Does Mental Health Parity Make Economic Sense for Wisconsin?

An evaluation of the effects of mental health parity in the commercial insurance market

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Foreword

This report examines the effects of a mental health parity mandate on health insurance premiums and on employer and employee health insurance behavior. The report is the product of collaboration between the Robert M. La Follette School of Public Affairs at the University of Wisconsin–Madison and the Wisconsin 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 in which they practice 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 final semester in the program, 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). In the Workshop students work collaboratively as a group to improve their policy analysis skills while contributing to the capacity of public agencies to analyze and develop policies on issues of concern to the state's residents.

The students in this Workshop section were assigned to one of several teams. One group worked on this report, while the others worked on projects for the Wisconsin Department of Revenue and the Wisconsin Joint Legislative Council. The topic of this report—an exploration of the potential costs and benefits of a mandate on commercial (non self-insured) health insurance plans to offer mental health benefits comparable to those for physical health conditions—was originally suggested by Director of Policy Initiatives and Evaluation Linda McCart at the Wisconsin Department of Health and Family Services. Without her support and encouragement this report would not have been possible. A number of other people in Department of Health and Family Services as well as in other Wisconsin state agencies, including the Office of the Commissioner of Insurance, also contributed to the success of the report. Their names are listed in the acknowledgments. I add my gratitude to the appreciation expressed there.

Wisconsin already mandates that health care plans offer a minimum level of mental health benefits. This coverage is generally far below that provided for care of physical conditions, leading to calls for mandating that mental health and physical care be equally covered. A number of states have already mandated parity. This report reviews the evidence from these states and from other studies and discusses for their relevance to Wisconsin.

This report cannot provide the final word on the complex issues the authors address and the conclusions are those of the authors alone. The authors are graduate students constrained by the semester time frame, and the topic they

have addressed 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 gains 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 Publications Director Karen Faster, who edited the report and shouldered the task of producing the final bound document.

I am very grateful to Wilbur R. Voigt whose generous gift to the La Follette School supports the La Follette School 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 faced by state government, I hope they not only have learned a great deal about doing policy analysis, but have also gained an appreciation of the complexities and challenges facing 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 of health care policies in the state of Wisconsin and elsewhere.

Karen Holden
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The authors would like to thank all those who have assisted in compiling the information necessary to evaluate the impacts of mental health parity in Wisconsin. We would particularly like to thank Linda McCart, Milda Aksamitauskas, Joyce Allen, Eleanor Cautley, and Tim Connor from the Wisconsin Department of Health and Family Services, as well as Lieutenant Governor Barbara Lawton, for their guidance and help in collecting important information. Additionally, we thank Eileen Mallow and Jean Terry of the Wisconsin Office of the Commissioner of Insurance for providing information about the health insurance market in Wisconsin. The insight we received from Professors Robert Haveman, David Weimer, and Barbara Wolfe was invaluable. We are also appreciative of our professor, Karen Holden, for her guidance and of Karen Faster for her editorial oversight.

Definitions

This section provides definitions of various health-related terms that are used frequently throughout the report.

Adverse selection: Occurs when applicants for insurance represent a sample of the population that is biased toward those with a greater loss exposure rather than a true random sample. In health insurance, individuals with greater health needs are more likely to purchase health insurance (Office of the Commissioner of Insurance [OCI], 2004).

Annual benefit limit: The dollar limit on the total amount of benefits that may be paid by the insurance provider in a 12-month period (U.S. Department of Labor, 2007).

Behavioral health carve-out: A program that separates mental health services and provides health benefits separately. This is usually accomplished through a separate managed behavioral health care contract (National Conference of State Legislatures [NCSL], 1998).

Coinsurance: A provision in insurance policies that requires the insured to share in the cost of covered services on a percentage basis. A typical coinsurance arrangement is 80 percent by the insurer and 20 percent by the insured (OCI, 2004).

Commercial insurance coverage: Health insurance policies that are purchased from a licensed insurance company either through a group health plan or by an individual. In Wisconsin, commercial insurance is regulated through the Office of the Commissioner of Insurance (OCI, n.d.a).

Co-payment: A predetermined (flat) fee that an individual pays for health care service visits (Department of Health and Family Services [DHFS], 2006a).

Cost-sharing: Any financial contribution made by consumers toward the health care services they receive.

Deductible: The amount an individual must pay for health care expenses before insurance (or a self-funded company) covers the costs (DHFS, 2006a).

ERISA: The Employee Retirement Income Security Act of 1974, which established federal regulations for certain employer-provided benefits, mainly pensions and health insurance coverage. The federal legislation preempts the ability of states to directly regulate employer provided benefits covered by ERISA. One of the goals of the legislation was to provide national regulation for employer plans to ensure the plans would be administered consistently, without interference from various state regulations (DHFS, 2006a).

Fee-for-service or indemnity plan: The traditional health care payment system under which physicians and other providers receive a payment that does not exceed the billed charge for each unit of service provided. Usually, under a fee-for-service insurance plan, individuals may choose to go to any provider they want, as long as the provider accepts the insurance company's payments (OCI, 2004).

Group health insurance: Any insurance plan under which a number of persons and their dependents are insured under a single policy, issued to their employer or an association with which they are affiliated, with individual certificates given to each insured person. Wisconsin law separates group health insurance policies into large and small groups. Small groups are defined as two to 50 employees and large groups are defined as 51 or more employees. Group health insurance is generally offered through employers (OCI, n.d.a).

Health maintenance organizations (HMO): A type of managed care plan that provides comprehensive, prepaid medical care to enrollees. An HMO pays for and provides the medical care, which means that enrollees are usually required to seek care from a provider employed by or under contract with the HMO. HMOs limit care to a specific geographic area (OCI, 2006).

Individual health insurance: Health insurance policies that are sold to individuals who are self-employed or otherwise not eligible for group health insurance. Insurers are not required to provide individual insurance policies to all who apply (OCI, n.d.a).

Managed care: A health care delivery system that links doctors, hospitals, and an insurance plan to deliver care to the plan's members with the goal of improving quality and reducing costs. Health insurance can manage care in a number of ways, including requiring each member to choose a primary care provider, to obtain the primary care provider's permission to see a specialist, and to use only providers in the plan's provider network (OCI, 2004).

Managed care plan: Health plans that require or create incentives for an enrollee to use providers that are owned, managed, or under contract with the insurer offering the health benefit plan (OCI, 2004).

Mandated benefits: Benefits that health insurance plans are required by state or federal law to provide to policyholders and eligible dependents (OCI, 2004).

Moral hazard: An economic term used to express the additional quantity of health care demanded resulting from a decrease in the net price of care due to insurance (DHFS, 2006a).

Out-of-pocket costs: Costs individuals pay for health care in excess of insurance coverage (OCI, 2004).

Point Of Service (POS) plan: A type of managed care plan, generally offered by HMOs, that allows members to use out-of-network providers for an additional cost (usually a higher co-payment or a deductible) (OCI, 2004).

Preferred Provider Option (PPO): A type of managed care plan that is usually marketed by an insurer to several employers. Preferred providers agree to provide care on a reduced fee-for-service basis. PPOs provide the insured with incentives, such as lower co-payments, to use the preferred providers versus out-of-network providers (OCI, 2006).

Premium: The amount of money an insurance company charges, based on a given rate, to provide the coverage described in the policy (OCI, 2004).

Public health insurance coverage:

Medicare: The federal government health care program for people age 65 and older and certain disabled individuals (OCI, n.d.a).

Medicaid: Health care programs for low-income residents and their dependents funded by federal and state dollars (OCI, n.d.a).

Health Insurance Risk Sharing Program (HIRSP): Wisconsin's high-risk health insurance pool. HIRSP offers health insurance to Wisconsin residents who are unable to find adequate health insurance coverage in the commercial market due to their medical conditions or who have lost their employer-sponsored group health insurance. Applicants are required to meet HIRSP eligibility criteria to qualify (OCI, 2004).

BadgerCare: Wisconsin's State Children's Health Insurance Program provides Medicaid benefits to working families with dependent children who have incomes up to 185 percent of the federal poverty level.

BadgerCare Plus: An expansion of Wisconsin's family Medicaid and State Children's Health Insurance Programs. Its goal is to form a simplified, comprehensive health insurance program that ensures all children have access to health insurance and increases coverage for low-income parents and single adults. It is expected to be implemented in January 2008.

Self-funded health insurance plan: A health insurance plan offered by an employer to its employees, with the benefits paid for entirely by the employer. Employers sponsoring self-funded plans typically contract with a third party administrator or insurer to provide administrative services. Self-funded plans are exempt from regulation by state laws, but are subject to certain federal requirements under ERISA (OCI, 2004).

Transitional treatment services: Services for the treatment of mental disorders, alcoholism, or other drug abuse problems provided in a less restrictive manner than inpatient hospital services, but in a more intensive manner than outpatient services (OCI, 2003).

Executive Summary

In Wisconsin, insurance coverage of mental health services is not as extensive as that of physical health care. The existing state and federal health care mandates allow insurance providers to cover a lower amount of mental health care services compared to physical health care services.

Stigmas surrounding mental illness and concerns about the cost of covering mental health care limit the ability of the market to address this problem on its own. A primary barrier is a fear among some insurance companies that should they expand mental health coverage above what their competitors offer, they will attract more people with high mental health care costs. For this reason, some policymakers and advocates argue that without government intervention to mandate uniform coverage across plans, Wisconsin residents with mental disorders will continue to face financial barriers to treatments that could benefit themselves and society.

This report examines the implications of mandating mental health parity in the Wisconsin commercial insurance market. The type of mandate reviewed in this report would require equality in insurance coverage between mental health (including substance abuse) and physical health conditions.

While this analysis provides insight into the potential impacts of implementing mental health parity, data limitations constrain the report's ability to produce an exact cost estimate and to accurately monetize benefits. As such, the authors were unable to determine whether enacting mental health parity in the commercial market would produce a net social benefit for the state. Major findings, based on the authors' estimates and on a review of the literature, include:

- **Wisconsin might experience a cost increase as a result of parity; however, the increase should be small as a percentage of overall health care costs.** The aggregate cost impact of implementing parity in Wisconsin is estimated to be between 0.4 and 2 percent of total health care premiums.
- **The cost of parity for individual consumers in Wisconsin should be small.** Estimates suggest that parity is likely to result in monthly premium increases ranging from 75 cents to $3.75 for policyholders in the group market and 59 cents to $5.62 for policyholders in the individual market.
- **The cost to employers under parity should be relatively small.** Estimates indicate employers are likely to spend an extra $2.82 to $14.11 per worker per month as a result of parity.
- **Managed care plans, which make up the majority of the commercial insurance market, should experience smaller cost increases from parity compared to other types of health care plans.** It is estimated that an employee in a health maintenance organization plan would experience an average monthly cost increase of $1.07 from parity, while an employee in a fee-for-service plan would experience a cost increase of $6.18 per month.

- **Parity should decrease out-of-pocket costs for mental health care consumers.** Numerous studies have documented that parity results in substantial reductions in out-of-pocket costs for individuals.
- **Employers are unlikely to alter health insurance coverage as a result of parity, although a small number of policyholders could drop coverage.** Historically, when confronted with higher health care costs, employers have not changed coverage offerings. For policyholders, estimates suggest that 0.57 percent in the individual market and 0.2 percent in the group market, or a total of 1,674 policyholders, could potentially drop coverage as a result of parity.
- **Managed care may limit increased utilization of mental health care services after parity.** Most studies on the relationship between parity and use of mental health care services in a managed care environment have concluded that the law had little to no effect on utilization rates.
- **While it is extremely difficult to quantify the benefits of parity, increased coverage of mental health care services should yield benefits for individuals with mental illness and for society.** Benefits from parity include reduced stigma and lower out-of-pocket costs for individuals with mental illness, as well as decreased crime and incarceration costs. Additionally, mental health parity may result in increased human capital development for children.
- **Employers and insurers may realize several financial benefits from parity.** One study found employees with depression were absent from work an average of 9.86 days per year. Additionally, employees with substance abuse disorders are 3.5 times more likely to experience an accident in the workplace and five times more likely to file for worker's compensation. Employers will likely see reductions in these costs. Insurers are likely to see a reduction in physical health care claims under parity.

This analysis points to the potential merit of legislation to mandate mental health parity in Wisconsin. The authors recommend that future discussions of mental health parity incorporate this report's thorough examination of cost increases, potential benefits, and political feasibility.

This report finds that the limited population affected and the influence of managed care on the utilization of services constrain the impact of a parity mandate. Such a mandate for an equalization of benefits would apply only to the 338,000 Wisconsin residents with a mental illness who possess commercial insurance. To increase the number of people affected, the state could implement parity in state employee insurance plans and in the proposed BadgerCare Plus benchmark plan. Although parity may generate benefits, evidence suggests that mandating the same cost-sharing requirements for mental and physical health coverage through parity may not eliminate access restrictions imposed by managed care. Thus, the state should consider monitoring managed care's controls to ensure access to mental health care is not unnecessarily restricted.

Introduction

Insurance companies have historically covered physical illnesses more generously than mental illnesses. This discrepancy in coverage may prevent people with a mental illness from accessing the treatment necessary to function at their highest potential. Recognizing this, a majority of states have enacted some form of mental health parity law to prevent insurance providers from offering different levels of coverage for physical and mental health care (see Appendix A for a description of other state's parity mandates). Despite efforts to highlight the need for greater coverage of mental health conditions,[1] Wisconsin remains among a small number of states that has not mandated some form of mental health parity.

Evidence suggests that underserving mental health needs can impose a number of costs on society. Reduced workplace productivity and lowered human capital result in losses to businesses and individuals. Additionally, untreated mental health conditions can contribute to higher crime and incarceration rates and increase the number of substance-related traffic accidents.

The historically negative stigma attached to mental illness as well as concern about the financial cost of increasing mental health insurance benefits have contributed to the persistence of inequitable coverage between mental and physical health conditions. Without a mental health parity mandate, the majority of commercial insurance companies in Wisconsin cover mental health services to the extent minimally required by the state.[2] This is a classic example of the economic concept of adverse selection: if one insurance plan offers more comprehensive mental health benefits, then people with higher than average mental health care needs will choose that plan, resulting in higher costs for the insurance company. Fear of adverse selection decreases the probability that providers will increase coverage of mental health care on their own. As a government mandate, parity should circumvent the threat of adverse selection by forcing insurance plans to simultaneously raise benefit levels (see Appendix B for a discussion of economic risks).

While not a panacea, increasing coverage of services through mental health parity legislation should decrease the number of individuals with unmet mental health needs. In a national survey, 48.1 percent of adults who perceived an unmet need for mental health treatment cited cost of insurance as a barrier to care (Office of Applied Studies [OAS], Substance Abuse and Mental Health Services Administration [SAMHSA], 2006). Likewise, 31.2 percent of adults who perceived an unmet need for substance abuse services cited lack of insurance or cost as barrier to their gaining desired care (OAS, SAMHSA, 2007).

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[1] See the 2004 report by the Governor's Task Force on Autism and the May 2006 *Report of the Task Force on Women and Depression in Wisconsin* (Hyde & Rice, 2006).

[2] The authors' came to this conclusion after reviewing the health insurance plans outlined on the websites of eight of the top ten health insurance companies in Wisconsin. Two companies did not have such information posted to their sites.

At the same time, federal statutes restrict the reach of a state parity mandate. Waivers from the federal government are necessary to alter public health insurance programs, such as Wisconsin's proposed BadgerCare Plus program. The federal Employee Retirement Income Security Act (ERISA) exempts self-funded employer health plans from state mandates; this includes employer health plans funded by state government agencies. As a result, state parity mandates only apply to the commercial insurance market. If Wisconsin wished to implement parity in public health plans and the state employee's self-funded health insurance plans, legislation outside of this law would be required. The similarity of the population in self-funded plans to the population in commercial plans suggests that should self-funded plans voluntarily adopt mental health parity, the estimated percentage cost increases and the potential benefits discussed in this report approximate those that would occur for self-funded plans.[3] The difference between publicly and privately insured populations limits the applicability of this report's findings to public health insurance programs.[4]

Does it make economic sense for the state of Wisconsin to mandate mental health parity in insurance coverage? This report explores the arguments for and against enacting mental health parity in the commercial insurance market. The analysis defines mental health parity as equality in cost-sharing provisions, such as co-payments and deductibles, and in lifetime and annual benefit limits between physical and mental health coverage. Mental illnesses are limited to diagnosable conditions and include childhood mental disorders and all major classes of adult mental illness listed under the codes of the American Psychiatric Association's Diagnostic and Statistical Manual of Mental Health Disorders (DSM-IV), which includes substance abuse disorder. Appendix C provides descriptions of the disorder classifications. The remainder of this report uses the terms mental illness and mental health to refer to all of these conditions.

This report considers the impacts of parity in terms of increases in insurance premiums, potential changes in insurance consumption, and the expected benefits of increased access to mental health services. The policy is also evaluated from the perspective of health care consumers, the business community, insurance companies, and government. The results of this report indicate that a parity

[3] The Congressional Budget Office notes that the employer/employee share of increased costs may differ between government and business. While private firms could pass increased costs on to workers by reducing their compensation and benefits, government employers may only be able to pass 25 percent of the increased costs onto workers. The remaining 75 percent of cost increases would require raising government revenue or reducing cost in other areas, meaning that some of the report's cost estimates for employees and employers would be different for self-funded government health insurance plans (2001).

[4] It is estimated that there are differences in the populations between those who are commercially insured and those who are receiving health care coverage from public programs. For example, those who are privately insured are typically employed at higher-wage, full-time positions versus those in public health programs. Differences in the types and magnitude of benefits vary between these two groups.

mandate would not dramatically increase premium costs and may result in benefits for a number of stakeholders, suggesting parity holds potential value for the state. The authors recommend that future discussions of mental health parity incorporate this report's thorough examination of the effects of parity in Wisconsin's commercial insurance market. However, the findings also suggest that parity is only the first step toward increasing access and equity for mental health care services. Additional steps could include implementing parity in the state employee health plans and the proposed BadgerCare Plus benchmark plan, as well as monitoring the impact of managed care on access to and quality of mental health care services.

This report begins with background information on the prevalence of mental illness, current mental health mandates, and the current Wisconsin insurance market. The report next outlines the context for the analysis, followed by a discussion of the costs and benefits of implementing a mental health parity mandate in Wisconsin. Noting that political feasibility is important to passage of mental health parity legislation, the analysis reviews prominent stakeholders' political views toward such a policy. The report's conclusion discusses the limitations of the analysis and offers policy recommendations.

Background

Gauging the need for and impact of mental health parity in Wisconsin requires identifying the prevalence of mental illness in the state, the characteristics of the current insurance market, and the existing policy context. This section estimates the number of Wisconsin residents suffering from mental disorders, reviews the state of Wisconsin's health insurance market, and explains federal and state health care regulations.

Prevalence of Mental Illness

National studies estimate that 26.2 percent of American adults have diagnosable mental illnesses (National Institute of Mental Health [NIMH], 2006). Common disorders among adults include major depression, anxiety disorders, bipolar disorder, obsessive-compulsive disorder, and schizophrenia (Legislative Fiscal Bureau [LFB], 2007).

Nationally, one in five children is affected by a mental illness with at least a mild functional impairment. Common mental illnesses among children include attention-deficit/hyperactivity disorder, attachment disorder, and conduct disorder (LFB, 2007). Autism is a disorder that has become increasingly common among children. An autism surveillance project reported that approximately five out of every 1,000 Wisconsin children born in 1994 had symptoms of autism (Sakai, 2007).

These statistics suggest that roughly some form of mental illness affects 1.8 million adults and children in Wisconsin.[5] In terms of the Wisconsin population, this translates to 31.9 percent of the state population. An additional 403,000 adults have substance abuse treatment needs, roughly 10.2 percent of the adult population (Welch, Quirke, & Moberg, 2001). The sheer number of adults and children affected by mental illness illustrates the importance of addressing access to mental health services in Wisconsin.

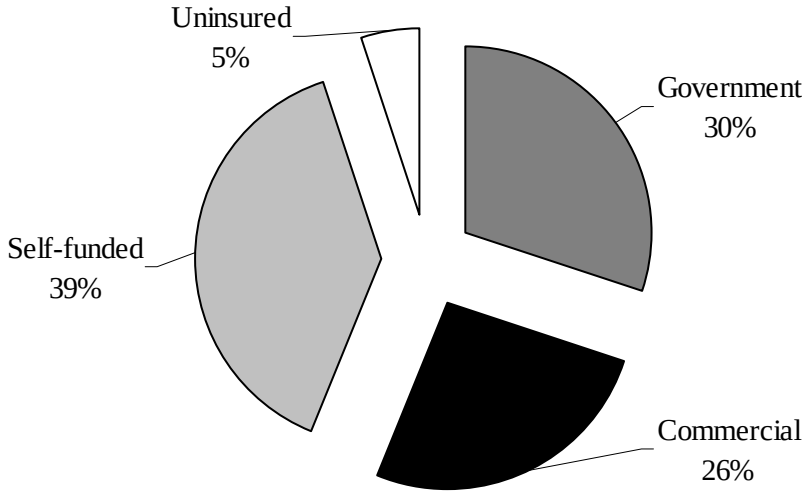
Wisconsin Health Insurance Market

Wisconsin consistently ranks high among the states in terms of providing health insurance coverage for its residents: only 5 percent of Wisconsin residents did not have health insurance in 2005. The majority of Wisconsin residents with insurance were enrolled in a self-funded employer health plan, in which the employer, rather than an insurance company assumes the financial risk of insuring employees. Per the federal ERISA guidelines, self-funded employer health plans are subject only to federal health insurance mandates. The second largest segment of the Wisconsin health insurance market in 2005 comprised residents covered through public health

[5] To calculate this estimate of the number of people with a mental illness in Wisconsin, the statistics cited above were combined to form an aggregate of those with mental illnesses. For example, since one in five children is affected by a mental illness with at least mild functional impairment, 20 percent was multiplied by the population of persons under 18 for Wisconsin (20 percent multiplied by 1,295,471 to get 259,094 children). The population estimates were taken from U.S. Census data (2007).

insurance programs, run by the U.S. Department of Health and Human Services, the Wisconsin Department of Health and Family Services, and Wisconsin's Health Insurance Risk-Sharing Plan (HIRSP) authority. Finally, in 2005, roughly one-quarter of the state population was covered by commercial health insurance. The majority of residents with commercial health insurance were insured through employer-sponsored group plans, with some residents covered by plans purchased in the individual market. While the Wisconsin Office of the Commissioner of Insurance (OCI) must approve commercial insurance policies, insurers are generally allowed to set premiums at the level they determine necessary to cover expenses (OCI, n.d.a). Figure 1 illustrates the breakdown of insurance coverage in of Wisconsin.

Figure 1: The Wisconsin Health Insurance Market by Coverage Type, 2005



Source: OCI, n.d.a.

The Wisconsin health insurance market has changed in recent years. During the past decade, the commercial health insurance market has declined substantially. Conversely, the number of Wisconsin residents covered by self-funded and public health plans has risen. The number of people without health insurance in Wisconsin has remained fairly stable over the past 10 years (OCI, n.d.a). Table 1 highlights these changes.

Table 1: Wisconsin Health Insurance Coverage by Plan Type, 1998 and 2005

	1998 Percentage	**2005 Percentage**	**Percentage Change**
Commercial Health Insurance	42	26	-16%
Self-Funded Health Insurance	32	39	+7%
Public Health Insurance	22	30	+8%
No Insurance	4	5	+1%

Source: OCI, n.d.a

The decline in commercial health insurance limits the state of Wisconsin's ability to regulate health insurance coverage for its residents. The federal exemption of self-funded health plans, Medicaid,[6] and Medicare from state insurance law means that a mandate for the commercial market would affect only one-quarter of the market. As a self-funded plan, the state would need to enact additional legislation to incorporate public employees into a health care mandate.

Since the 1990s, managed care's penetration into the health insurance marketplace has grown rapidly. The level of managed care in the Wisconsin commercial health insurance market is high; in 2006, managed care plans[7] covered 93.8 percent of individuals in the group market and 90.9 percent of people in the individual market (OCI, 2006). A general recognition of managed care's ability to control costs has driven its increased use. However, critics accuse managed care providers of restricting access to services to produce cost savings. If managed care systems impede the use of mental health services, they will also limit the benefits of parity that result from removing financial barriers to these services.

Health Care Mandates

Mandates refer to regulations the state or federal government imposes on insurance companies to require them to offer certain benefits. Traditionally, governments have created these regulations to ensure that insurance companies provide coverage at a level beneficial to society in circumstances where the insurance company would not do so in the absence of regulation. Advocates of mandates assert that mandated benefits provide coverage of necessary services; opponents counter that regulations raise premiums and may result in a greater number of people who are unable to afford insurance (Minnesota Department of Health, 2001). Wisconsin has 24 state-specific mandates for health insurance (OCI, n.d.a). The following discussion concentrates on Wisconsin's mental health insurance mandates and federal mandates.

Federal Mental Health Parity Legislation

The federal Mental Health Parity Act of 1996 mandates lifetime and annual dollar limits for mental health benefits equal lifetime and annual dollar limits for medical and surgical benefits. The act applies to all group health plans that offer mental health benefits, but it does not require plans to offer these benefits. If group health plans do not include coverage for mental health benefits, they are not required to comply with the regulations in the act. The act also does not specify a definition of mental illness, allowing plans to determine the conditions covered. The act does

[6] States must comply with federal law related to Medicaid, but can apply for federal waivers to bypass some of these guidelines.

[7] Managed care plans include health maintenance organizations (HMO), point of service (POS), and preferred provider (PPO) plans. There are varying levels of managed care. While PPO plans are less managed than HMO and POS plans, they have been included in OCI's definition of managed care (OCI, 2002).

not cover substance abuse treatment or services (National Alliance on Mental Illness [NAMI], 2007).

The federal act includes a number of limitations. While it requires equality in lifetime and annual dollar limits, group health plans may impose some restrictions on mental health benefits. These include increased cost-sharing requirements and day limits on individual mental health services (Centers for Medicare and Medicaid Services, 2007). The Mental Health Parity Act exempts group health plans that cover fewer than 51 workers. Additionally, if any group plan is able to demonstrate that providing mental health benefits would increase its costs by 1 percent or more, then the group can gain an exemption. Insurance companies use these limitations and loopholes to avoid providing comprehensive mental health benefits (NAMI, 2007). In this way, the act is not far-reaching in its implications, which may be why several states have opted to pass more comprehensive forms of parity legislation.[8]

Wisconsin Mental Health Insurance Mandates

Although Wisconsin does not require mental health parity, the state does mandate a minimum level of mental health coverage. In 1985, the state established the current inpatient minimums for mental health and substance abuse services ($7,000) and, in 1991, set the minimums for outpatient ($2,000) and transitional ($3,000) services. In 2004, the costs of prescription drugs and diagnostic testing were exempted from the benefit minimum (Wisconsin Senate Bill 71, 2003). Wisconsin mandates allow co-payments and deductibles for mental illness and substance abuse to be higher than the cost-sharing agreements for physical health conditions (Whitesel, 2002). All of these requirements apply solely to group plans; Wisconsin does not have any mandates applicable to individual health insurance policies (see Appendix D for more information on Wisconsin's mental health mandate history).

Current Gap in Mental Health Insurance Coverage

The majority of insurance companies in Wisconsin only provide the minimum amount of mental health coverage required by the state. Further, health care costs have increased substantially since these mandates were first passed, devaluing the coverage available to Wisconsin residents. To keep pace with inflation, these minimums would have to be raised to $20,397 for inpatient services, $5,593 for

[8] At this writing, two proposals for federal mental health parity have been proposed. House Resolution 1424 and Senate Bill 558 propose changes to the federal Mental Health Parity Act of 1996. The bills both mandate parity in treatment limitations and financial limitations. The change applies only to insurance plans that offer mental health benefits. The proposals amend ERISA laws so that self-funded insurance plans are included but exempt small businesses with 50 or fewer employees. The proposals differ in the scope of mental health benefits included, the method in which the proposals interact with state parity laws, and requirements for out-of-network benefit coverage (NAMI, n.d.a).

transitional services, and $3,969 for outpatient services.[9] At this time, Wisconsin residents with the greatest need for mental health services must either forgo services or pay the full cost of services above the coverage limit, reducing the effectiveness of their insurance coverage.

Costs of Treatment for Mental Illnesses in Wisconsin

Treatment costs for mental illness vary dramatically between disorders. While many mental illnesses require a combination of inpatient, outpatient, and transitional services, Table 2 highlights the average cost of inpatient treatment for various disorders in Wisconsin hospitals. Four of the six disorders evaluated had inpatient costs for one inpatient stay higher than that required by Wisconsin law and, on average, inpatient hospital services were $2,831 higher than Wisconsin's mandated coverage level of $7,000. Additionally, these costs reflect charges for one inpatient stay; if a person has more than one inpatient stay per year, the current benefit mandate would not sufficiently cover the charges incurred from additional stays. This suggests that the current caps for inpatient treatment of mental illness inhibit adequate coverage of treatment costs.

Table 2: Number, Duration, and Cost of Inpatient Treatment by Disorder, Wisconsin, October 2005 to September 2006

	Number of Discharges	Median Age	Average Length of Stay (in days)	Average Charge	Charges Not Covered under Wisconsin's Mandated Coverage ($7,000)
Schizophrenia	5,637	41	17.4	$16,837	***$9,837***
Depression	4,467	31	4.7	$5,816	--
Bipolar Disorder	8,673	32	8.9	$10,549	***$3,549***
Alcohol Abuse / Dependence	9,272	45	3.7	$6,352	--
Substance Abuse / Dependence	1,247	38	8.8	$8,232	***$1,232***
Childhood Mental Disorders	1,495	14	14.3	$14,166	***$7,166***
Average*	Total: 30,791	36.8	8.5	$9,831	***$2,831***

Source: Wisconsin PricePoint System – www.wipricepoint.org

*Calculations completed by the authors using data from Wisconsin PricePoint. Total and average includes only mental illnesses highlighted in table.

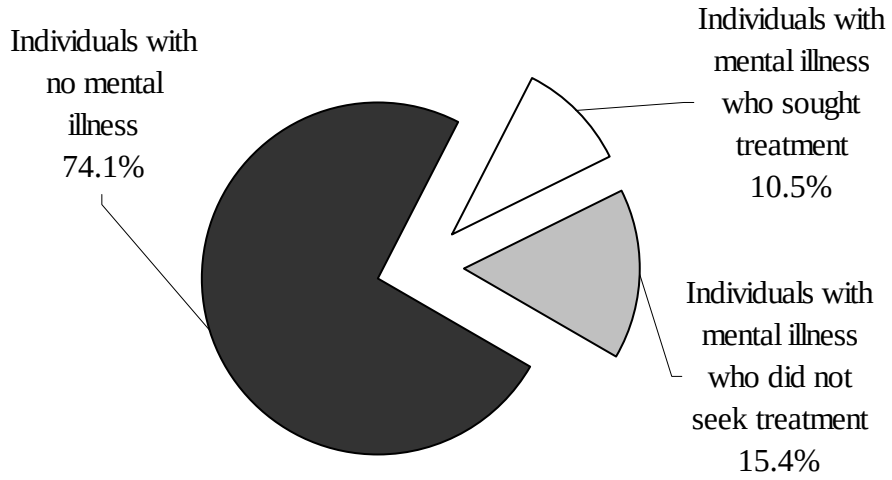
[9] These numbers were calculated using the U.S. Bureau of Labor Statistics' Consumer Price Index for medical care in the Minneapolis, Minnesota-Wisconsin region. All dollars are 2006 dollars.

Gap in Services

One possible outcome of the existing benefit caps is that individuals with mental illness may forgo treatment. Based on national information regarding the incidence of mental illness (NIMH, 2006), roughly 338,000 individuals covered by commercial insurance in Wisconsin suffer from a mental illness.[10] However, only 137,000 people sought treatment for mental illness within a one-year period (Finkelstein, et al., 2002). This means that nearly 201,000 individuals in Wisconsin did not seek treatment for their mental illness, 59 percent of the population with a mental illness (see Figure 2). Some people may not seek treatment for their mental illness because of the negative stigma attached to mental illnesses and treatment. However, among those who did not seek treatment, cost was a commonly cited reason. Roughly 55 percent of those in the commercial market with a mental health need did not seek treatment because of cost (U.S. Department of Health and Human Services [U.S. HHS], Chapter 6, 1999).

Applying this percentage to the Wisconsin population suggests that about 111,000 individuals did not seek treatment for their mental illness because of cost. While the percentage does not distinguish between those who did not receive treatment due to inadequate insurance coverage versus those who did not seek treatment because their cost-sharing agreements are a financial barrier, at least some of these individuals have a barrier to mental health treatment due to the benefit levels of their commercial insurance. This suggests that cost is often a significant barrier to individuals in need of mental health services.

Figure 2: Segments of the Commercial Insurance Market with Mental Illness, by Treatment Status



Source: Finkelstein, et al., 2002; U.S. HHS, Chapter 6, 1999

[10] This number was calculated by multiplying Wisconsin's population covered by commercial insurance by the estimated national percentage of persons with a mental illness (26.2 percent).

The limited mental health coverage available through the commercial insurance market in Wisconsin and the need for mental health services among Wisconsin residents suggest that existing state health insurance mandates are not sufficient to meet the health care needs of Wisconsin residents. Requiring mental health parity, a policy growing in popularity at both the state and the federal level, is one possible solution to filling this coverage gap. Parity legislation should decrease the costs that people face and, therefore, increase the rate at which individuals access needed mental health services.

The sections that follow analyze the appropriateness of a mental health parity mandate for Wisconsin. The analysis begins by defining the mandate's target population and then discusses factors that limit the overall impact of a parity mandate. The next section estimates the cost effects of parity, including: changes in health insurance premiums in the group and individual markets, decreased out-of-pocket costs, potential effects on businesses and workers, and expected changes in the utilization of mental health services. This section will end with a discussion of the role of managed care. After estimating costs, the analysis will discuss the potential benefits of parity enactment. These benefits can be classified into four main categories: benefits to individuals with mental illness, benefits to employers, benefits to insurers, and benefits to society. Last, the analysis will turn to an evaluation of the political feasibility of passing a parity mandate. This section examines the impacts of parity on major stakeholders, including insurance companies, health care consumers, businesses, and government.

Context for Analysis

In examining the impact of a mental health parity mandate in Wisconsin, it is important to understand the population affected as well as the factors that may limit the scope of the policy.

Target Population

Individuals from birth to age 64 covered through commercial health insurance plans make up the target population of a parity mandate in Wisconsin. However, the roughly 5 percent of individuals 65 and older who have health insurance through the commercial market may be included in the data in this analysis.[11] Roughly 1.3 million Wisconsin residents have commercial insurance in Wisconsin and would be affected by parity legislation. More specifically, 1.2 million individuals have insurance in the group market (91 percent) and 116,000 people have insurance in the individual market (9 percent) (OCI, 2006).[12]

Among the commercially insured population, two subgroups would be most affected by a parity mandate: those with a mental illness who seek some treatment, estimated at 137,000 individuals, and those with mental illnesses who did not seek treatment, roughly 201,000 individuals.[13] While these subgroups represent only a small percentage of individuals with a mental illness in Wisconsin, mandating parity for this population would improve mental health coverage for Wisconsin residents. Further, many individuals with mental illness not reached by a parity mandate are covered through public insurance programs whose benefits are much richer than those available in the commercial market (please see Appendix E for more information on public insurance benefits).

The experience of other states can provide policy models for mental health parity legislation in Wisconsin. While states vary in how they define mental conditions covered under parity laws, this report uses a broad definition, covering all

[11] This estimate is based on the fact that almost all individuals 65 and older receive health coverage through Medicare, Medigap, or employer-sponsored insurance. As most seniors no longer work, this analysis assumes that the majority of seniors with employer-sponsored insurance represent individuals on pension plans. Pension plans cannot be regulated by the state and thus are excluded from the target population. Four percent of individuals 65 and older have coverage through the individual insurance market (DHFS, 2006b).

[12] These numbers were estimated based on data from the OCI (n.d.a), which reported 26 percent of insured individuals are covered by commercial insurance. This analysis applies this percentage to the Wisconsin population 65 and older. Commercial insurance covered about 5 percent of those older than 65 (OCI, 2006). The number estimated (1.3 million) is a total of these two calculations (1.2 million + 116,000).

[13] To arrive at the number of individuals with a mental illness who sought treatment, the target population estimate was multiplied by the percentage of people in the commercial market who had claims related to a mental illness. As the SAMHSA report "Mental Health, United States, 2002" (Finkelstein, et al., 2002) determines, this percentage is 10.6. To estimate the number of individuals who have a mental illness but did not seek treatment, this report uses the estimate for those in the commercial market with a mental illness and subtracts the number of people who sought services.

diagnosable conditions, including substance abuse. States also differ on whether they include only group plans or both group and individual plans in their parity legislation; both group and individual plans are considered in this analysis.

Factors Limiting the Impact of a Parity Mandate

Four factors limit the effect of the parity policy examined in this analysis:

1) the high level of managed care in Wisconsin,
2) the fact that Wisconsin would shift from an existing mandate for minimum coverage of mental health care services to parity,
3) the limited population that would be affected by the policy change, and
4) the small proportion of health care benefits spent on mental health services.

In Wisconsin, more than 90 percent of enrollees with commercial health insurance policies are covered by a managed care plan. Unlike fee-for-service plans, managed care allows insurance companies to control the use of services, producing substantial cost savings. Studies on mental health parity have consistently shown that managed care limits the potential cost increases associated with parity (refer to Appendix B for a discussion of managed care's influence on parity).

Some of the highest cost estimates of parity mandates compare a pre-parity policy of no guaranteed access to mental health services to the level of access allowed under parity. These estimates will be greater than Wisconsin's costs, because Wisconsin mandates that health insurance plans cover a minimum level of mental health services annually. At the same time, lower co-pays under a parity mandate may induce new users to access mental health services. To the extent that cost-sharing is higher for mental illnesses than it is for physical illness, and to the extent that parity makes cost-sharing less cost-prohibitive for people, parity may mean that some individuals with mental illness would begin seeking treatment.

The impact of federal statutes that limit the population affected by a parity mandate would have a similar influence on restricting the expected increase in costs. Because federal statutes limit the affected population to individuals and families in commercial plans that are not self-funded – the majority of which are provided through an employer – the increased use of mental health services is largely confined to employed individuals and their dependents. While people in the individual market would also be affected, the number is small: 116,000 Wisconsin residents in 2005.

The final factor suggesting that cost impacts would be low is the small proportion of premium costs and paid benefits attributable to mental health services. According to a 2001 OCI survey of group health insurers, mental health and substance abuse benefits constituted 2.94 percent of premiums collected and 3.23 percent of health benefits paid (2002). While how much utilization would increase under parity is uncertain, the experiences of other states suggest that the change would not be dramatic.

Impacts on Health Insurance Market

The following section estimates the cost of a parity mandate for Wisconsin in terms of expected premium increases within both the commercial group and individual insurance markets. The analysis identifies the expected increases in overall premiums and addresses the differences among insurance plan types. The monetary impact on workers and businesses in the group market and on policyholders in the individual market are also estimated. The section concludes with a discussion of potential responses to increased premiums by employers and individuals.

Estimated Premium Increases from Parity

The initial studies of parity from the early to mid-1990s reported a wide range of cost estimates, from a 1 percent to 11 percent increase in total premiums (Barry, Frank, & McGuire, 2006). Many of these reports projected impacts on an insurance market with a high level of fee-for-service plans. Over the last decade, the health insurance market has increasingly relied on managed care. As a result, the estimated impact of parity on insurance costs has dropped dramatically. Recent impacts have ranged from the 0.33 percent increase in health costs for a policy covering Rhode Island state employees (Otten, 1998) to estimates of a 4 percent increase in costs cited in a 2000 report by the General Accounting Office (renamed the Government Accountability Office in 2004). In a 2001 report on the cost of implementing parity in Wisconsin, OCI predicted that a parity mandate could increase the state's group health premiums by 0.12 to 1 percent (O'Connell, 2001). The sources of that analysis, along with subsequent studies, were considered in determining the cost estimates used in this report's analysis. (Appendix F reviews the research on the impacts of parity on health insurance costs.)

Theoretically, one response insurance companies could have to a mental health parity mandate would be to reduce their coverage of physical health care services. In practice, this has not occurred; instead, insurance companies maintain coverage and pass increased health care costs to policyholders through premiums. For that reason, expected changes in premiums provide an appropriate estimate of the increased costs associated with parity. The existing estimates of parity's impact on insurance costs that are most applicable to Wisconsin indicate that premiums might rise between 0.4 percent and 2 percent.

To estimate the cost impact of implementing mental health parity in Wisconsin, the authors of this report conducted an extensive literature review on estimates from prior studies that predicted the cost impacts of parity or reported changes that occurred after the enactment of a parity policy. Three criteria guided the selection of estimates to use in this analysis. Preference was given to studies in which the parity mandate analyzed was similar to the one outlined in this report: a comprehensive policy that required equal cost sharing and included substance abuse. Acknowledging the increasingly important role of managed care in determining cost increases, studies that took into account the impact of managed care

when specifying their analysis were also considered superior. Finally, given Wisconsin's mandate of a cost floor for mental health care coverage, studies that assumed an existing level of mental health coverage prior to parity were chosen over studies that used a starting point of no coverage.

All the studies reviewed for this report were based on non-Wisconsin specific data and the information available provided no best estimate for Wisconsin. Thus, three studies representing the range of potential cost increases were chosen for this analysis. A Congressional Budget Office (CBO) analysis of expected premium increases from a proposal to expand the federal parity policy provides a low estimate of 0.4 (Congressional Budget Office [CBO], 2007).[14] A study by the National Advisory Mental Health Council (NAMHC) accounts for a middle estimate of 1.52 percent (Kirschstein, 2000).[15] An actuarial analysis predicting impacts for the state of New York supplies a high estimate of 2 percent (Bachman, 2002).[16]

The CBO, NAMHC, and New York studies were chosen based on the quality of their analyses, which relied on market models from respected actuarial firms (Hay Group and PriceWaterhouseCoopers), and their adherence to this report's selection criteria. Although all three of these studies evaluated comprehensive parity laws that included substance abuse, the CBO report differed in that the parity policy examined was only mandated if insurance companies offered mental health benefits. All studies selected also considered the role of managed care in their analyses. Finally, all three studies assumed some minimum level of mental health coverage prior to parity. While it was not feasible to compare these baselines to the current Wisconsin mandate, the inclusion of some level of covered services prior to parity suggests that these estimates can provide a reasonable indication of the expected costs of parity in Wisconsin. Appendix G discusses these three studies in more detail and provides further explanation of the assumptions made in this analysis.

[14]The CBO analyzed a 2007 policy proposal to prohibit commercial group insurance plans that offer mental health coverage from establishing different treatment limits or financial regulations between mental and physical health services. The definition of mental health included substance abuse. The CBO estimates the change in premiums for additional health benefit costs associated with expanded coverage of mental health services. Its estimate does not incorporate potential changes in employer, employee, or insurance provider behavior, such as limiting the extent or type of plans offered. Because the CBO study excludes the small number of commercial group insurance providers who do not offer mental health benefits, it may slightly underestimate the costs of the parity mandate this report examines.

[15] This is a weighted estimate that applies the NAMHC estimates for family and single plans to the proportion of each within the commercial group market in Wisconsin.

[16] The New York estimate measured the expected increase in health care benefits paid, but it provides an appropriate proxy for changes in premiums based on the assumption that the full cost of benefits is passed to policyholders through premiums. In the case that this assumption is wrong, the estimated premium increase would overestimate the cost impact of parity.

Group Market Premiums

The estimated total annual premiums paid in Wisconsin's commercial group insurance market are $8.2 billion.[17] Application of the expected percentage increases in premiums to this figure suggests that, in the aggregate, annual commercial insurance premiums in the group market would rise between $33 million and $165 million as a result of parity, as shown in Table 3. Appendix H explains the calculations used to generate these findings.

Table 3: Increase in Group Insurance Market Premiums from Parity (2006 Dollars)

Estimated Percentage Increase	Predicted Rise in Total Annual Insurance Premiums
0.40	$33 million
1.52	$125 million
2.00	$165 million

Sources for estimated percentage increases: CBO, 2007; Kirschstein, 2000; Bachman, 2002

Although Wisconsin has a high percentage of managed care, which helps contain premium increases, other types of insurance plans exist. To illustrate the impact that managed care has on constraining health costs and to display the change in premiums across plan types, this analysis provides estimated premium increases for HMO, POS, PPO, and fee-for-service plans.[18] The state of New York report and a report by the NAMHC (Varmus, 1998)[19] supplied the expected percentage increase in premiums.[20] Appendix I discusses these estimates in greater detail.

[17] This estimate is based on indexing a 2005 figure reported by the Office of the Commissioner of Insurance (OCI, n.d.b) to 2006 dollars. Amounts were converted to 2006 dollars using the U.S. Bureau of Labor Statistics' Consumer Price Index for medical care in the Minneapolis, Minnesota-Wisconsin region.

[18] The percentage of the Wisconsin commercial group market in each plan type is based on a report that included the top 20 insurance providers (OCI, 2006). The analysis assumes that the overall market exhibits a similar distribution of types of insurance plans.

[19] This study is an earlier version of the 2000 NAMHC study used to produce one of the overall estimates. While it looked at plan type estimates rather than an overall estimate, the estimates in the 1998 version generally are based on the same assumptions as the 2000 version and thus are relevant to Wisconsin. The 2000 report gives an overall estimate but does not classify the estimate by plan type. However, to the extent that managed care's cost control techniques were better understood in the later study, the assumptions regarding managed care may vary between the two studies.

[20] Incongruities exist between the studies used to produce the plan type estimates and the studies used to produce the overall estimates. As the 1998 NAMHC study provided the lowest estimated premium increase by plan type, while the CBO study provided the lowest estimate for overall premium increases, it appears that managed care plans have higher than average cost increases. However, comparisons should only be made within rather than between studies. If managed care plans were analyzed under the same assumptions that produced the CBO's overall estimate, the cost increases associated with these plans would likely be lower.

The magnitude of increased costs varies by plan type. As indicated in Table 4, the rise in premiums is significantly smaller for HMOs than for other plan types. HMO plans' dominance in Wisconsin's commercial group insurance market – 52 percent of plans – should help contain the overall cost of a parity mandate. PPO and POS plans each constitute approximately one-fifth of the market and fee-for-service make up 7 percent (OCI, 2006). Appendix H explains the calculations used to estimate premium increases by plan type.

Table 4: Increase in Group Insurance Market Premiums from Parity by Plan Type (2006 Dollars)

Plan Type	Estimated Percentage Increase		Estimated Rise in Annual Insurance Premiums	
	Low	*High*	*Low*	*High*
Health Maintenance Organization	0.6	1.3	$26 million	$56 million
Preferred Provider	2.7	5.1	$45 million	$86 million
Fee-for-Service	3.5	5.0	$20 million	$28 million
Point of Service	3.5		$60 million	

Sources for estimated percentage increases: Sing, Hill, Smoklin, &Heiser, 1998; Bachman, 2002

Increased Premium Costs for Employers and Employees

Understanding the impact of these cost increases on Wisconsin businesses and workers requires an examination of the share of premiums each pays. Appendix J provides greater detail on the calculations used to produce these findings for employers and employees.

Employee Premium Increases

The average Wisconsin worker pays 21 percent of the total health insurance premium.[21] Applying this share to the expected increases in total premiums indicates that a parity mandate might increase Wisconsin workers' aggregate premiums anywhere from $7 million to $35 million per year. Table 5 displays the range of estimated increased costs.

[21] This average incorporates the difference in employee share between individual and family coverage and the prevalence of each type of coverage within the Wisconsin commercial group insurance market using state-specific information from the U.S. Department of Health and Human Services Medical Expenditure Panel Survey.

Table 5: Increase in Aggregate Employee Premiums from Parity (2006 Dollars)

Estimated Percentage Increase	Predicted Rise in Total Annual Insurance Premiums
0.40	$7 million
1.52	$26 million
2.00	$35 million

Sources for estimated percentage increases: CBO, 2007; Kirschstein, 2000; Bachman, 2002

Employee premiums may differ between types of insurance plans as a result of the way different plan types operate and the varying employee premium shares within plan types. Table 6 reports the ranges of expected cost increases.[22]

Table 6: Increase in Aggregate Employee Premiums from Parity, by Insurance Plan Type (2006 Dollars)

Plan Type	Estimated Percentage Increase		Estimated Rise in Annual Insurance Premiums	
	Low	*High*	*Low*	*High*
HMO	0.6	1.3	$5 million	$11 million
Preferred Provider	2.7	5.1	$10 million	$17 million
Fee-for-Service	3.5	5.0	$4 million	$5 million

Sources for estimated percentage increases: Sing, et al., 1998; Bachman, 2002

While the aggregate increase in employee premiums appears large, analyzing the impact per worker suggests the costs are low. The average employee might experience a premium increase between $9 and $45 per year or 75 cents to $3.75 per month. The costs are lowest for HMO plans and markedly greater for PPO (while PPO plans are a type of managed care, they are much less controlled than HMO plans) and fee-for-service policyholders. Table 7 displays the expected premium increase per employee.[23]

[22] The table includes only information for HMO, PPO, and fee-for-service plans because the information source on plan types does not include employee share information for POS plans.

[23] Per-employee findings rely on data for the top 20 insurance providers to determine the per-employee cost. These insurers constituted 79.4 percent of commercial group premiums, or $6.5 billion. The analysis assumes that per-employee costs for the remaining portion of the market should not differ in any significant manner.

Table 7: Estimated Increases in Premiums per Employee from Parity (2006 Dollars)

Plan Type	Annual		Monthly	
	Low	*High*	*Low*	*High*
Overall	$9	$45	$0.75	$3.75
HMO	$13	$28	$1.07	$2.31
Preferred Provider	$62	$109	$5.18	$9.08
Fee-for-Service	$74	$107	$6.18	$8.89

Sources for estimated overall increases from authors' calculations with data from CBO, 2007, and Bachman, 2002; sources for estimated increases by plan type from authors' calculations with data from Sing, et al., 1998, and Bachman, 2002.

Employer Premium Increases

The share of increased premium costs not paid by workers will fall to Wisconsin businesses. Applying expected increases for overall premiums suggests that parity will raise aggregate costs for employers between $26 million and $130 million annually. Table 8 reports the range of expected cost increases.

Table 8: Increase in Aggregate Employer Premiums from Parity (2006 Dollars)

Estimated Percentage Increase	Predicted Rise in Total Annual Insurance Premiums
0.40	$26 million
1.52	$99 million
2.00	$130 million

Sources for estimated percentage increases: CBO, 2007; Kirschstein, 2000; Bachman, 2002

Similar to increases in employee premiums, expected costs to employers vary by plan type. Table 9 displays the estimated aggregate premium increases for employers by HMO, PPO, and fee-for-service plans.

Table 9: Increase in Aggregate Employer Premiums from Parity, by Insurance Plan Type (2006 Dollars)

Plan Type	Estimated Percentage Increase		Estimated Rise in Annual Insurance Premiums	
	Low	*High*	*Low*	*High*
HMO	0.6	1.3	$21 million	$45 million
Preferred Provider	2.7	5.1	$36 million	$67 million
Fee-for-Service	3.5	5.0	$16 million	$22 million

Sources for estimated percentage increases: Sing, et al., 1998; Bachman, 2002

The impact of these changes on a business would vary based on the number of workers it employs. Table 10 provides expected premium increases for businesses per worker.[24]

Table 10: Estimated Increases in Premiums from Parity per Worker(2006 Dollars)

Plan Type	Annual		Monthly	
	Low	*High*	*Low*	*High*
Overall	$34	$169	$2.82	$14.11
Health Maintenance Organization	$52	$112	$4.29	$9.30
Preferred Provider Organization	$228	$430	$18.98	$35.85
Fee-for-Service	$301	$430	$25.09	$35.89

Sources for estimated overall increases from authors' calculations with data from CBO, 2007, and Bachman, 2002; sources for estimated increases by plan type from authors' calculations with data from Sing, et al., 1998, and Bachman, 2002.

Individual Market Premiums

The estimated annual value of total premiums paid in Wisconsin's individual insurance market is $1.7 billion.[25] Due to the lack of research into the impact of parity mandates on the individual market, this analysis relies on the same sources for expected percentage premium increases as those used in the group market analysis.[26] Appendix G includes a discussion of the implications of using these estimates for the individual market.

Applying the estimated percentage premium increases to the total individual premiums written suggests that overall annual premiums in the Wisconsin individual insurance market would rise $6.6 million to $33.2 million as a result of parity (see Table 11). The smaller aggregate premium increases in the individual market compared to the group market is largely due to the small proportion (9 percent) of the commercial market that individual plans constitute (OCI, 2006). Appendix H explains the calculations used to produce these findings.

[24] Per-worker findings rely on data for the top 20 insurance providers to determine the per-worker cost. These insurers constituted 79.4 percent of commercial group premiums, or $6.5 billion. This analysis assumes that per-worker costs for the remaining portion of the market do not differ significantly.

[25] This estimate is based on indexing a 2005 figure reported by OCI (n.d.b) to 2006 dollars. Amounts were converted to 2006 dollars using the U.S. Bureau of Labor Statistics' Consumer Price Index for medical care in the Minneapolis, Minnesota-Wisconsin region.

[26] NAMHC's estimate is slightly different, 1.46 instead of 1.52, because it is weighted based on the proportion of the national individual market with single and family coverage, 69.7 percent and 30.3 percent, respectively (Bernard, 2005).

Table 11: Increase in Individual Insurance Market Premiums from Parity (2006 Dollars)

Estimated Percentage Increase	Predicted Rise in Total Annual Insurance Premiums
0.40	$6.6 million
1.46	$24.2 million
2.00	$33.2 million

Sources for estimated percentage increases: CBO, 2007; Kirschstein, 2000; Bachman, 2002

Premium Increases by Type of Insurance Plan

Similar to the group market, different types of insurance plans affect the change in premiums. However, the most prevalent type of managed care in the individual market is PPO, rather than HMO: more than 70 percent of individual market plans are PPO plans (OCI, 2006). As PPO plans have fewer managed care features than HMO plans, this might make parity more expensive for the average policyholder in the individual market. Table 12 provides estimated increases in premiums for each type of insurance plan in the Wisconsin individual market.[27] Appendix H explains the calculations used to produce these findings.

Table 12: Increase in Individual Market Premiums from Parity, by Insurance Plan Type (2006 Dollars)

Plan Type	Estimated Percentage Increase		Estimated Rise in Annual Insurance Premiums	
	Low	*High*	*Low*	*High*
Health Maintenance Organization	0.6	1.3	$1.4 million	$3 million
Preferred Provider Organization	2.7	5.1	$31.5 million	$59.5 million
Fee-for-Service	3.5	5.0	$9.1 million	$13 million

Sources for estimated percentage increases: Sing, et al., 1998; Bachman, 2002

Premium Increases for Individual Policyholders

Due to limitations in available Wisconsin data, this analysis used estimates of average monthly premiums for family and single plans in the north-central region of the country to estimate premium increases per policyholder in the individual market[28] (base premiums were $149 for single plans and $281 for family plans[29]

[27] Unlike the group market, the individual market does not have POS plans.

[28] This may underestimate the actual cost of premiums in Wisconsin because studies have shown that Wisconsin has higher than average insurance costs (Boulton, 2006).

[Kaiser Family Foundation, 2004]). This differs from the group market analysis, which used Wisconsin specific data.[30]

Table 13 shows that monthly premiums per policyholder may increase 59 cents to $2.97 for single coverage and $1.12 to $5.62 for family coverage. Appendix K explains the calculations used to produce these findings.

Table 13: Per Policyholder Increase in Premiums from Parity, Individual Insurance Market (2006 Dollars)

Estimated Percentage Increase	Predicted Rise in Monthly Insurance Premiums	
	Single Plans	*Family Plans*
0.40	$0.59	$1.12
1.40 / 1.60*	$2.08	$4.50
2.00	$2.97	$5.62

Sources for estimated percentage increases: CBO, 2007; Kirschstein, 2000; Bachman, 2002

*The NAMHC study provided separate cost estimates for single and family plans.

Although data constraints prevent this analysis from disaggregating the cost impacts for individual policyholders by plan type, the group market pattern of fee-for-service and PPO policyholders experiencing greater costs increases than HMO policyholders should hold within the individual market.

Out-of-Pocket Spending

Part of the rise in premium costs results from a transfer of treatment costs from those afflicted by mental health disorders to the insurance plan, and, therefore, the pool of policyholders. Without parity, persons with a mental illness who incur costs above the existing coverage caps must choose to pay for services themselves or forgo services. A number of studies have found that out-of-pocket spending for mental health services diminished with the enactment of a parity policy. Although this analysis cannot develop estimates specific to Wisconsin, a discussion of these

[29] These estimates are based on indexing 2003 figures reported by the Kaiser Family Foundation (2004) to 2006 dollars. Amounts were converted to 2006 dollars using the U.S. Bureau of Labor Statistics' Consumer Price Index for medical care in the Minneapolis, Minnesota-Wisconsin region.

[30] The data available on Wisconsin's individual insurance market was incongruent for estimating per policyholder costs. Premiums in Wisconsin's commercial market were reported as annual totals, while the number of policyholders reported were captured at a given point in time. Unlike the group market, where coverage remains relatively stable during a given year, enrollment in the individual market fluctuates throughout the year. Studies indicate that the individual market is generally a short-term solution for people who have lost employer-sponsored insurance and the majority of people tend to have individual health insurance for less than one year at a time (Demchak, 2006; Ziller, Coburn, McBride, & Andrews, 2004; Kaiser Family Foundation, 2004). This makes a point in time estimate of enrollment in the individual market an inappropriate proxy for an annual enrollment figures.

studies illustrates the potential for a parity mandate to reduce out-of-pocket spending for insured individuals with mental health disorders.

Vermont's 1998 parity policy was the most comprehensive of its time and remains among the strongest to date. A recent study of the impact of parity in the state found a reduction in the amount enrollees in Blue Cross/Blue Shield of Vermont paid to fund their own treatment. Table 14 compares the percentage of total mental health care out-of-pocket payments for varying levels of annual mental health care charges before and after parity. At all levels, parity reduced the financial burden on individuals seeking treatment. However, those with the greatest out-of-pocket costs before parity realized the greatest benefits after parity was enacted, even though they paid a smaller percentage of total charges (Rosenbach, et al., 2003).

Table 14: Reduced Out-of-Pocket Spending for Mental Health Services after Vermont's Mental Health Parity Mandate

Annual Level of Mental Health Charges	**Out-of-Pocket Payments as a Percentage of Total Mental Health Charges**	
	1996 (pre-parity)	*1999 (post-parity)*
$1-$500	50.0	19.3
$501-$1,000	32.0	20.0
$1,001-$2,500	27.1	20.3
$2,501-$5,000	18.4	14.1
More Than $5,000	9.0	4.4

Source: Rosenbach, et al., 2003

A study of federal employee health plans indicated a high potential for reduced out-of-pocket spending. The research followed seven Federal Employees Health Benefits Program plans that included a national plan and plans in four geographic regions. Changes in parity plans were compared against non-parity plans to control for the influence of factors outside the implementation of parity. The study found that five plans experienced statistically significant reductions for out-of-pocket spending per user for mental health and substance abuse services after parity. The savings ranged from $13.82 to $87.06 per employee per year; in 2006 dollars, these savings would range from $16.83 to $106.00[31] (Goldman, et al., 2006).

A study comparing out-of-pocket spending for mental health treatment with and without parity predicted that parity would lead to significant reductions in out-of-pocket spending. The research constructed a set of hypothetical episodes of mental health treatment that mirror the use of these services and examined the difference in out-of-pocket expenses by varying levels of mental health benefit costs. It found that parity reduced these expenses in HMO and non-HMO plans (Zuvekas,

[31] Amounts were converted to 2006 dollars using the U.S. Bureau of Labor Statistics' Consumer Price Index for medical care in the Minneapolis, Minnesota-Wisconsin region.

Banthin, & Selden, 1998). For example, an individual using $2,000 of mental health benefit costs would have his or her out-of-pocket expenses reduced by $592.99 under parity in an HMO plan and $792.83 in a non-HMO plan. Table 15 displays the savings in 2006 dollars.[32]

Table 15: Out-of-Pocket Savings under Parity by Plan Type by Mental Health Treatment Annual Costs (2006 Dollars)

Plan Type	Levels of Mental Health Benefit Costs			
	$2,000	*$10,950*	*$35,000*	*$60,000*
Average	$712	$4,916	$16,833	$40,389
HMO	$593	$4,830	$15,579	$41,415
Non-HMO	$793	$5,012	$17,930	$38,200

Source: Zuvekas, et al., 1998

When the study's authors revisited their research in 2001, they reported similar findings. The study predicted declines in the mean shares consumers pay for outpatient care after parity: "from between 40 and 50 percent to 20 percent or less for low expenditure levels, and from between 80 and 90 percent to less than 10 percent for higher expenditure levels." The decline in mean consumer cost-sharing for inpatient care would be "about 15 to 20 percent for lower expenditures" and "between 50 and 60 percent as expenditures rise to $50,000" (Zuvekas, Banthin, & Selden, 2001:1224).

Behavioral Responses to Parity

Mandating mental health parity might cause employers and employees in the group market and policyholders in the individual market to change patterns of health care consumption. In its estimate of the costs of the proposed federal Mental Health Parity Act of 2007, CBO noted that employers might respond to increased premiums by dropping coverage for employees or altering the plans they offer. They projected individual consumers might forgo health insurance due to the increased price. After accounting for these responses, the agency lowered its estimated cost of parity from 0.4 percent of premiums to 0.2 percent (CBO, 2007). An actuarial analysis of parity for the state of New York applied similar assumptions regarding individual responses to costs and reduced its estimate from 2 percent of benefit claims to 0.8 percent. While these responses reduce the cost estimates of parity, they entail potential reductions in access to health care services. Although this analysis cannot quantify the impact of behavioral responses for Wisconsin, the following sections assess the potential for these responses.

[32] The original findings were in 1995 dollars; they were converted to 2006 dollars using the U.S. Bureau of Labor Statistics' Consumer Price Index for medical care in the Minneapolis, Minnesota-Wisconsin region.

Employer Responses to Parity

If the cost of providing insurance to employees rises, employers may find that they can save money by altering or dropping coverage or shifting to self-funded plans.[33] Though these threats exist, evidence from other states indicates that parity would produce only a small impact on business and that the potential for employers altering coverage is low.

A *Business Insurance* article examining the impact of parity laws on businesses noted that "even the more stringent laws enacted by many states have not proved to be a major problem for employers" (Greenwald, 2000:3). The article quoted a business consulting firm representative, who believed that "most people think of parity as a pretty cost neutral experience" (Sternbach cited in Greenwald, 2000). In Wisconsin, where insurance plans are already required to offer some mental health coverage, the threat of a highly negative employer response after parity implementation likely would be even lower. Businesses that already offer some type of mental health benefit "have been less likely to feel a financial pinch from parity" (3).

The behavior of U.S. employers during the period of rapidly rising health insurance costs of the late 1990s suggests that the predicted cost increases from parity will be insufficient motivation for employers to increase the share of premiums paid by their workers. Although health care premiums rose dramatically from 1996 to 2000, employers continued to cover the same proportion of premium costs (Frostin, 2001; Mercer cited in Frostin, 2001; Ganel, et al. cited in Frostin, 2001). These findings should not be interpreted as employers failing to shift costs since employers may have offset increased health care costs through reductions in workers' taxable compensation and other fringe benefits (CBO, 2001). Rather, it is evidence that the increased health care costs associated with parity would not necessarily engender a change in the share of premiums paid by employers.

Specific states' experiences after parity enactment confirms that a parity mandate is unlikely to lead to significant changes in the coverage employers offer their employees. A survey of New Hampshire insurance carriers and health plans two years after the implementation of a parity mandate for biologically based mental illnesses found that the mandate "was not a factor in negotiating premiums or benefits with employers and none could report concerns expressed by either employers or consumers related to the implementation of the new legislation" (Lewin Group, 1997). The insurance providers reported that employers had not made changes to benefits, deductibles, cost-sharing, or medical management in response to the law (Lewin Group, 1997).

[33] Recall that self-funded plans are exempt from state health care mandates under ERISA.

A 1999 California parity policy targeting severe mental illnesses had little impact on employers. A Mathematica study that evaluated implementation of the law found "no evidence that employers – large or small – were dropping health care coverage" because of parity (Lake, Sasser, Young, & Quinn, 2002:20). Employers surveyed noted that the parity law was a "non-event" and a "'small blip' on employers' radar screens compared with other human resource issues" (21).

A survey of Vermont employers after implementation of parity suggested that parity had little impact on them. After Vermont enacted a comprehensive parity law, a small number of employers (0.3 percent) reported dropping coverage in response to the law. These businesses employed only about 0.07 percent of the state's workforce. While one-fifth of employers who reported increased premiums identified parity as a reason, one-third indicated that the policy was not a reason. Only 5 percent of fully insured employers suggested that parity influenced a change in the proportion of premiums their workers were required to cover (Rosenbach, et al., 2003).

Even if employers did not alter the coverage they offer to workers, they might shift to self-funded plans to escape a state mandate and maintain administrative flexibility. However, the likelihood of parity encouraging a transition to self-funded plans appears low. Research into the reasons employers move to self-funded plans suggests that the choice is driven more by an attempt to avoid conflicts in insurance laws between states than a desire to limit costs (DeFrancesco, 2004).

Vermont's experience confirms the low threat of a shift to self-funded plans in response to a parity mandate. That 3 percent of employers changed at least one plan to self-funded indicates that the parity law influenced their decision (Rosenbach, et al., 2003).

Consumer Responses to Parity

Premium increases associated with mental health parity might cause some individuals in the commercial market to forgo health insurance. One way to estimate the number of Wisconsin residents who would drop coverage because of price increases is through the price elasticity of demand for health insurance. The term "price elasticity of demand" refers to a percentage change in the quantity of a good demanded in response to a given percentage change in price (Perloff, 2004). While the price elasticity of demand for health insurance is hard to measure precisely, most studies estimate a fairly inelastic price elasticity of demand for health insurance, with a percentage change in price leading to a smaller percentage change in demand. Inelastic demand means that consumers spend a greater proportion of their income on health insurance.

A 2005 CBO study looked specifically at price elasticity within the individual health insurance market. The CBO estimated a 1 percent increase in premium costs resulted in 0.57 percent decrease in the number of people with health

insurance. Applying this elasticity to the individual market in Wisconsin suggests that for every 1 percent increase in premiums, 453 of the estimated 79,000 policyholders in Wisconsin's individual market[34] would choose not to retain their health insurance coverage.

Another study estimated that an increase of 1 percent in health insurance premiums would result in a 0.2 percent drop in insurance (Mandated Health Benefits Advisory Commission, 2005). Applying this elasticity to the Wisconsin group market suggests that for every 1 percent increase in the cost of health insurance premiums, 1,221 of the estimated 611,000 policyholders[35] would elect to drop health insurance coverage. This may be an overestimate because it does not take into account the value of additional services for people with a mental illness.[36]

While these estimates provide some sense of the potential drop in health insurance coverage from parity, they are limited. First, they provide an aggregate estimate of demand elasticities. In reality, a number of factors affect an individual's price elasticity of demand. In the context of the demand for health insurance, demographics such as income and health status can be expected to affect one's likelihood of dropping insurance coverage. Finally, the relatively small premium increases associated with parity and that these increases arise from provision of additional services suggest that individuals would be less likely to drop coverage than might be the case when premium increases result from the rising cost of health care.

Utilization of Mental Health Services

Equalized benefits coverage between physical and mental health conditions may not produce the desired impact on individuals' access to needed mental health services. Analyzing changes in utilization rates for mental health care services before and after parity can illustrate both the potential for additional use of services under parity and how parity might alter the type of services individuals use.

A review of the literature (highlighted in Appendix L) found mixed results in terms of the effect of parity on the utilization of mental health care services. Case studies of states and commercial companies that implemented parity indicate slight changes, both positive and negative, in mental health care utilization among plans that had managed care prior to enactment of parity. Plans that implemented managed care

[34] Calculated by multiplying 0.0057 by the total number of policyholders in the individual health insurance market in 2005, as reported by OCI (2006).

[35] This is calculated by multiplying 0.002 by the total number of policyholders in the group health insurance market in 2005, as reported by OCI (2006).

[36] The estimate is based on the assumption that the premium increase is "valueless" for consumers. A reasonable assumption is that a premium increase associated with expanded mental health benefits would have value for individuals with a mental illness or with family members with a mental illness but be "valueless" for individuals without either and who do not expect to require those services. Thus, the subgroup of the commercial market that has to pay for mental health care will be less likely to drop coverage than this elasticity predicts.

and parity simultaneously displayed sharper increases in utilization (Rosenbach, et al., 2003; Branstrom & Sturm, 2002). However, in these cases, it is difficult to isolate the impacts of parity on utilization from utilization increases that could be attributed to an influx of new mental health users into managed care plans.

Vermont's experience suggests that parity might have different impacts on different types of health care services. In the Vermont commercial insurance plan that used managed care before and after parity was implemented for its mental health services but not for substance abuse services, a change in the type of care utilized was observed. The use of outpatient mental health services increased under parity, while inpatient mental health services decreased. Differences also appeared between substance abuse and mental health care services. Unlike mental health care utilization rates, substance abuse service utilization rates decreased as a result of parity regardless of plan type (Rosenbach, et al., 2003). The generalizability of these findings are limited by a short evaluative time frame and the possibility that observed effects have more to do with adjustments to new benefits than long-term changes in utilization behavior.

Research studies comparing states that implemented mental health parity against states without the mandate have found that parity legislation has little effect on utilization rates (Bao & Sturm, 2004; Pacula & Sturm, 2000). However, these studies include self-funded plans in their data comparisons. Self-funded plans are exempt from state health care mandates and, therefore, unaffected by parity policies. As a result, the studies may have been unable to capture the overall impact of mental health parity on utilization rates.

Two studies isolated plans affected by parity legislation, while accounting for influences on the use of mental health services that are independent of parity (such as the rising cost of health care or changes in the uninsured population) (Parity Evaluation Research Team, 2004; Goldman, et al., 2006). By using a comparison group, these two studies separated the effect of parity on the utilization of mental health services from the effect of other changes in utilization rates. Both studies found that natural changes in utilization rather than the enactment of mental health parity drove the observed changes in utilization rates. A weakness of these studies was their failure to account for changes in service utilization patterns. For example, inpatient services could have decreased at the same time that outpatient care increased, producing a net result of little or no change in overall utilization rates.

Managed Care Discussion

A significant reason for the limited increase in health care costs and the minimal increase in utilization of mental health services is the role managed care plays in how people access health care. Prior to managed care, insurance companies primarily used benefits design (for example, day limits on inpatient care) and cost-sharing to limit individuals' use of medical services and control costs. Managed care uses supply-side techniques, like provider agreements, prior authorization, and utilization review to achieve the same containment goals.

Outside formal studies on parity and mental health care service utilization rates, consensus is growing that managed care may impact the relationship between parity and access to mental health care. Experience has shown that parity increases the likelihood of insurance companies and employers switching to managed care to control costs. Managed care contains costs by offering supply-side incentives to ration health care services. Thus, while parity ensures that insurance benefits are equal between mental and physical conditions, it cannot regulate the way that utilization is controlled under managed care (Burnam & Escarce, 1999). Further, because mental health conditions are usually managed separately from physical health conditions – either within the same health plan or through carve-out (see Appendix B) – mental illnesses can be subject to different cost control measures than physical illnesses (Frank, Goldman, & McGuire, 2001). While the explicit mechanisms through which managed care affects supply and demand for health care are not well understood, the role of managed care suggests that parity may not be enough to ensure its explicit goal of equal treatment for mental and physical health conditions. Further, managed care tools may inhibit improved access to health care for individuals with mental illness.

The relationship between cost and access within managed care plans is an important, if poorly understood, factor in discussing the impacts of parity. While some plans that instituted parity experienced decreased costs, an examination of these plans suggests that savings arise from changes in the use of health care services or the introduction of managed care. Appendix M provides specific cases where the implementation of parity led to cost savings.

Summary of Impacts on Wisconsin's Insurance Market

Overall, this analysis estimates that mental health parity would raise annual premiums in Wisconsin between $39.6 million and $198.2 million. For employers, this raises annual premium costs $34 to $169 per worker, translating to a monthly increase of $2.82 to $14.11 per worker. Employees would experience an annual increase of $9 to $45, or a monthly premium increase of 75 cents to $3.75. Within the individual insurance market, the average single plan's monthly premium could rise 59 cents to $2.97, and the average family plan's monthly premium could rise $1.12 to $5.62. Lower cost increases can be expected in managed care plans, especially in HMOs. Evidence suggests that these cost increases would not induce employers to alter the insurance coverage they provide but may lead to a small number of individuals dropping coverage. As a result of parity, individuals with a mental illness may see their out-of-pocket costs reduced. Based on other research, utilization of mental health services is expected to remain relatively unchanged, largely due to managed care's impacts on access to health care services.

Benefits of Mental Health Parity

This section of the analysis discusses the potential benefits of implementing mental health parity in Wisconsin. This discussion will be more general than that of costs and will not assign precise monetary values to the benefits afforded by parity. The reason for this is that neither the current mental health parity research nor existing estimates of mental health treatment's benefits provide the data necessary to formulate a defined dollar amount of benefits applicable to individuals with a mental illness in Wisconsin's commercial insurance market (see Appendix N for a detailed discussion of these reasons).

The discussion that follows highlights what is known about the potential benefits of mental health services. Benefits can be classified into four main categories: benefits to individuals with a mental illness, benefits to employers, benefits to insurers, and benefits to society. Where the research allows, a quantitative estimate of the benefit in Wisconsin is provided. Where that is not possible, the anticipated benefit, an approximation of its magnitude, and a discussion of what is known and unknown about that particular benefit are explained.

Benefits to Individuals with a Mental Illness

In Wisconsin, individuals with group health insurance who require care beyond what is covered by their health insurance plan[37] must decide whether they will pay the full cost of further treatment or forgo that treatment. Given the high cost of some mental health care services, some people probably delay necessary treatment. For these individuals, parity would increase their access to treatment. The resulting improvements in mental health and functioning can yield a number of residual benefits.

As the individual cost of treatment declines, persons with a mental illness and their families would experience less financial burden. The benefit of this effect exceeds the simple transfer of individual out-of-pocket spending to insurance companies in terms of increased benefit payouts. Insurance companies are able to negotiate a lower price for treatment services compared to what an individual pays for the same service on their own. An online article in *Health Affairs* noted, "Recent analysis suggests that private insurers on average pay 39 percent of charges for hospital inpatient services and 56 percent of charges for physician services" (Ginsburg, 2007). Obtaining care through insurance at a negotiated price results in greater economic efficiency, creating a net social benefit.

[37] Generally, health insurance plans offer the minimum mandated coverage amounts of $7,000 inpatient, $3,000 transitional, and $2,000 outpatient mental health treatment.

Benefits to Employers

Improving access to mental health services may produce benefits for Wisconsin businesses. A healthier workforce means lower costs for employers.

Reduced Absenteeism

Several research studies have highlighted the reduction in absenteeism when mental illness is properly treated (Goetzel, Ozminkowski, Sederer, & Mark, 2002). Employees who receive treatment for their mental disorders are less likely to miss work. Businesses then benefit from increased productivity – a present worker is often more productive than an absent or substitute one. Additionally, employers may see reduced costs associated with overtime wages and substitution wages. If employees' treatment for mental disorders leads to improved attendance, other employees may not need to work overtime to compensate for their colleagues' absence.

Many studies have attempted to capture the costs of absenteeism to employers. Research on the impacts of depression illustrates the cost associated with absenteeism. One study found that those with depressive illness were absent from work an average of 9.86 days per year. In comparison to employees without mental disorders, a Harvard study found that depressed workers missed three more days per year than their counterparts (Goetzel, et al., 2002). The National Committee for Quality Assurance estimated that nationally there were 8.4 million sick and lost productivity days among workers with depression. This translates to nearly $1.4 billion in lost productivity (2006).

In Wisconsin, an estimated 2.08 percent of commercial insurance claims were filed for major depression (Finkelstein, et al., 2002). This translates to roughly 17,300 Wisconsin residents who sought some form of treatment for depression. If all of these claimants were employed, they missed more than over 170,500 days of work in one year because of depression-related symptoms. This estimate does not include the number of people who may suffer from depression but do not seek treatment, which would increase the number of work days missed because of depression.

Nationally, depression constituted 2 percent of commercial market insurance claims in 2002. Three percent of claims were associated with stress and adjustment disorders, and 4.33 percent of claims were associated with mood and anxiety disorders (Finkelstein, et al., 2002). The above estimate of missed work days only included those days related to depression; adding other mental illnesses into the calculation would increase the total number of days employees are absent due to a mental illness.

Increased On-the-Job Productivity (or Reduced Presenteeism)

Employers may also see benefits of treating mental disorders for workers who are on the job. "Presenteeism" costs refer to employees who may be physically present for work but are not producing at their optimal level. Workers who suffer from mental illness may have high rates of presenteeism, costing businesses

through reduced productivity. Studies have attempted to capture the costs of presenteeism to employers. One study estimated that workers with depression experienced "work cutback" an average of 13.08 more days per year than employees with no mental illness; this translates to 5 percent of the year for a full-time worker (Goetzel, et al., 2002).

In terms of Wisconsin's commercially insured population, employees who experience depression-related presenteeism lose an average of 13.08 days per year per employee. In the aggregate, this translates to roughly 226,200[38] days per year lost for Wisconsin employers due to reduced productivity. These costs of diminished productivity to Wisconsin employers could be even larger with the inclusion of other mental disorders. If parity increases the treatment of mental disorders, then employers should see reductions in these presenteeism costs and the benefits of a more productive workforce.

A cost-benefit analysis examining the effects of enhanced depression treatment among workers from a range of industries across the nation offered evidence of the value of increased mental health services access. The study found that absenteeism and presenteeism decreased when employees with depression were provided with more intensive treatment. For every $1.00 invested in more thorough mental health treatment, employers gained a minimum return on investment of $1.20 in the form of increased productivity and attendance. The benefits increased as employees stayed with their respective companies for longer periods. Although the applicability of this study to parity is limited by its use of intensive case management and physician services from a general medical practice rather than from mental health specialists, it suggests that some benefit should accrue in the move to higher levels of mental health treatment (Lo Sasso, Rost, & Beck, 2006).

Other studies have indicated that on-the-job productivity loss for depressed workers is between 20 and 25 percent of their total productivity. This loss is generally associated with "poor concentration, memory lapses, indecisiveness, fatigue, apathy, and lack of self-confidence" (Goetzel, et al., 2002:324). Significant costs can accumulate to employers if employees who suffer from depression are present at work but produce at a compromised level.

Reduced Short-Term Disability Costs

Research has indicated that employers experience reduced short-term disability costs when mental illnesses are treated properly. Research indicates employees with mental disorders may use short-term disability benefits more frequently than workers without mental illness. One study estimated that workers with depression experienced between 1.5 and 2.3 more short-term disability days than non-depressed workers during a 30-day period. The same study noted that these short-term disability claims

[38] This figure was calculated by using the estimate that roughly 17,300 adults in the commercial insurance market were treated for depression multiplied by the number of days per year attributed to presenteeism (13.08).

translate into salary equivalents of $182 to $395 per worker. Using the report's estimates, nationally, a worker with depression would use 18 to 27.6 days per year in short-term disability claims (Kessler, et al., 2001). This costs employers short-term disability payouts, employee productivity losses, and expenses associated with overtime or substitution needed to compensate for the employee's absence.

Other Potential Cost-Savings to Employers

While most research on the impact of mental health disorders in the workplace focuses on productivity losses, increased access to mental health services may yield other benefits to employers. One possible cost-savings is reduced employee turnover. The employees most likely to be absent, suffer from presenteeism, or collect short-term disability claims are also more likely to be dismissed or quit. Connecting these individuals to treatment enables them to not only become more productive but may increase the length of time they stay with an employer. Workforce stability saves employers money by decreasing the costs associated with recruitment and training of new workers.

A related benefit to employers is the potential for increased safety and fewer occupational accidents. With treatment, employees with a mental illness should be more focused on the job. This focus could reduce the number of workplace accidents that occur, making the workplace safer. If workplace accidents are reduced as a result of mental illness treatment, employers may see a reduction in the number and amount of workers' compensation claims that are filed. One study found that people with substance abuse disorders are 3.5 times more likely to experience an accident in the workplace and five times more likely to file for workers' compensation (Lewis & Klineberg cited in Brumbaugh, 1998). Increased workplace safety could generate significant cost-savings for employers, especially in industries where occupational injuries are frequent.

Additionally, some studies have suggested that employers who restrict mental health benefits in their insurance plan may experience increased physical care costs. Goetzel and colleagues noted that "there is some evidence, for example, that when employers 'ration' mental health benefits, physical health costs may actually increase" (Goetzel, et al., 2002: 325). This study estimated that employees who lost access to mental health services used physical health services 37 percent more, presumably because their mental health benefits were restricted (Goetzel, et al., 2002).

Benefits within the Insurance Market

Mental health disorders do not occur in a vacuum. Research has identified connections between mental health conditions and diminished physical health. The prevalence of co-occurring mental disorders and substance abuse is also documented. The relationship of mental health disorders and other medical conditions suggests that treatment of mental illness may produce additional health care savings. These savings may reduce costs for insurance companies by lowering

the number of claims for physical health services. Ultimately, benefits to insurance companies would extend to all persons in the insurance pool in the form of lower premiums or slower premium growth. Just as increases in the use of mental health services under parity could increase insurance premiums, decreased demand for related medical care as a result of parity should create downward pressure on premium prices.

Reduced Physical Health Claims

Increasing access to mental health services may produce an associated decrease in physical health claims and acute care services. Research has shown that individuals with chronic physical illness and a mental illness tend to consume physical health services at a higher rate than persons with a chronic physical condition who do not have a mental illness (Kathol, et al., 2005). The cause of the correlation between physical and mental illness is unknown. To the extent that physical and mental health are related, treating mental illness may simultaneously decrease physical health expenditures. Prior experience suggests this is true. Following the state of Ohio's implementation of mental health parity for state employees, there was an overall savings in health care costs (Mandated Health Benefits Advisory Commission, 2005).

One study found that people diagnosed with depression incur nearly twice the physical health care costs of those without depression in a one-year period. Persons diagnosed with somatization[39] disorder had nine times greater annual physical health care costs than individuals without the disorder (Harris & Edlund, 2005). In two separate studies using random assignment, persons with somatization disorder were provided both mental and physical health services as opposed to solely physical health services. Both studies observed a reduction in health care expenditures (53 percent and 33 percent) when individuals received treatment for both physical and mental health conditions (cited in NIMH, 2000). These results suggest that parity, through increases in mental health services for individuals who previously received an inadequate level of care, may produce a decline in physical health claims.

Substance abuse can lead to physical health complications. To the degree that substance abuse is treated prior to development of a physical health problem, cost savings will occur. California observed such savings when the state's largest HMO began providing unlimited treatment for addiction and alcoholism. The HMO calculated that costs of substance abuse treatment were recovered within 18 months due to significantly lower physical health claims (Bender & Fritchen, 2005).

[39] Somatization disorder is "a chronic condition in which there are numerous physical complaints. These complaints can last for years, and result in substantial impairment. The physical symptoms are caused by psychological problems, and no underlying physical problem can be identified" (Medline Plus, 2006).

Co-Occurrence of Mental Health Disorders and Substance Abuse

Numerous clinical studies have documented the co-occurrence of substance abuse and mental illness (Harris & Edlund, 2005). In the National Comorbidity Study, 51 percent of persons meeting the criteria for substance abuse also met the criteria for a mental disorder at some time in their life (cited in Harris & Edlund, 2005). It is unknown why this correlation is so high; some theorize that individuals with mental illness use substance abuse to self-medicate, while others believe that prolonged substance abuse may cause mental illness. To the extent that there is an interaction between the two conditions and that treatment of these conditions requires greater insurance coverage than is available under current insurance offerings, a parity law should provide greater access to proper treatment. If this occurs, then lower costs may accrue over the long-term as substance abuse and mental illness conditions are treated before they interact.

Benefits to Society

Parity's main benefit to society will likely be found in decreased costs associated with crime and incarceration. For example, a ten-year longitudinal study of the benefits of treatment for conduct disorder[40] found that the costs of crime make up two-thirds of the total costs associated with the disease. Crime costs were greater than those of medical, special education, and social service costs combined (Scott, Knapp, Henderson, & Maughan, 2001).

The large number of incarcerated adults suffering from a mental illness or a substance abuse problem offers further evidence of the connection between untreated mental health needs and crime. Fifty to 75 percent of the children in juvenile justice facilities have a mental illness, and many have co-occurring substance abuse problems (cited in National Mental Health Association, n.d.). What is not well known is the percentage of these individuals who are insured by a commercial group health insurance plan, either through their own employment or a family member's employment. Therefore, it is difficult to determine the degree of societal benefit associated with lower crime and incarceration costs that could be realized through passage of mental health parity legislation.

Coverage of substance abuse conditions under mental health parity potentially provides benefits to society through reduced crime and incarceration costs. From 2000 to 2002, the state of California conducted a cost-benefit analysis (called CalTOP) that monetized the benefits to society accrued from treatment of individuals with substance abuse disorders in the Medicaid system. Overall, the study found $7.00 in benefits gained for each dollar spent on treatment. The largest benefit was observed in the costs associated with crime; there was a 14 percentage point decrease in rates of arrests following treatment. Those who remained in treatment longer than 90 days had a 4 percentage point lower rate of incarceration than those with shorter treatment stays (Hser, et al., 2003).

[40] Conduct disorder is "characterized by a pattern of behavior that violates the basic rights of others or major age-appropriate societal norms or rules" (DSM-IV-TR, 2000). It is fourth among the most frequently occurring childhood disorders (Finkelstein et al, 2002).

Covering substance abuse conditions in the mental health parity mandate should produce benefits for society in the area of traffic safety. The CalTOP study observed a 5 percent decrease in arrests for driving under the influence, and a 2 percentage point decrease in motor vehicle accidents after treatment. Again, larger effects were observed for individuals who received 90 days of substance abuse treatment.

As the CalTOP analysis observed Medicaid enrollees before and after treatment, the benefits realized following implementation of mental health parity in Wisconsin likely would be smaller than those experienced in the CalTOP study. However, while the magnitude of the benefit of longer treatment may differ when implementing parity in Wisconsin, the potential benefits associated with longer treatments are applicable. Currently, Wisconsin substance abuse treatment services through private group health plans allow for a cycle of treatment no longer than 30 days.

Benefits of Treating Childhood Mental Disorders

The economic benefits of treating childhood mental illness are observed in the areas of health care, education, and future work productivity, and accrue over a child's lifetime. In addition, treatment of children with a mental illness yields benefits for their parents that include reduced absenteeism and presenteeism at work and financial savings when fewer costs are incurred to provide health care to their children (Glied & Neufeld, 2001). Relatively little information is available that addresses "childhood mental disorders" as a broad category. Rather, research in this area tends to focus on specific disorders. This section will touch on two disorders that are frequently researched (depression) or have recently been a focus for policymakers (autism and other pervasive developmental disorders).

Much of the research exploring the benefits of treating childhood mental disorders focused on the second most frequent diagnosis, depression. Multiple studies have found that depression in children and adolescents affects social functioning and school performance, and increases the risk of substance abuse (Wells, Kataoka, & Asarnow, 2001; Lynch & Clarke, 2006). Depression also leads to a higher likelihood of involvement in the juvenile justice system (Glied & Neufeld, 2001). To the extent that mental health parity improves the outcomes of children with depression, society could benefit from greater work productivity, less substance abuse and the negative effects of these disorders, less crime, and decreased demand for special services in school. Like any intervention involving children, the earlier that appropriate treatment for mental illness is received, the greater future benefits may be.

A growing number of children are diagnosed with pervasive developmental disorders, including autism. This disorder begins in the preschool years, and affects social and communication skills. Early intervention has been shown to improve child outcomes and may reduce the need for special education programming in later years. Where mental health parity results in greater access to treatment in a child's pre- and early school years, long-term treatment costs should be reduced, producing a net benefit for society.

Impact of Mental Health Parity on Stakeholders

Enacting mental health parity legislation in Wisconsin would affect stakeholders differently. The following section summarizes the impacts (both the costs and potential benefits) of a parity mandate for major stakeholders and describes their current position on the issue. The stakeholders evaluated in this analysis are health care consumers with commercial insurance, consumers who have a mental illness, small businesses, large businesses, health insurance companies, and the Wisconsin state government. Table 16 provides a summary of the impact of mental health parity on these stakeholders.

Health Insurance Consumers in the Commercial Market

As estimated in detail earlier in this report, policyholders in the group health insurance market—representing 91 percent of all persons covered in the commercial market—could see average premium increases of $9 to $45 per year. In the individual market policyholders would experience average premium increases of $7 to $36 per year for single plans and $13 to $67 for family plans.

Health insurance consumers could realize potential savings from the societal benefits of parity. The potential benefits that could affect health insurance include reduced crime, reduced incarceration costs, and fewer traffic accidents. While this analysis was unable to monetize the benefits for these stakeholders, insurance consumers would receive some of the societal gains associated with parity.

Generally, health insurance consumers support mental health benefit expansions. A study of public opinion on mental health parity highlighted that the public[41] endorses expansions but that this support can diminish depending on type of disorder and estimated cost increases. For example, when asked if they backed a guaranteed mental health benefits, 69 percent said yes, but support dropped to 34 percent when the benefits would mean higher taxes or premiums. Additionally, the study indicated much lower levels of support for including substance abuse benefits (Hanson, 1998). Based on these findings, health insurance consumers' support of mental health parity is conditional and should be considered when weighing the feasibility of enacting a parity mandate in Wisconsin.

Consumers with a Mental Illness

Individuals with a mental illness would realize several potential benefits from parity legislation, including improved treatment for their illness (which may have gone un- or undertreated because of unequal insurance benefits), and potential out-of-pocket cost savings. Coverage of mental health benefits would allow people with a mental illness to access needed services and reduce the role of cost as a barrier to receipt of services.

[41] The study specifically looked at public opinion polls, which are an appropriate estimate for the attitudes of health insurance consumers in Wisconsin.

Individuals with a mental illness in the commercial insurance market would likely support parity legislation. Stigmas attached to mental illness could be reduced if parity legislation was enacted. In addition, provision of equal benefits for mental and physical illnesses would improve access to health care services for this group.

Employers

The business community would see increased premium costs as a result of parity enactment. Individual employers could see average premium increases of $34 to $169 per worker per year. Although businesses may pass on much of this cost to employees through slower wage increases and decreased compensation packages, this could affect their ability to remain competitive in their industry (CBO, 2007).

Benefits generated from parity legislation could offset costs to employers. These benefits include decreased absenteeism, increased on-the-job productivity, reduced short-term disability costs, lower turnover, fewer workplace accidents, and lower physical care costs. While this analysis was unable to quantify these benefits, appropriate treatment of mental illness should increase productivity in the workforce, and, in turn, generally raise a company's profits.

Employers, as well as groups that represent their interests, tend to oppose mental health parity legislation for two reasons. First, employers are generally concerned with the anticipated cost increases associated with the expansion of mental health benefits. Significant cost increases in health insurance premiums can affect businesses' financial stability. Second, employers oppose mental health parity because they feel that mandated benefits reduce their freedom to choose a health insurance plan that fits their employees' needs (Lake, et al., 2002).

Along with some insurance associations, several business associations have joined the Coalition Opposed to New Health Care Mandates. The coalition, with 18 members from Wisconsin business and insurance associations,[42] has announced its opposition to health insurance mandates included in Governor Jim Doyle's 2007-2009 state budget. The governor's budget includes increases in coverage limits for mental health and substance abuse services. The coalition has publicly denounced these mandates, saying they will drive up the cost of health insurance and only affect the commercial market (Coalition Opposed to New Health Care Mandates, 2007).

[42]The business associations in the coalition include the National Federation of Independent Business, the Wisconsin Auto and Truck Dealers, the Wisconsin Manufacturers and Commerce, and the Wisconsin Restaurant Association. The insurance interests include the Independent Insurance Agents of Wisconsin, the National Association of Insurance and Financial Advisors, the Professional Insurance Agents of Wisconsin, the Wisconsin Association of Health Plans, and the Wisconsin Physicians Services Insurance Corporation (Coalition Opposed to New Health Care Mandates, 2007).

Small Businesses

Small businesses may oppose parity legislation more strongly than large businesses, though generally for the same reasons. Small businesses typically operate on a much tighter profit margin and thus any cost increases may have a more pronounced effect on a small business' profit. Also, while small businesses are less likely to offer health insurance coverage to their employees, those that do tend to pay higher premiums per employee than larger employers (Lake, et al., 2002).

The opposition of small businesses has affected the types of parity legislation passed in other states. Of the states that have some form of parity legislation, 13 exempt small businesses from meeting the requirements of parity law. New Mexico exempts small businesses if their annual costs increase more than 1.5 percent from parity requirements. New York uses an alternative approach, offering a subsidy for small businesses to offset the costs of meeting the state's parity mandate. Accommodating the interests of small businesses, either through a cost exemption or subsidy, may increase the political feasibility of a parity mandate.

Health Insurance Companies

Because health insurance companies generally pass on the cost of expanding benefits by increasing the cost of policyholder premiums, they should not see large costs due to the enactment of parity. Health insurance companies may see fewer physical health claims as a result of parity legislation; research has indicated that properly treating mental illness may reduce the number of physical health claims made by people with mental disorders (Mandated Health Benefits Advisory Commission, 2005). However, as decreases in the costs of services should also be passed on to policyholders through lower premiums, reductions in physical health claims may not result in significant reductions in costs for health insurance companies.

Health insurance companies have expressed strong opposition to the enactment of parity legislation. Generally, health insurance companies and representative groups oppose mandates on health insurance benefits because, they argue, mandates raise the cost of health insurance by requiring "static clinical procedures" (America's Health Insurance Plans, n.d.). Donald Young, then president of the Health Insurance Association of America (now America's Health Insurance Plans) noted that parity legislation at the federal level was "a misguided effort to provide additional treatment resources for a wide variety of ill-defined and difficult-to-diagnose mental disorders" (cited in Barry, Frank, & McGuire, 2006). This quote indicates the apprehension of insurance companies to cover mental illnesses, citing that these disorders are difficult to define, diagnose, and treat.

Government

Increased regulatory responsibilities associated with enacting parity legislation could impose a cost on Wisconsin's government; however, this cost may be insignificant as the government already regulates other health insurance mandates. The entire state could realize several benefits associated with adequately treating mental illness, including reduced crime and incarceration costs, and fewer traffic accidents. Additionally, benefits from treating childhood mental disorders accrue to society through reduced lifetime costs of additional health and educational services as well as increased lifetime productivity.

Parity legislation has been proposed before in Wisconsin and has faced opposition to passage from various stakeholders. Table 16 summarizes the impact of mental health parity on these stakeholders.

Table 16: Summary of Parity's Impact on Stakeholders

Stakeholders	Costs	Potential Benefits	Political Feasibility
Health Insurance Consumers	Premiums increase $7 to $67 per year	Portion of societal gains including reduced crime, reduced incarceration costs, and fewer traffic accidents	Moderately supportive of equalized benefits, although wary of expansion costs Lower support for inclusion of substance abuse benefits
Insurance Consumers with a Mental Illness	Premiums increase $7 to $67 per year	Receiving necessary treatment forgone without parity Reduced out-of-pocket costs for services	Supportive
Employers	Premiums increase $34 to $169 per year per employee Costs may be passed on to workers over time	Reduced absenteeism Increased on-the-job productivity Reduced short-term disability claims Other gains (including lower turnover, workplace accidents, and physical care costs)	Oppose because of cost increases and perceived limitations on choice of plans
Small Businesses	Same as above	Same as above	Oppose because of cost increases (may be higher for small businesses with tighter profit margins) Oppose because of perceived limitations on choice of plans with mandated benefits
Health Insurance Companies	Cost increases would generally be passed onto consumers and businesses through increased premiums	May have reduced expenditures on claims for physical health services	Oppose more mandates on insurance market Mental disorders are not clearly defined and are difficult to diagnose, thus parity is a wrong approach
Wisconsin State Government	Potential regulatory costs	Societal gains including reduced crime, reduced incarceration costs, and fewer traffic accidents	Parity legislation has failed in past years with only incremental changes occurring

Limitations of the Analysis

While providing insight into the potential impacts of implementing mental health parity in Wisconsin, this analysis faces limitations associated with the scope of the available data. The greatest limitation is a reliance on data from outside Wisconsin. Prevalence rates of mental illness, the proportion of commercially insured individuals seeking treatment, average premium per policyholder within the individual plan market, and expected percentage increases in insurance premiums used non-Wisconsin information. Although these data are adjusted for some Wisconsin-specific characteristics, such as population, total premiums written, distribution of insurance plans, and the proportion of individuals in single and family coverage, differences remain that do not account for state-level variation. This may affect the accuracy of this analysis' predictions for the state (see Appendix O for a more detailed discussion of the implications of this limitation).

Limitations also arise in the available data related to benefits estimates. The major factor affecting benefits estimates concerns the inability to monetize the gains associated with implementing parity due to the nature of existing benefits estimates for mental health care. Prior studies of the benefits of treatment have focused on moving from no treatment to some treatment for mental disorders. However, as the population within Wisconsin would move from limited to additional treatment, the benefit would be smaller than that gained from initial access to services. The lack of research on the benefits of additional mental health care precluded a cost-benefit analysis of mental health parity (see Appendix N for a discussion of which data would be needed to conduct such a cost-benefit analysis).

These limitations are significant and affect the report's ability to pinpoint the overall impact of mental health parity for the state.

Policy Recommendation

The authors recognize that the political feasibility of implementing mental health parity is potentially problematic. Past discussions of parity have been dominated by concerns over significant cost increases. However, this report finds that premiums should rise only 0.4 to 2 percent. In addition, a parity mandate would generate potential benefits in the form of increased worker productivity, lower out-of-pocket spending for individuals with a mental illness, reduced physical health care claims, improved human capital development for children, and reduced crime and incarceration costs. While these benefits might offset some of the costs, data limitations prevent this analysis from determining whether a parity mandate would produce a net social benefit for the state of Wisconsin. Despite these limitations, the authors recommend that future discussions of mental health parity incorporate this report's thorough examination of cost increases, potential benefits, and political feasibility.

Beyond the discussion of costs, benefits, and political feasibility, this report finds that the limited population affected and the influence of managed care on the utilization of services constrain the impact of the parity mandate examined in this report. Such a mandate for an equalization of benefits would apply only to the 338,000 Wisconsin residents with a mental illness who possess commercial insurance. To increase the number of people affected, the state could implement parity in state employee insurance plans and in the proposed BadgerCare Plus benchmark plan. Although parity may generate benefits, evidence suggests that mandating the same cost-sharing requirements for mental and physical health coverage through parity may not eliminate access restrictions imposed by managed care. Thus, the state should consider monitoring managed care's controls to ensure access to mental health care is not unnecessarily restricted.

Parity for State Employee Plans

State employer plans are self-funded; meaning a mandate for the commercial market will not affect them. However, Wisconsin, in its role as an employer, can implement parity for its workforce. The cost increase in the state employee health insurance plan as a result of parity would likely be similar to that observed in the commercial market. By voluntarily offering parity in their employees' health benefits, the State of Wisconsin could set the standard for other self-funded health plans.

Parity within the Proposed BadgerCare Plus Benchmark Plan

The two public health insurance programs under state authority, Medicaid and BadgerCare, offer unlimited mental health benefits. However, in designing the proposed BadgerCare Plus program, state officials modeled its benchmark plan's mental health benefits off of benefits offered in the private market. A major barrier to parity within the proposed benchmark plan is a concern that individuals with mental health needs will drop commercial insurance coverage to gain access to the mental health benefits under the public insurance plan. The fear is that this shift would increase the cost of the program. Mandating parity within the private market eliminates this threat. If the state wishes to improve the mental health of Wisconsin's residents by increasing access to services, one option is to include parity in all of Wisconsin's public health insurance programs. The costs and benefits of including parity in the BadgerCare Plus benchmark plan are unknown and require further research.

Parity and Managed Care Improvements

Mental health parity mandates equate co-payments, deductibles, and benefit maximums; all are an important part of the benefits picture. However, managed care uses methods other than price controls to contain costs. Managed care affects mental health parity's effectiveness by using supply-side techniques to limit access to health care, including reliance on expert opinion, bargaining power, use of information systems, control of intake and referral, and financial incentives to constrain use of services (Frank, Kyanagi, & McGuire, 1997). Requiring the same cost-sharing requirements for mental and physical health through parity may not eliminate access restrictions instituted by managed care. Researchers have not arrived at a definitive conclusion that managed care contributes to less access or lower quality health care; however, the potential for such a circumstance does exist. Researchers interested in mental health parity are focusing their efforts on examining the effects of managed care on access to, and quality of, mental health services. This report recommends that the state monitor this research as it develops, and if appropriate, consider policy alternatives that address managed care's controls.

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Appendix A: State Parity Policies

The diversity of policies referred to as mental health parity complicates attempts to estimate the impact of enactment of a parity mandate. The specific action mandated, the extent of the plans and conditions covered, and the inclusion of exemptions vary among parity laws. The National Conference of State Legislatures (NCSL) and the National Alliance on Mental Illness (NAMI) categorize parity laws in different ways. The discussion below synthesizes their assessments and descriptions.

Types of Mandates

There are three types of mental health care mandates that are less comprehensive than full mental health parity: mandated benefits, mandated offerings, and mandated-if-offered laws. NCSL identifies 20 states with these more limited mandates (National Conference of State Legislatures [NCSL], 2007).

A number of states focus their laws on increasing the availability of mental health care without mandating equal coverage. Seven states require insurance companies to cover mental illnesses, but the level of coverage and the types of illnesses vary. Kansas, Michigan, Mississippi, Nevada, North Dakota, Pennsylvania, and Tennessee are mandated benefits states (NCSL, 2007).[43] Other states mandate that insurance companies offer policyholders the choice of mental health coverage, but allow the cost for and extent of coverage to differ between mental and physical services. Alabama, Florida, Georgia, Louisiana, South Carolina, Texas, and Utah, fall within this category (NCSL, 2007).[44] While NCSL considers Wisconsin a mandated offering state (2007), NAMI assesses the state's policy as a mandated minimum benefit (n.d.b).

Mandated-if-offered laws only regulate insurance plans that include mental health coverage. Both the federal Mental Health Parity Act of 1996 and the current U.S. Senate proposal fall within this category. Five states (Arizona, Indiana, Kentucky, Missouri, and Nebraska) establish the level of coverage that must be offered if a plan offers mental health benefits (NCSL, 2007).[45]

Types of Parity

Outside of these three types of mandates, approximately 30 states have parity laws. However, the types of plans and conditions covered vary, and many states include exemptions. Three states (Idaho, North Carolina, and South Carolina) require parity only for state employee insurance plans. In Minnesota, only HMO plans face a comprehensive parity mandate; other plans within the individual and group markets

[43] NAMI considers Nevada and Tennessee's laws to be parity mandates (n.d.b).

[44] NAMI identifies Texas and Utah as parity states (n.d.b).

[45] NAMI classifies Indiana and Kentucky's laws as parity mandates (n.d.b).

are mandated if offered. Sixteen states include parity for individual and group plans (National Alliance on Mental Illness [NAMI], n.d.b).

The definition of the conditions for which equal coverage must exist varies widely. NAMI considers 13 states' parity mandates to use a broad definition of mental illness (n.d.b). Ohio limits the conditions to a list of seven biologically based diseases. An additional five states focus only on nine biologically based illnesses.[46] California, Oklahoma, and Montana include only "severe mental illnesses" while other states target serious conditions (NCSL, 2007). NAMI identifies 11 states with full parity, including substance abuse coverage. Massachusetts covers substance abuse if it occurs with mental illness (NAMI, n.d.b).

States include a number of exemptions within their parity laws. Thirteen exempt small employers, with the definition of small employees ranging from 20 to 50 workers. New Mexico exempts small employers whose costs increase by more than 1.5 percent in one year. Eight parity states exempt businesses that experience costs that increase above a certain threshold that ranges from 1 to 4 percent (NAMI, n.d.b).

Based on NAMI's classifications, the mandate examined within this report would provide comprehensive parity. Four states (Connecticut, Maryland, Oregon, and Vermont) require comprehensive parity for the commercial group market and one (Minnesota) for HMO plans. NAMI describes the mandates in an additional six states (Indiana, Kentucky, Maine, New Mexico, Rhode Island, and Washington) as broad-based parity: providing equal coverage for a broad range of illnesses, but including some limitations or exemptions (n.d.b).

Unique Parity Policies

Two states include unique components of their parity policy. Rather than exempt businesses with less than 50 workers, New York created a subsidy for these employers to cover the cost of parity. In 2006, the state legislature designated $50 million to cover those costs (NCSL, 2007).

While Maryland has one of the most comprehensive parity policies, it allows coverage of outpatient services to differ. For the first five visits, mental health coverage must equal 80 percent of physical coverage; visits six through 30, 65 percent; and visits past 30, 50 percent (NCSL, 2007). This price structure can be expected to lower costs of a parity policy.

Table A-1 depicts the variation in state parity policies.

[46] The nine mental illnesses defined as biologically based are schizophrenia, bipolar disorder, obsessive-compulsive disorder, major depressive disorder, panic disorder, anorexia nervosa, bulimia nervosa, schizoaffective disorder, and delusional disorder.

Table A-1: State Parity Mandates

State	Includes Individual Plans	Broad Definition of Mental Illness	Includes Substance Abuse	Exempts Small Businesses	Cost Exemption
Arkansas		X	X	X	Cost increase cap of 1.5%
California	X				
Colorado					
Connecticut	X	X	X		
Delaware	X		X		
Hawaii	X			X	
Illinois				X	
Indiana[a]	X	X	X	X	Cost increase cap of 4%
Iowa[b]				X	
Kentucky[b]		X	X	X	
Maine	X	X	X	X	
Maryland	X	X	X		
Massachusetts	X		If occurs with mental illness	X	
Minnesota		X	X		
Montana	X				
Nevada[b]	X			X	2% premium increase cap
New Hampshire					
New Jersey	X				
New Mexico		X		If costs exceed 1.5% growth in one year	For more than 50 employees, if costs exceed 2.5% growth in one year
New York				Subsidy for small businesses	
Ohio					1% cost-increase cap
Oklahoma				X	2% premium-increase cap
Oregon		X	X		
Rhode Island	X	X	Limited		
South Dakota	X				
Tennessee[b]		X		X	1% cost increase cap
Texas				X	
Vermont	X	X	X		
Virginia			X	X	
Washington	X	X			
West Virginia	X				1% cost increase for groups of 25 or fewer; 2% for large groups

a. NCSL considers Indiana or Texas's laws to establish parity within state employee plans, but not the commercial market.

b. NCSL does not characterize the Iowa, Kentucky, Nevada, and Tennessee laws as parity

Sources: NCSL, 2007; NAMI, n.d.b

Appendix B: Economic Analysis of Parity and Managed Care

Research has consistently shown that the overall market demand for mental health services is more elastic[47] than that of physical health services. Empirical evidence demonstrates the demand for mental health services decreases at a faster rate than demand for other services when cost-sharing[48] is introduced. Additionally, the demand for outpatient care is relatively more elastic than for inpatient care (Kirchstein, 2000). This makes intuitive sense; a person who needs more intensive care in an inpatient setting likely has a more severe or acute mental health need (more inelastic demand) than a person who requires mental health services available in the community. Therefore, inpatient care is less price sensitive than outpatient care. To control use of services, insurers have historically used cost-sharing measures to limit access to mental health treatment.

Individuals who would receive additional mental health treatment under parity policy are expected to have a relatively inelastic demand for mental health services when compared to the general population's demand for the same services. Individuals likely to be affected by a parity mandate are already receiving some level of mental health service and require more treatment than is covered by their current insurance policy. This population is not the population on the margin – the people who are willing to seek services only if the price seems reasonable given their level of need. Rather, individuals in the Wisconsin population who would be affected by parity have already determined that they need services despite any price disincentives in their insurance plan.

One argument against parity is given that physical illnesses and mental illnesses have different demand curves, it is economically inefficient to set the supply at the same level for both services (Barry, Frank, & McGuire, 2006). However, this argument assumes that the person seeking mental health services has a somewhat elastic demand for mental health services (that is, the desire to seek services will decrease as the price increases). In the current Wisconsin market, this assumption of elastic demand is likely untrue. It is more likely that in the current market, the demand curve for mental illness is more similar to that of physical illness.

In addition to differences between mental and physical health in elasticity of demand, supply-side phenomena are at work as well. The nature of mental illness and the variety of treatments available to address it contribute to greater variation and uncertainty in the mental health market than in the physical health market

[47] Price elasticity of demand refers to the amount of change in demand in response to a change in price. When researchers state that the price elasticity of demand for mental health services are more elastic than the demand for physical health services, this is interpreted to mean an increase in the price of mental health treatment will result in fewer people seeking services than if the same increase were implemented for physical health services.

[48] Cost-sharing measures may include deductibles, co-insurance, and coverage limits.

(Frank & McGuire, Chapter 16, 2000). The characteristics of mental illness make it more difficult to definitively determine when a person's mental illness has gone into remission than it is to determine when a physical condition is healed. There is also greater variation in treatments of mental illness than in physical health care. A wide range of professionals, including social workers, therapists, psychologists, and psychiatrists, may address the same mental health condition using different modalities. With the correct path to healing unknown, disagreement among clinicians about proper treatment may lead to inefficiencies in the treatment of mental health conditions (Frank & McGuire, Chapter 16, 2000).

Adverse Selection and Moral Hazard

Adverse selection and moral hazard are two economic terms of importance to an examination of mental health parity. Important in all insurance markets, the two concepts are especially pertinent when discussing insurance coverage of mental health services. Treatment variation and uncertainty amplify the effects of adverse selection and moral hazard.

Adverse selection in the health insurance market occurs when an individual seeks out an insurer who offers extensive coverage of her or his medical condition. In employment-based insurance, the insurer accepts any person employed by the employer into the plan, regardless of the employee's medical conditions. The insurer assumes a given level of disease among its plan members, and sets its premiums, co-pays, and deductibles accordingly. The person seeking insurance, however, is aware of her or his health status, and may seek employers and/or insurance plans that offer extensive coverage of her or his medical condition. This is adverse selection – individuals with higher medical needs select a plan with maximum coverage of their conditions; the plan is unaware of the medical condition and therefore does not take the higher costs into account when calculating premiums. The result is greater than expected costs to the plan.

Some economic theorists assert that adverse selection causes plans to offer fewer benefits in an effort to discourage individuals with high physical and/or mental health needs from seeking out their insurance plan (Frank, Goldman, & McGuire, 2001). The only solution to counter the incentive to offer fewer benefits is to level the playing field among insurers. Governments may intervene by mandating a minimum level of coverage that all plans must offer. The state of Wisconsin uses this technique; the state requires a mandated minimum level of coverage for inpatient, outpatient, and transitional treatments of mental health services.

Insurance companies in Wisconsin generally offer no more than the mandated minimum benefit. This leaves individuals with severe and persistent mental illnesses requiring treatment in excess of the benefits offered to incur large costs or forgo treatment. Although the mandated minimum coverage amount is less than an insurer's plans members may wish for, insurers have little motivation (due to adverse selection concerns) to offer more than the minimum benefit required. Recognizing this, advocates have promoted a mental health parity

mandate as a solution. By requiring physical and mental health to be equated, the quantity of mental health treatments supplied should increase.

Moral hazard refers to the incentive to consume more health care services as the price of the service decreases. In the mental health realm, individuals who are concerned about their mental health are more likely to seek services if there is little cost to them for doing so. A person is more likely to try a "self-help" solution, or seek no care at all if access to care has financial barriers.

Managed Care

Traditionally, health insurance companies have used benefit design techniques (such as cost-sharing) to counteract moral hazard. Managed care presents insurance companies with new tools to limit costs. In managed care, costs are limited by measures aimed at ensuring only necessary and appropriate care is provided (Frank & McGuire, Chapter 16, 2000). This results in a more efficient system, with lower costs. Managed care's cost-control techniques include prior authorization requirements, utilization review, and contracts that include financial disincentives to providers to take on long-term or higher-needs cases.

While these techniques have given insurers greater control over costs, it has also given insurers greater control over access to services. Although managed care improves efficiency by directing patients to the level and duration of care most appropriate for their mental health needs, advocates are concerned that managed care restricts access to and quality of necessary services.

The techniques used in managed care are difficult for economists to model. It is unknown how the combination of tools used by managed care affects the supply and demand equation in mental health services. Because the inner workings of managed care are unknown, it is difficult for governments to develop interventions that regulate managed care techniques. As researchers learn more, governments may become better equipped to draft interventions that address use of managed care tools that unnecessarily restrict individuals who need treatment.

With the advent of managed care in the 1980s and 1990s, greater cost controls contributed to lower cost estimates for parity implementation. Currently, a new trend of specialization has occurred in managed care. Development of health care firms that specialize in providing and managing mental health care treatments is referred to as a behavioral health carve-out.[49] Behavioral health carve-outs seem to be more popular in states with mental health parity laws, and while they exist in Wisconsin, they may become more common should mental health parity

[49] A behavioral health carve-out is a program that provides mental health benefits separately from physical health care services, usually through a separate managed behavioral health care contract (National Conference of State Legislatures [NCSL], 1998).

legislation be passed.[50] There is greater uncertainty and variation in treatment associated with mental health care than with physical health care. By specializing in mental health conditions, behavioral health carve-outs are more efficiently able to match persons with a mental illness to appropriate care. A four-year study of a behavioral health carve-out found that costs decreased 30 to 40 percent, while the number of individuals accessing mental health benefits increased. Cost savings appear to have been achieved through cost shifting to pharmacies and hospitals and through reductions in the intensity of treatment (for example, fewer inpatient and more outpatient treatment days) (Grazier, Eselius, Hus, Shore, & G'Sell, 1999). As with all of managed care, concerns remain that access and quality of care may be compromised as behavioral health carve-outs achieve cost reductions through less intensive care. Researchers continue to explore access and quality issues.

[50] Vermont experienced an increase in the number of carve-outs in their state following mental health parity implementation. As a result, costs and visits to mental health providers decreased for a time following mental health parity enactment.

Appendix C: Mental Health Disorders

The American Psychiatric Association's Diagnostic and Statistical Manual, 4th edition Text Revision (DSM-IV-TR) lists diagnostic criteria. Mental health professionals use it to diagnose mental health disorders. This appendix summarizes childhood and adult disorders listed in the DSM-IV-TR. The descriptions and examples in each class are not exhaustive, but, rather, they are meant to give an overview of the types of disorders that this report includes in its definition of full mental health parity.

Childhood Disorders

These disorders are generally diagnosed in infancy, childhood, or adolescence. Below is a list of the major classes of disorders, followed by a definition and a sampling of diagnoses that are contained in each class.

1. **Mental retardation**. "This disorder is characterized by significantly sub-average intellectual functioning (an IQ of approximately 70 or below) with onset before age 18 years."
2. **Learning disorders**. This group of disorders includes the following diagnoses: reading disorders, mathematics disorder, and disorders of written expression. These are characterized by skill performance substantially below that expected given the child's age, intelligence, and educational experience.
3. **Motor skills disorder.** This disorder represents a "marked impairment in the development of motor coordination".
4. **Communication disorders.** Includes:
    - Expressive language disorder: A disorder characterized by limited vocabulary, incorrect sentence structure, and limited speech skills.
    - Mixed receptive-expressive language disorder: Similar to expressive language disorder, but includes impairment in understanding language (receptive skills) and forming language (expressive skills).
    - Phonological disorder: This disorder refers to "phonological production (i.e., articulation) errors that involve the failure to form speech sounds correctly and cognitively based forms of phonological problems that involve a deficit in linguistic categorization of speech sounds (e.g., a difficulty in sorting out which sounds in the language make a difference in meaning). Severity ranges from little or no effect on speech intelligibility to completely unintelligible speech."
    - Stuttering

5. **Pervasive developmental disorders.** These disorders are marked by "severe deficits and pervasive impairment in multiple areas of development." Social interaction and communication skills are affected. In addition, stereotyped behavior interests and activities may be present. Examples of disorders in this category are:
    - Autistic disorder.
    - Asperger's disorder: A diagnosis of Asperger's disorder reflects a "severe and sustained impairment in social interaction … and the development of restricted, repetitive patterns of behavior, interests, and activities." These behaviors cause a "clinically significant impairment in social, occupational, or other important areas of functioning."
6. **Attention-Deficit and Disruptive Disorders.** Examples of disorders in this category include:
    - Attention-deficit/hyperactivity disorder
    - Conduct disorder. This disorder is "characterized by a pattern of behavior that violates the basic rights of others or major age-appropriate societal norms or rules."
7. **Feeding and eating disorders of infancy or early childhood.** Feeding and eating disturbances found in young children are included in this category. Sample diagnoses include:
    - Pica: eating non-food items.
    - Rumination disorder: Repeated regurgitation and re-chewing of food.
8. **Tic disorders**
9. **Elimination disorders.** Sub-categories include:
    - Encopresis: Passing feces in inappropriate places.
    - Enureseis: Urinating in inappropriate places.

Adult disorders

The following disorders are primarily diagnosed in individuals older than 18. A list of the major classes of disorders, followed by a definition and a sampling of diagnoses that are contained in each class, are listed below.

1. **Substance-related disorders:** This class of disorders includes substance dependence and substance abuse of legal or illegal drugs. It also includes substance-induced disorders, which are disorders caused by ingestion of a substance resulting delirium, anxiety, or other psychological symptoms.
2. **Schizophrenia and other psychotic disorders:** Disorders in this class include schizophrenia, schizophreniform (a form of schizophrenia that lasts less than six months) disorder, schizoaffective disorder (a combination of schizophrenic and mood disorder symptoms) and other disorders. All of the disorders in this class have symptoms of hallucinations, disorganized speech, or disorganized or catatonic behavior. Disorders in this

category (with the exception of schizophreniform) tend to be long-lasting and severe.

3. **Mood disorders:** The most well-known of the mood disorders are major depressive disorder, dysthmia (a less severe form of depression), and bipolar disorders (characterized by cyclical episodes of elevated mood "manic" stage followed by depression).
4. **Anxiety disorders:** Post-traumatic stress disorder, anxiety disorders, and obsessive-compulsive disorder are among the disorders that make up this category. All disorders in this category have some type of anxiety symptom that interferes with the individual's daily activities.
5. **Somatoform disorders:** These disorders are characterized by the presence of physical symptoms that suggest a general medical condition but "are not fully explained by a general medical condition, by the direct effects of a substance, or by another mental disorder (e.g., panic disorder)." The person with this disorder does not intentionally exaggerate her or his physical symptoms. To be diagnosed, the "symptoms must cause clinically significant distress or impairment in social, occupational, or other areas of functioning."
6. **Factitious disorders:** Individuals with factitious disorders intentionally produce physical or psychological symptoms, by causing an injury or by fabricating symptoms.
7. **Dissociative disorders:** Disorders in this class are characterized by a "disruption in the usually integrated functions of consciousness, memory, identity, or perception. The disturbance may be sudden or gradual, transient or chronic." This class of disorders includes dissociative identity disorder (formerly called multiple personality disorder) and dissociative amnesia (an inability to remember personal information, particularly relating to memories of traumatic events).
8. **Sexual and gender identity disorders:** This class includes sexual dysfunctions (for instance, voyeurism) and gender identity disorders. Gender identity disorders involve "strong and persistent cross-gender identification accompanied by persistent discomfort with one's assigned sex."
9. **Eating disorders:** Anorexia nervosa and bulimia nervosa are in this category. Both are characterized by inaccurate perceptions of body weight and actions taken to control caloric intake.
10. **Sleep disorders:** The four main categories of sleep disorders all affect the quality and amount of sleep or the timing of sleep. Insomnia and narcolepsy are two examples.
11. **Impulse-control disorders not elsewhere classified:** Individuals with these disorders experience an overwhelming desire to commit an act that is harmful to themselves or others. After committing the act, they feel a sense of release and may or may not feel remorse. Examples of these

disorders are kleptomania (characterized by impulses to steal) and pyromania (characterized by an impulse to start fires).

12. **Adjustment disorders:** Adjustment disorders occur when an individual experiences a stressor and responds emotionally or behaviorally in excess of what is expected or that impairs their daily functioning. Symptoms must persist for more than three months.
13. **Personality disorders:** The underlying characteristic of all 11 personality disorders is "an enduring pattern of inner experience and behavior that deviates markedly from the expectations of the individual's culture, is pervasive and inflexible, has an onset in adolescence or early adulthood, is stable over time, and leads to distress or impairment". One example is borderline personality disorder, which dominated by a pattern of instability in interpersonal relationships, self-image, and affects, and marked impulsivity.
14. **Delirium, dementia, and amnestic and other cognitive disorders:** This class of disorders is characterized by cognitive deficits in a person who previously had no deficits. These deficits may be caused by a medical condition, or may be substance-induced. An example of a diagnosis in this class of disorders is dementia of the Alzheimer's type.

Appendix D: History of Wisconsin's Mental Health Care Mandates

Although it does not possess a heavily regulated health care market, Wisconsin has instituted a number of mandates relating to coverage of mental health care services in the commercial insurance market.

In 1971, Wisconsin passed its first piece of legislation regarding health insurance mandates for the coverage of mental illness and substance abuse. The law, Chapter 325, Laws of 1971, mandated that group insurance policies in the commercial market provide coverage of inpatient hospital treatment for alcoholism if the policies provided coverage of hospital treatment for physical health conditions. In 1973, the law was amended to include coverage of outpatient treatment and added mental illness and drug abuse to the conditions covered by the law.

In 1985, Wisconsin Act 29 required group policies to provide a minimum amount of coverage for inpatient and outpatient treatment for mental illness and substance abuse. The minimum level was set at $7,000. While total coverage need not exceed $7,000, the law further clarified that minimum coverage of inpatient hospital services must be the lesser of the first 30 days of inpatient treatment or the first $7,000 per year. The act set the minimum level of coverage for outpatient treatment to the first $1,000 per year. In 1991, a new category of treatment, transitional services, was added. The law requires $3,000 of transitional treatment services to be covered each year. Also in 1991, the minimum level of coverage for outpatient services was raised to $2,000.

In 1997, Wisconsin Act 27 directed that the coverage of mental illness and substance abuse be subject to the same exclusions or limitations, such as deductibles, that applied to other conditions covered by a group health insurance plan. However, in 1999, Wisconsin Act 9 specified that coverage for mental illness and substance abuse could be subject to co-payments and deductibles beyond the limitations applicable to physical health conditions (Whitesel, 2002).

In 2004, Senate Bill 71 was signed into law. It exempted the cost of prescription drugs and diagnostic testing from the benefit minimums (Wisconsin Senate Bill 71, 2003).

Appendix E: Public Insurance Benefits

A number of public programs are available to Wisconsin residents who meet eligibility criteria. Coverage for mental illness varies by program.

Medicaid and BadgerCare Plus

Table E-1 and E-2 show the coverage amounts and co-payments for mental health services under the proposed BadgerCare Plus program. Implementation of BadgerCare Plus is expected to begin in 2008.

Table E-1: Mental Health Benefits for BadgerCare Plus Enrollees under 200 Percent of the Federal Poverty Level

	Benefits	Co-pay
Mental Health	Full coverage	$1
Substance Abuse	Full coverage	$1

Source: DHFS (2006b)

Table E-2: Mental Health Benefits for BadgerCare Plus Enrollees above 200 Percent of the Federal Poverty Level

	Benefits	Co-pay
Mental Health Outpatient	$1,800 per year	$15
Mental Health Transitional	$2,700	$15
Mental Health Inpatient	Based on state employee health plan	$15
Substance Abuse	$7,000	$15

Source: DHFS (2006b)

Medicare

Inpatient Services

Medicare limits lifetime treatment in freestanding inpatient psychiatric facilities to 190 days. Treatment in general hospitals for psychiatric diagnoses is not subject to the 190-day limit.

Outpatient Services

Mental health provider services, diagnostic testing, and brief office visits to monitor the efficacy of prescribed medications are subject to the standard 20 percent co-insurance under Medicare. Medicare's "outpatient mental health limitation" sets a 50 percent co-insurance rate for psychotherapy services (including individual, family, and group psychotherapy; therapeutic activity; and patient education services). Reimbursement rates and coverage policies differ among types of mental health providers.

Psychotropic Drugs

Medicare began covering most psychotropic and other outpatient prescription drugs with the implementation of Part D in January 2006 (National Health Policy Forum, 2007).

Appendix F: Literature Review of Cost Estimate of Parity Legislation

Researchers studying the impact of parity have examined the changes for individual health care consumers, employers, and the overall insurance market. The following studies include predictions of the effects of parity and reported experiences of federal and state parity policies.

General Predictions

Zuvekas, Banthin, Selden (1998)

Using health plan benefits from a national sample of commercially insured individuals, this study estimated the change in out-of-pocket costs for consumers of mental health services that could result from parity. The authors adjusted data from the 1987 National Medical Expenditure Survey to reflect 1995 population characteristics and focused their analysis on the 17,258 sampled persons who were younger than 65. When comparing out-of-pocket spending under non-parity and parity coverage, the study found significant savings at various consumption levels: when consuming $2,000 in mental health services, out-of-pocket costs dropped by more than $400; $10,950 in services, more than $3,000; $35,000 in services, more than $10,000; and $60,000 in services, almost $25,000.

Varmus (1998)

This interim report to Congress by the National Advisory Mental Health Council referenced an actuarial model created by Hay Group, which estimated percentage increases in group health care premiums as a result of parity. While the model did not include an estimate for the overall market, it provided expected percentage increases for the following types of insurance plans: HMO, 0.6; POS, 3.5; PPO, 5.1; and fee-for-service, 5.0.

General Accounting Office (2000)

As a part of its analysis of the federal parity policy, the General Accounting Office (now the Government Accountability Office) assembled estimates of comprehensive parity polices from studies published from 1996 to 1999. Estimates ranged from 2 to 4 percent increases in health care benefit costs. The findings were a composite of estimated increases across the insurance market, including fee-for-service, point of service, and managed care plans.

Kirschstein (2000)

The final report of the National Advisory Mental Health Council to Congress updated the findings of its 1998 interim report (Varmus) to reduce the expected cost of parity. The 1998 estimate of 3.6 percent increases in health insurance premiums was reduced to 1.4 percent. The increase was 1.6 percent for family coverage. The study relied on an actuarial model developed by the Hay Group.

Zuvekas, Banthin, Selden (2001)

In an update of research published in 1998, this study estimated the share of the marginal cost of mental health services that consumers would pay. The study found that by reducing the coverage limits on mental health care to those of physical care, insurers would bear more of the incremental cost of providing these treatments and consumers would face lower out-of-pocket expenses. In non-parity plans, initial mental health expenditures are covered, but the share of costs fall increasingly on the consumer as the expenditures rise. Parity allows expenses at the highest levels to be covered by insurance and, therefore, distributed over the insurance pool. The study predicted declines in the mean shares consumers pay for outpatient care if parity is instituted "from between 40 and 50 percent to 20 percent or less for low expenditure levels, and from between 80 and 90 percent to less than 10 percent for higher expenditure levels." The decline in mean consumer shares for inpatient care would be "about 15 to 20 percent for lower expenditures" and "between 50 and 60 percent as expenditures rise to $50,000" (1224).

The study showed that establishing parity between physical and mental health coverage shifts costs from individuals to insurance companies, thereby relieving the impact on consumers with mental disorders. Costs formerly borne by an individual with a mental illness (or a family member's illness) are distributed over the population of policyholders within the insurance plan. Its conclusions illustrate the potential benefit parity provides for people with mentally illnesses who possess commercial insurance.

Congressional Budget Office (2001)

In its cost estimate, S543: Mental Health Equitable Treatment Act of 2001, the Congressional Budget Office estimated the costs of mandating mental health parity in plans that offer coverage of these services. Using an actuarial model developed by the Hay Group, the report anticipated premiums for group health insurance would increase by an average of 0.9 percent. When the model incorporated expected behavioral changes by health plans, employers, and workers, the estimated increase in group health premiums fell to 0.4 percent.

Congressional Budget Office (2007)

In a cost estimate of the proposed parity mandate, S. 558: Mental Health Parity Act of 2007, the Congressional Budget Office estimated the costs of mandating mental health parity in plans that offer coverage of mental health treatment. Based on a Hay Group actuarial model, the report predicted premiums for group health insurance would increase by an average of 0.4 percent. When the model incorporated expected behavioral changes by health plans, employers, and workers, the estimated increase in group health premiums fell to 0.2 percent.

State-Specific Predictions

Alaska Mental Health Parity Task Force (1999)

The state task force commissioned an actuarial analysis by Rom Bachman of PriceWaterhouseCoopers of varying levels of parity both with and without the use of managed care. The predictions of claims cost increases for a comprehensive parity police were the following: 1.7 percent for mental health and substance abuse with managed care, 4.3 percent without managed care; 1.3 percent for mental health only with managed care, 3.2 percent without managed care. Due to the minimal cost increases, the task force recommended the state adopt a comprehensive parity policy that included substance abuse services.

Joint Interim Task Force on Mental Health and Chemical Dependency Treatment (2000): Oregon

In its final report, the legislative task force included surveys of state employee health plan carriers by the Public Employees Benefit Board. In 1999, carriers estimated that enacting parity between mental and physical health care coverage would increase costs by 2.55 percent to 7.04 percent; parity for mental health and chemical dependency would raise costs by 2.13 percent to 7.36 percent. When the survey was repeated in 2000, carrier quotes ranged from 1.03 percent to 5.2 percent increases for mental health parity and 0.14 percent to 0.79 percent for the parity of chemical dependency services.

O'Connell (2001): Wisconsin

In a social and financial impact report of legislation proposed by Senator Chuck Chvala and Representative Scott Jensen, the Wisconsin Office of the Commissioner of Insurance predicted a parity mandate would add $7 million to $57 million per year to premium costs for group health insurance consumers. The report based its estimated increase of 0.12 to 1 percent of premiums on the experiences of other states.

Bachman (2002): New York

PriceWaterhouseCoopers, L.L.P., performed an actuarial analysis of a comprehensive parity plan, varying the inclusion and exclusion of substance abuse services. The study estimated the overall insurance market would experience a 2 percent increase in health care costs for parity including substance abuse services and a 1.7 percent increase for mental health parity that does not cover substance abuse. For managed care plans, costs were predicted to increase by 2.7 percent (substance abuse included) and 2.3 percent (without substance abuse) for PPOs and 1.3 percent and 1 percent respectively for plans that use HMOs or otherwise control access to services.

The analysis anticipated employer responses to increased costs. Incorporating these expected responses deflated the estimates to 0.8 percent (substance abuse included) and 0.7 percent (without substance abuse).

Federal Policy Experiences

Strum (1997)

This RAND study examined 4,000 managed care plans, 24 of which include benefits with no coverage limits that did not differ across the enrollee population. It compared the increased costs per enrollee between the parity policy and policies with varying limitations on coverage for the years 1995 and 1996.

The report found that the removal of coverage limits resulted in small increased costs. Removal of caps of 30 inpatient days and 20 outpatient visits raised the annual cost per enrollee by less than $7 annually; removal of a $10,000 annual coverage limit raised these costs by less than $4; a $25,000 annual coverage limit cost $1; and removal of a $50,000 annual coverage limit had no effect. The study concluded that the parity plans studied achieved lower costs through reduced hospitalization rates, a shift to outpatient care, and reduced payments per service. Access to mental health specialty care increased under managed care plans when compared to the fee-for-service plans they replaced.

In his 2001 testimony presented to the Health Insurance Committee, National Conference of Insurance Legislators, Robert Strum characterized the finding of this study in terms of percentage increase in health care costs. He estimated that to provide full mental health and substance abuse parity in a plan that lacked coverage of these services would increase the costs by 3 percent to 4 percent of the premium (assuming an annual premium of $1,500 per member) and that expanding existing benefits would have a smaller effect (Strum, 2001).

Feldman, Bachman, Bayer (2002)

The 2002 scholarly article “Mental Health Parity: A Review of Research and a Bibliography” summarized parity research and concluded that cost increases ranged from less than 1 percent to 2.5 percent.

Goldman, et al. (2006)

This study examined seven federal employee health benefits plans that began to offer mental health and substance abuse benefits equal to those of physical benefits. The study contrasted those plans to similar plans that did not have parity, and compared the changes in total spending and out-of-pocket spending by users of mental health and substance abuse services for two years before and one year after parity was implemented.

The majority of the parity plans produced decreases in total spending and out-of-pocket spending per mental health services user compared to non-parity counterparts. Three of the plans produced statistically significant reductions in total spending per user ($68.97, $119.26, and $201.99), three displayed reductions that were not significantly different than no savings, and one showed an increase ($27.11) that was not statistically significant. Five plans exhibited significant reductions

in the amount of out-of-pocket spending per user of the services ($13.82, $15.43, $49.80, and $87.06), while one produced a significant increase ($4.48).

The authors asserted their findings suggest that parity yielded limited effects on insurance costs. In part this is a result of the use of managed care. Of the seven plans, only two showed significant change in the probability of using mental health or substance abuse services: one increased the probability by 0.78 percent; the other decreased the probability by 0.96 percent. Although parity appeared to have little impact on the use of services, the study concluded, "parity of coverage of mental health and substance abuse services, when coupled with management of care, is feasible and can accomplish its objectives of greater fairness and improved insurance protection without adverse consequences for health care costs" (1386).

State Policy Experiences

Otten (1998): Multiple States

The Milbank Memorial Fund report, *Mental Health Parity: What Can It Accomplish in a Market Dominated by Managed Care?*, referenced the experiences of a number of states that passed parity policies that exceed the coverage mandated by federal law. In Minnesota, a major health plan expressed the belief that the state mandate would increase premiums by 26 cents per member per month, whereas the Minnesota Department of Employee Relations estimated the cost of the law to induce a 1 to 2 percent increase in premiums for state employees. Rhode Island state officials estimated that their state law raised health costs by 0.33 percent. Two Maryland managed care companies reported cost increases of none and 1 percent after passage of the state's parity law. A Texas parity law that covered three-fourths of the state's employees experienced no increase in health care costs.

Varmus (1998)

This report found minimal cost increases or savings for parity. For example, Texas simultaneously introduced a parity policy covering mental health and substance abuse treatments for state employees and managed care for these services. Over the following five years, Texas experienced a decline in the monthly per member cost of mental health services for these employees of more than 50 percent. While inpatient mental health costs sharply decreased, outpatient costs rose.

Similar to Texas, North Carolina introduced parity and managed care at the same time for its state employees. Over the next five years, the per-member-per month costs dropped 32 percent. While inpatient admissions and stays for mental health declined, outpatient treatment prevalence increased and outpatient visits decreased.

Maryland introduced a parity law that allowed some disparity in outpatient co-payments between physical and mental health coverage and equal parity for inpatient services into an insurance market dominated by managed care.

Over the next three years it saw costs increase slightly. In the first year, the cost for treating mental health and substance abuse disorders rose by 0.84 percent. The second year displayed no change in costs. In the third year, treatment costs decreased by 0.27 percent of total benefit claims.

Strum, Goldman, McCulloch (1998): Ohio

This study followed Ohio state employees for five years following the enactment of a comprehensive parity policy that included substance abuse. It looked at the changes in cost resulting from a move from an indemnity plan to managed care and for a move from an HMO with limited benefits to a carve-out plan with parity. The movement from indemnity to managed care saw a drop in both outpatient and inpatient visits despite and increase in benefits. Shifting from a HMO with limits to a carve-out plan with parity was associated with increased use of outpatient care and transitional care. The cost per member per month increased $1 during the shift from the HMO in 1993 to the carve-out plan in 1995/1996, but returned to the 1993 level by 1996/1997.

Rosenbach, et al. (2003): Vermont

This report, commissioned by the U.S. Department of Health and Human Services, examined the impact of Vermont's comprehensive parity law for mental health and substance abuse coverage on the state's insurance market and employers in the three years after enactment. It based its analysis of insurance market impacts on the experiences of the two largest commercial health plans, which constitute nearly 80 percent of the market: Kaiser/Community Health Plan (Kaiser/CHP) and Blue Cross/Blue Shield of Vermont (BCBSVT). Kaiser/CHP, which retained its managed care system after enactment of parity, experienced an 18 percent decline in mental health and substance abuse spending per member per quarter and a 9 percent decrease in overall spending on these services. The report observed that declines were driven entirely by decreased use of substance abuse treatment.

BCBSVT, which replaced a fee-for-service system with managed care after passage of parity, experienced an 8.4 percent decline in mental health and substance abuse spending per member per quarter. This aggregate decline resulted from a 1.9 percent increase for mental health services offset by a 46.6 percent decrease for substance abuse. The overall spending on services within BCBSVT increased by 4.4 percent, as a 21.9 percent increase in mental health services was offset by a 47 percent decrease for substance abuse services.

Connecticut Legislative Program Review and Investigations Committee (2005)

This report included a survey of the six largest insurers in Connecticut to determine the cost impacts of a comprehensive parity policy that included substance abuse services. Only three of the insurers provided complete information that could be used to estimate the increased cost of care. Comparing costs three years prior to parity and three years after enactment, each plan saw its costs increase. Inpatient costs, adjusted for inflation, rose $59,289 and 45 percent. Outpatient

costs, adjusted for inflation, rose $50,137 and 96 percent. The report lacks an analysis of what portion of increases were attributable to parity.

Maryland Health Care Commission (2006): Maryland

Maryland requires an annual evaluation of the cost of state health care mandates. This evaluation found that the parity mandate was among the most costly of Maryland's health care mandates. The 2005 costs of the state's mental health and substance abuse parity mandate was 6 percent of the full cost of health services and 0.6 percent of the marginal cost of health services (The marginal cost estimates the additional cost associated with the mandate by subtracting the value of the services that would be covered in the absence of the mandate from the full cost of the service). The annual full cost of the parity mandate per group policy was $335; the marginal cost, $34.

Appendix G: Methodology for Cost Estimates for Total Group and Individual Market

The three estimates used in this analysis were from a 2007 Congressional Budget Office (CBO) analysis of an expansion of federal parity policy, a June 2000 report from the National Advisory Mental Health Council, and a 2002 prediction by PriceWaterhouseCoopers of the cost impacts of parity for the state of New York.

The federal Mental Health Parity Act of 2007 (S. 558) would prohibit commercial group insurance providers who offer mental health benefits, including substance abuse benefits, from establishing different treatment limits or financial requirements between mental and physical health care coverage. Using an actuarial model developed by the Hay Group, an actuarial firm, the CBO estimates a mandate would raise group premiums by 0.4 percent. This estimate did not incorporate potential changes in employer, employee, or insurance provider behavior, such as limiting the extent or type of plans offered (CBO, 2007). Because the law would include most, but not all, group insurance providers this estimate may provide a slight underestimation of the costs of the parity policy in Wisconsin as examined in this report.

The National Advisory Mental Health Council (NAMHC) examined the existing research on parity in states and for federal employees and used a simulation model developed by the Hay Group that estimated that a comprehensive parity policy could raise single premiums by 1.4 percent and family premiums by 1.6 percent (Kirschstein, 2000). Adjustments to these estimates differed for the group and individual markets. Applying the family and single coverage estimates to the proportion of Wisconsin's commercial group market with family (57.8 percent) and single (42.2 percent) coverage as reported by the U.S. Department of Health and Human Services' Medical Expenditure Panel Survey yielded a weighted estimate of 1.52 percent for the group market.

The New York analysis predicted a 2 percent increase in health care benefits paid after the institution of a policy that prohibits different co-payments, deductibles, out-of-pocket maximums, or day and visit limits between physical health, mental health, and substance abuse services. Although this estimate addresses the increased cost as a percentage of benefits paid, it is an appropriate proxy for changes in premiums (Bachman, 2002). As applied to Wisconsin's market, this report assumes that insurance companies would pass the full cost of increased benefits to employers and employees through raising the price of premiums.

Application of Estimates to the Individual Market

Due to the lack of research into the impact of a parity mandate on the individual market, this analysis relies on the same estimated percentage increases used in the group market for the individual market, with one exception. The NAMHC estimate is adjusted to reflect the greater amount of single coverage in the

individual market. This adjusted estimate, 1.46 percent, relies on the proportions of family (30.3 percent) and single (69.7 percent) coverage within the national commercial individual market (Bernard, 2005). There is no reason to believe that Wisconsin's individual market characteristics diverge significantly from the national market.

Only one of the studies used to estimate premium increases in this report included individual markets in its analysis. The New York estimate (2 percent) applied to the overall commercial market, both group and individual plans. However, the available information did not provide separate analysis for the two sectors. While the NAHMC estimate did consider the individual market, it is an analysis of parity's impact on the insurance market. The exclusion of any discussion of expected differences between group and individual plans could be interpreted as evidence of limited differences. This estimate's similarity to the New York estimate offers support that individual plans will not exhibit significantly greater increases in premiums. An estimate not used in this report, the Maryland Health Care Commission's analysis of the impact of health insurance mandates, included group and individual plans, and it reported that the state's parity mandate increased the marginal cost of health insurance by 0.6 percent (2006). This low estimate suggests that the range of expected percentage increases in premium increases used in this report offers a plausible prediction of the impacts on Wisconsin's commercial individual market.

Appendix H:
Cost Estimate Calculations: Group and Individual Markets, Total and Plan Type

This report provides cost estimates for the commercial health insurance market in the form of estimated increases in premium costs. These estimates were derived by 1) converting annual group and individual commercial market premiums for Wisconsin—as reported by OCI—from 2005 to 2006 dollars and 2) applying the estimated percentage premium increases obtained from other parity studies to these baseline premiums.

The conversion to 2006 dollars used the U.S. Bureau of Labor Statistics' Consumer Price Index for medical care in the Minneapolis, Minnesota-Wisconsin region and raised the premium figures by approximately 6 percent. Table H-1 illustrates the calculations.

Table H-1: Wisconsin Annual Premiums

Market	2005 Total Premiums	Total Premiums (2006 dollars)
Group	$7,748,882,291	$8,238,615,512
Individual	$1,559,375,663	$1,657,928,982

Sources for 2005 premiums: OCI, n.d.b

Group Market

Total

Estimated premium increases in the group market were derived by applying the expected percentage increase in premiums as a result of parity (0.4, 1.52, and 2.0) to the total premiums and recording the difference. Table H-2 illustrates the calculations.

Table H-2: Change in Total Group Market Premiums Under Parity

Total Premiums	Expected Percentage Increase	Estimated Premiums Under Parity	Difference
$8,238,615,512	0.4	$8,271,569,974	$32,954,462
$8,238,615,512	1.52	$8,363,479,968	$124,864,457
$8,238,615,512	2.0	$8,403,387,822	$164,772,310

Sources for estimated percentage increases: CBO, 2007; Kirschstein, 2000; Bachman, 2002

Plan Type

Multiplying total group premiums in Wisconsin by the proportion of the group market in each plan type produces the estimated premiums per plan type. Table H-3 illustrates the calculations.

Table H-3: Wisconsin Group Market Premiums per Type of Insurance Plan

Plan Type	Total Premiums	Proportion of Group Market	Premiums per Plan Type
Health Maintenance Organization	$8,238,615,512	51.9	$4,275,841,451
Point of Service	$8,238,615,512	20.9	$1,721,870,642
Preferred Provider	$8,238,615,512	20.4	$1,680,677,564
Fee-for-Service	$8,238,615,512	6.8	$560,225,855

Source for proportion of group market: OCI, n.d.b

Estimated premium increases for each plan type were derived by applying the expected percentage increase in premiums for each type as a result of parity to the premium per plan type and recording the difference. Table H-4 illustrates the calculations.

Table H-4: Change in Group Market Premiums per Plan Type Under Parity

Premiums per Plan Type	Expected Percentage Increase	Estimated Premiums Under Parity	Difference
Health Maintenance Organization			
$4,275,841,451	0.6 (Low)	$4,301,496,499	$25,655,049
$4,275,841,451	1.3 (High)	$4,331,427,389	$55,585,939
Point of Service			
$1,721,870,642	3.5	$1,782,136,114	$60,265,472
Preferred Provider			
$1,680,677,564	2.7 (Low)	$1,726,055,859	$45,378,294
$1,680,677,564	5.1 (High)	$1,766,392,120	$85,714,556
Fee-for-Service			
$560,225,855	3.5 (Low)	$579,833,760	$19,607,905
$560,225,855	5.0 (High)	$588,237,148	$28,011,293

Sources for estimated percentage increases: Sing, et al., 1998; Bachman, 2002

Individual Market

Total

Estimated premium increases in the individual market were derived by applying the expected percentage increase in premiums as a result of parity (0.4, 1.46, and 2.0) to the total premiums and recording the difference. Table H-5 illustrates the calculations.

Table H-5: Change in Total Individual Market Premiums Under Parity

Total Premiums	Expected Percentage Increase	Estimated Premiums Under Parity	Difference
$1,657,928,982	0.4	$1,664,560,698	$6,631,716
$1,657,928,982	1.46	$1,682,146,279	$24,217,297
$1,657,928,982	2.0	$1,691,087,561	$33,158,580

Sources for estimated percentage increases are from authors' calculations with data from CBO, 2007; Kirschstein, 2000; and Bachman, 2002.

Plan Type

Multiplying total individual market premiums in Wisconsin by the proportion of the individual market in each plan type produces the estimated premiums per plan type. Table H-6 illustrates the calculations.

Table H-6: Wisconsin Individual Market Premiums per Type of Insurance Plan

Plan Type	Total Premiums	Proportion of Individual Market	Premiums per Plan Type
Health Maintenance Organization	$1,657,928,982	13.9	$230,452,128
Preferred Provider Organization	$1,657,928,982	70.4	$1,167,182,003
Fee-for-Service	$1,657,928,982	15.7	$260,294,850

Source for proportion of individual market: OCI, n.d.b

Estimated premium increases for each plan type were derived by applying the expected percentage increase in premiums for each type as a result of parity to the premium per plan type and recording the difference. Table H-7 illustrates the calculations.

Table H-7: Change in Individual Market Premiums per Plan Type Under Parity

Premiums per Plan Type	Expected Percentage Increase	Estimated Premiums Under Parity	Difference
Health Maintenance Organization			
$230,452,128	0.6 (Low)	$231,834,841	$1,382,713
$230,452,128	1.3 (High)	$233,448,006	$2,995,878
Preferred Provider Organization			
$1,167,182,003	2.7 (Low)	$1,198,695,917	$31,513,914
$1,167,182,003	5.1 (High)	$1,226,708,285	$59,526,282
Fee-for-Service			
$260,294,850	3.5 (Low)	$269,405,170	$9,110,320
$260,294,850	5.0 (High)	$273,309,593	$13,014,743

Sources for estimated percentage increases are from authors' calculations with data from CBO, 2007; Kirschstein, 2000; and Bachman, 2002.

Appendix I: Methodology for Cost Estimates by Insurance Plan Type

Although managed care dominates the Wisconsin health care insurance market, other plans continue to exist. To accurately capture the impact of parity on the variety of health insurance plans in Wisconsin, the authors disaggregated the analysis into estimates for each of the following coverage types: health maintenance organization (HMO), point of service (POS), preferred provider (PPO), and fee-for-service.

Two sources give cost estimates for specific types of insurance coverage: Ronald Bachman's analysis for the state of New York and a 1998 report by the National Advisory Mental Health Council (NAMHC). The Bachman analysis combined HMO and POS plans that used gatekeepers (2002). The reported percentage change (1.3 percent) provided the basis for estimated cost increases for HMO plans in Wisconsin. Although Bachman estimates cost increases as a percentage of benefits paid, this is an appropriate proxy for expected increases in premiums. This analysis assumes that insurance companies would pass the full cost of increased benefits to employers and employees by raising premiums. If this is not true, then this figure overestimates premium increases.

The NAMHC report on the impact of parity for mental health and substance abuse supplied percentage changes in premiums for varying types of insurance plans: HMO (0.6 percent), POS (3.5 percent), PPO (5.1 percent), and fee-for-service (5 percent) (Sing, Hill, Smoklin, & Heiser, 1998). These estimates were part of an actuarial model that has since been updated. The Hay Group model that provided these estimates predicted a 3.6 percent increase in premiums for the overall health care insurance market. In 2000, this estimate was reduced to 1.4 percent for single premiums and 1.6 percent for family premiums. A detailed explanation of the changes in the model can be found in Appendix D of the National Advisory Mental Health Council's June 2000 report, "*Insurance Parity for Mental Health: Cost, Access, and Quality"* by Kirschstein (2000).

Three updates to the Hay Group model are relevant to the estimates in this analysis for Wisconsin: a decline in the cost of mental health care services, the increased use of carve-out plans, and the reduced role administrative costs play in premium prices. The cost of mental health and substance abuse services per enrollee has fallen; the 2000 model assumes a cost that is one-half that of the 1998 model. This declining trend is reflected in the fee-for-service/PPO plans used by the federal employee health benefits program, which were integral to the Hay Group's estimates for these plan types.

The use of carve-out plans for the provision of mental health services is expected to reduce costs. The 2000 model assumed that 20 percent of fee-for-service, PPO, and POS plans used carve-out plans.

The final factor was a change in the impact administrative costs exert on premiums. The 1998 model applies an administrative loading factor of 1.15 for medical/surgical expenses and 1.2 for behavioral coverage; the 2000 model uses a factor of 1.11 for these services. The administrative loading factor "represents a fixed percentage of the total claims costs for administrative costs and profit (where applicable), to obtain the total premium cost" (Kirchstein, 2000: 35).

If the estimates for plan types were based on the updated Hay Group model, the costs would probably be lower. The dominant factor in the updated model was the change in the cost of mental health services; the other factors played minimal roles in the reduced estimate (Kirchstein, 2000).

Appendix J:
Cost Estimates for Employers and Employees

The implementation of mental health parity might cause health insurance premiums to increase. The increase in premiums would affect both businesses and the individuals they employ. However, the employer and employee share of premium costs differs across types of insurance and between single and family coverage. To accurately capture these variations, this analysis developed weighted averages.

The U.S. Department of Health and Human Services' 2004 Medical Expenditure Panel Survey (MEPS) provides the distribution of family and single coverage and the average employee share for single and family coverage within commercial group insurance for Wisconsin. The weighted average for the employee share of premiums was derived by summing the percentage of employees with single coverage multiplied by the average employee share for singles and the percentage of employees with family coverage multiplied by the average employee share for families. The employer share was determined by subtracting the weighted employee share from 100. Figure J-1 illustrates the calculation.

Figure J-1: Weighted Average for Employee Share of Premium, Total Market

Percentage of employees with single coverage	*	Average employee share for single coverage	+	Percentage of employees with family coverage	*	Average employee share for family coverage	=	Weighted average for employee share
0.422	*	20.2	+	0.578	*	21.6	=	21.0

MEPS also provides Wisconsin data on the average premium shares for the following types of insurance plans: HMO, PPO, and fee-for-service. This analysis applies the same distribution of single and family plans within the Wisconsin commercial market to each of the plan types and develops weighted averages for the employee share of premium for each plan type using the same equation as in the total market. Again, employer shares of premium costs were determined by subtracting the relevant employee share from 100. Figure J-2 illustrates the calculations.

Figure J-2: Weighted Average for Employee Share of Premium, Plan Types

Percentage of employees with single coverage	*	Average employee share for single coverage	+	Percentage of employees with family coverage	*	Average employee share for family coverage	=	Weighted average for employee share
Health Maintenance Organization								
0.422	*	16.6	+	0.578	*	22.3	=	19.9
Preferred Provider Organization								
0.422	*	21.5	+	0.578	*	21.4	=	21.4
Fee-for-Service								
0.422	*	18.9	+	0.578	*	20.4	=	19.8

To allow for the greatest understanding of the impact of parity on Wisconsin's workers, this analysis reports changes in employee premiums in three ways: 1) aggregate annual employee contribution, 2) average annual premiums per employee, and 3) average monthly premiums per employee. The ranges for the aggregate annual employee contribution were determined by multiplying estimates for the changes in the total premium due to parity by the weighted average for employee shares in the form of a percentage.

The ranges for the change in the average annual employee premium per employee were derived by dividing the aggregate annual employee contribution change by the number of Wisconsin workers affected. The information on the number of workers in the commercial group market used included only the top 20 insurance providers or 79.4 percent of premiums ($6.5 billion in estimated commercial group premiums paid in Wisconsin in 2006). The 2006 OCI report *Health Insurance Coverage in Wisconsin* provides the total number of employees in the commercial group market and the number of employees in each plan type.

Dividing the average annual share per employee by 12 generated the change in the average monthly premium per employee.

The range of changes in employer premiums was generated in a similar manner to those for employee premiums. In short, the average employer share was multiplied by the estimated changes in total premiums.

Appendix K: Cost Estimates Calculations: Policyholders in the Individual Market

The estimated increase in individual policyholders' monthly premiums was derived by converting 2003 regional family and single coverage premiums, as reported in a 2004 Kaiser Family Foundation report, to 2006 dollars and applying the expected percentage increase in premiums obtained from other parity studies to these baseline premiums.

The conversion to 2006 dollars used the U.S. Bureau of Labor Statistics' Consumer Price Index for medical care in the Minneapolis, Minnesota-Wisconsin region and raised the premium figures by approximately 17 percent. Table K-1 illustrates the calculations.

Table K-1: Average Regional Monthly Premiums

Coverage	Average 2003 Monthly Premiums	Monthly Premiums (2006 dollars)
Single	$127.40	$148.74
Family	$240.74	$281.07

Sources for 2003 premiums: Kaiser Family Foundation, 2004

Estimated premium increases per policyholder in the individual market were derived by applying the expected percentage increase in premiums as a result of parity (0.4, 1.4/1.6, and 2.0) to the monthly premiums and recording the difference. Table K-2 illustrates the calculations.

Table K-2: Change in Monthly Premiums Under Parity

Monthly Premiums	Expected Percentage Increase	Estimated Premiums Under Parity	Difference
Single			
$148.74	0.4	$149.33	$0.59
$148.74	1.4	$150.82	$2.08
$148.74	2.0	$151.71	$2.97
Family			
$281.07	0.4	$282.19	$1.12
$281.07	1.6	$285.57	$4.50
$281.07	2.0	$286.69	$5.62

Sources for estimated percentage increases are from authors' calculations with data from CBO, 2007; Kirschstein, 2000; and Bachman, 2002.

Appendix L: Impact of Parity on the Utilization of Health Care Services

A number of academic and government studies have looked at the impact of mental health parity on adult mental health service utilization.

Rosenbach, et al. (2003) look at the impact of parity on two health insurance companies in Vermont (together the companies comprised 78 percent of the commercial insurance market), Blue Cross Blue Shield of Vermont (BCBSVT), a fee-for-service company that moved the majority of its members to managed care with the implementation of parity, and Kaiser/Community Health Plan (Kaiser/CHP), a managed care company. The authors find that parity increased overall mental health service utilization for Kaiser/CHP and BCBSVT. A further breakdown of services shows that utilization of inpatient care decreased significantly for individuals in Kaiser/CHP, but increased significantly for individuals in BCBSVT. Outpatient services increased for both plans. Table L-1 displays these findings for Vermont.

Table L-1: Use of Mental Health Services

Kaiser/CHP (Number of Mental Health Users per 1,000 Members per Quarter)	**Before Parity**	**After Parity**	**Percent Change**
Any Mental Health Services	19.28	20.53	6.5
Inpatient/Residential Services	0.34	0.21	-38.2
Partial Services	0.08	0.14	Not significant
Outpatient Services	19.24	20.48	6.4
BCBSVT (Number of Mental Health Users per 1,000 Members per Quarter)	**Before Parity**	**After Parity**	**Percent Change**
Any Mental Health Services	31.13	33.57	7.8
Inpatient/Residential Services	0.23	0.4	73.9
Partial Services	Less than 0.05	0.07	Not significant
Outpatient Services	31.09	33.54	7.9

Source: Original analysis by Rosenbach, et al., 2003

At the same time, Kaiser/CHP experienced an increase in the number of users who had 30 or more inpatient visits per year. In 1996 and 1997, before implementation of parity, the percentage of members using 30 or more days of inpatient care was 3.9 and 0.91 respectively. After parity, this percentage increased to 5.81 in the first year and 15.15 in the second year. BCBSVT did not experience a similar increase.

The authors found a somewhat different story for substance abuse services. In both plans, there was an overall drop in the utilization of substance abuse treatment services after the implementation of parity. The decreases in service utilization were particularly sharp for inpatient services. Table L-2 displays these findings for Vermont.

Table L-2: Use of Substance Abuse Services

Kaiser/CHP (Number of Substance Abuse Users per 1,000 Members per Quarter)	**Before Parity**	**After Parity**	**Percentage Change**
Any Substance Abuse Services	5.69	4.77	-16.2
Inpatient/residential Services	0.56	0.18	-67.9
Partial services	0.18	0.24	Not significant
Outpatient services	5.43	4.68	-13.8
BCBSVT (Number of Substance Abuse Users per 1,000 Members per Quarter)	**Before Parity**	**After Parity**	**Percentage Change**
Any Substance Abuse Services	4.98	3.53	-29.1
Inpatient/Residential Services	0.39	0.18	-53.8
Partial Services	0.25	0.33	Not significant
Outpatient Services	4.85	3.38	-30.3

Source: Original analysis by Rosenbach, et al., 2003

Branstrom & Sturm (2002) looked at utilization of mental health services in two large employers affected by mental health parity legislation. The employer that had managed care before and after parity experienced a decrease in the use of mental health care: 24.7 percent for outpatient services; 33.9 for inpatient services; and 58.3 for intermediate care services. The employer that implemented managed care simultaneously with parity experienced increases in mental health service utilization: 24.1 percent for outpatient services; 11.4 percent for inpatient services; and 17.5 percent for transitional services. However, the study's authors include two caveats to these increases. The first is that users of mental health care were switched into the employers managed care plans after parity, increasing the number of mental health care users in these plans. The second is that all of the increased service utilization still only accounted for well under 1 percent of total health care spending.

Harris, Carpenter, & Yuhua (2006) used a quasi-experimental research design to measure the effects of state mental health parity laws on the utilization of mental health services. The authors considered three distinct groups by level of mental and emotional distress in their analysis: higher, middle, and lower. They found the probability of using mental health care increases by 1.2 percentage points for the

lower distress group (40-70 percent increase in utilization given baseline estimates) and a 1.8 (20-30 percent increase in utilization given baseline estimates) percentage point increase for the middle distress group. There was no significant change in the upper distress group. The source of the service utilization increase for both groups was increased use of outpatient care and prescription drugs. The authors suggest that inelastic demand for health care may be a reason why the higher distress group did not experience an increase in utilization rates because they were already purchasing services before parity. The authors note that their estimates might be biased downward as their analysis includes commercial and self-funded plans, the latter of which is not affected by state parity laws.

Bao & Sturm (2004) examined individuals' perceived quality of insurance coverage and access to care after the implementation of mental health parity. They use a difference-in-difference-in-difference approach to examine individuals with mental illness (compared to people without) in states with mental health parity legislation (compared to people without) before and after the parity law took effect. They found no significant effects of the parity legislation and suggest that this may have to do with the fact that the legislation did not reach enough people to have a population impact. Their analysis included self-funded plans, which are not impacted by parity legislation.

Pacula & Sturm (2000) control for the finding that states with below average mental health care utilization rates are more likely than states with above average utilization rates to enact parity and find that parity legislation—defined as more expansive than the federal mandate—does not affect mental health service utilization overall. However, it does have a small positive impact on individuals with more severe mental illnesses. The authors note that they were unable to exclude self-funded plans from their analysis. As a result, they believe that their finding of a limited effect may have been different if self-funded plans were excluded.

Parity Evaluation Research Team (2004) conducted a difference-in-difference analysis comparing nine federal employee health benefits plans (seven fee-for-service and two HMO) where parity was implemented, to 35 plans where parity was not implemented. The study found that only one out of the nine federal plans experienced an increase in the probably of mental health service utilization relative to secular trends; the probability for one fee-for-service plan increased 0.78 percentage points. Two of the federal plans actually experienced a slight decrease in the likelihood of mental health service utilization relative to secular trends. Separating out substance abuse from other mental health services tells a somewhat different story. All nine plans experienced a 0.01 to 0.25 percent increase in the probability of substance abuse utilization in relation to comparison plans; however, this increase was only significant in four of the nine plans. As substance abuse represents such a small portion of the population (generally less than 1 percent of beneficiaries), changes in utilization for mental health services that excluded substance abuse were essentially identical to the combined estimate.

Goldman, et al. (2006) used the same data as the 2004 Parity Evaluation Research Team study to examine the implementation of parity in federal employee health benefits plans. However, their difference-in-difference analysis excluded the HMO plans. The authors also had a different analytical setup, comparing seven federal plans to a matched set of comparison plans. Still, the results of this study reflect those found in the Parity Evaluation Research Team study.

Appendix M:
Examples of Decreased Costs Under Parity

The combined effect of parity and managed care may produce health cost savings, though the cause of these cost savings is unknown. Savings could result from the benefits associated with parity or from the impact of managed care (e.g.: improved price negotiations by managed care companies, better matching of services to medical needs, or limitations in access to services under managed care). Many states that have seen the largest decreases from parity had insurance companies that began using managed care along with the policy.

A study on the impact of parity in seven federal employee health benefits plans found decreased spending on mental health and substance-abuse care. Three of the plans showed statistically significant reductions in spending per service user that ranged from $68.97 to $201.99 per year (Goldman, et al., 2006). This study is particularly illustrative of parity impacts as it compared insurance policies that used parity against similar policies that lacked parity. As a result, it controls for other factors influencing the cost of care and isolates impacts attributable to parity.

States' experience with parity policies provides further evidence of decreased costs. A 1998 interim report to Congress by the National Advisory Mental Health Council includes findings from multiple states. In Texas, state employees' plans with parity experienced a reduction in per-member-per-month costs of over 50 percent over five years. The simultaneous introduction of parity and managed care limits the ability to identify the impact of parity on costs. North Carolina state employees saw monthly per-member costs fall 32 percent compared to pre-parity levels. Although managed care is less of a factor in this case, mental health utilization rates dropped along with costs, suggesting a component of the savings may have resulted from declining use of services. Although Maryland's parity policy produced an initial increase in the cost for treating mental health and substance abuse disorders of 0.84 percent, in the third year after enactment these costs dropped by 0.27 percent of total benefits (Varmus, 1998). A 2003 study of Vermont's parity policy examined cost impacts in the state's two largest insurance providers. Within Kaiser/Community Health Plan, mental health and substance abuse spending per member per quarter declined by 18 percent, and overall spending on these services decreased by 9 percent. Blue Cross/Blue Shield of Vermont, which introduced managed care and parity simultaneously, experienced an 8.4 percent decline in mental health and substance abuse spending per member per quarter. While outpatient services increased under parity, substance abuse treatment declined. The study suggests that this decline played a significant role in the reduced spending (Rosenbach, et al., 2003).

Appendix N: Barriers to Cost-Benefit Analysis and Suggested Data Collection

This analysis was unable to complete a cost estimate of the benefits of mental health parity. The primary reason is no studies fully monetize these benefits. Although many states have passed some form of mental health parity law, none appears to have determined the benefits (or cost-effectiveness) of mental health parity.

Current research on benefits falls into three main categories: examinations of mental health parity laws that focus solely on costs, research that focuses on the benefits of treatment compared to no treatment, and research that focuses on a particular illness.

Research on mental health parity legislation has focused on costs, because prior to the implementation of any parity laws, concern arose that the costs of parity would be beyond what insurance companies could reasonably afford. A second barrier to monetization of the benefits of parity is that studies that focus on the benefits of mental health treatment generally examine the effects of providing treatment to a person who previously received no treatment. In parity policy for the commercial health insurance market, this would likely not be the case. Rather, implementation of parity policy is expected to allow individuals who are receiving less than the optimal amount of treatment for their conditions to receive more intense treatment and treatment of longer duration. Studies examining the difference between no treatment and treatment allow insight into the positive effects of treatment, but the magnitude of the treatment impact is greater than can be expected under a parity policy.

A third class of studies focuses on a particular illness. While this research frequently examines the benefits of additional treatment or more intense treatment, which is applicable to parity policy, these studies do not separate insured versus uninsured persons. In addition, the dollar value of the starting level of therapy is generally not provided, nor are the costs of additional services, making it difficult to generate the benefits of additional treatment from parity.

Information Needed for Estimate the Monetary Benefits of Parity

If the state of Wisconsin wishes to evaluate the benefits of mental health parity following passage of a parity law, numerous pieces of information could be collected via multiple study designs. These could accomplish such a task, such as surveys, a randomized trial in the state employee health system prior to enactment of the law statewide, or a study of employers'/employees' results before and after policy implementation, this appendix offers a non-comprehensive list of information that could be gathered to provide insight into some of mental health parity's benefits in a monetary form.

Information Measuring Benefits to Society

As stated in the body of this report, the benefits to the general population of Wisconsin are difficult to estimate with available data. Benefits to society may include lower crime and incarceration costs. If greater access to long-term substance abuse treatment leads to reductions in the number of arrests and traffic accidents resulting from drivers under the influence of alcohol or drugs, additional benefits to society will accrue.

The state of California measured benefits of substance abuse treatment among its Medicaid population by matching treatment data (in the Medicaid system) to Department of Motor Vehicle records and criminal records (Hser et al., 2003). If the state of Wisconsin attempted to undertake a similar effort to connect data among residents in *private* health insurance plans with state data, the research would be severely complicated by privacy issues. However, the data integration ideas present in the CalTOP project are a unique way of utilizing and manipulating data already in the state's possession to produce meaningful analyses. With the CalTOP study as inspiration, Wisconsin could explore ways to collect health data that complements current records in possession of the Department of Transportation and state criminal and incarceration records to produce meaningful analyses of the benefits of mental health parity in relation to traffic and criminal law violations.

Employer Information

The primary benefits of a mental health parity mandate to employers are work productivity gains, reduced absenteeism, and reduced turnover. Employers who offer short-term disability benefits also may see reduced numbers of short-term disability claims as mental health parity allows greater access to services. Pre- and post-parity measures of missed work days and employment tenure among employees who utilize mental health treatment services, or whose family members utilize mental health treatment services, would provide a measure of employer benefits. Including the amount of reduced absenteeism and presenteeism among employees with family members with a mental illness is key; family members frequently miss work to attend appointments or address school issues for the family members with illnesses. To measure short-term disability claims pre- and post-parity, measures of the numbers and cost of claims should be collected from employers or disability insurance providers.

Studies have measured worker productivity by surveying employees and/or employers on their perceived work output (Lo Sasso, Rost, & Beck, 2006; Stewart, Ricci, Chee, Hahn, & Morganstein, 2003). Wisconsin could develop a survey to be administered by phone using a randomly selected sample or alternatively, by working with a specific employer or group of employers to obtain information. Surveys are useful for comparing the productivity of employees receiving mental health treatment to employees who do not require mental health treatment. They could also be used to measure absenteeism and turnover rates.

Information on Persons Receiving Treatment for a Mental Illness

The primary beneficiaries of a mental health parity mandate are individuals who do not receive an adequate amount of mental health services because their insurance does not cover the level of services needed, or individuals paying out of pocket to obtain adequate services above the amount covered by insurance. To measure the monetary benefits to these individuals, the state would need insurance information enumerating the individuals receiving benefits of greater value than the current mandates ($2,000 outpatient services, $3,000 in transitional services, and $7,000 in inpatient services). The benefit would be calculated using two values. The first is the amount of service over the current minimum mandate received by individuals who previously did not receive any services beyond what their insurance covered. The second value is obtained from individuals who previously paid out of pocket for treatments above the amount covered by insurance. The amount of benefit is the difference between what the person previously paid out of pocket and the dollar value of services now covered by insurance at a lower fee rate due to insurance bargaining power. This formula would account for the cost transfer from the individual who previously paid out-of-pocket to the insurance company.

Insurance Provider Information

To assess whether increased mental health parity benefits result in lower co-morbidity rates with physical and substance abuse conditions, insurers could tabulate the number of mental and physical health visits paid for by the insurer pre- and post-parity. A second option is to compare utilization across groups over time, similar to the methods used in the study of Blue Cross/Blue Shield medical and pharmaceutical claims of individuals who utilized mental health services (Kathol, et al., 2005). The study used claims data to determine cost differences before and after the institution of a behavioral health carve-out. Using ICD-9 codes, claims data, and provider contracted rates information provided by Blue Cross Blue Shield, the researchers were able to compare differences in physical and mental health care utilization rates following implementation of the behavioral health carve-out among persons with no mental health service use and those with mental health service use. The state of Wisconsin could contract with a private insurance provider to provide and/or analyze similar information relating to pre-and post-parity claims to learn whether parity benefits insurers in the form of lower physical health claims. Or, if the state of Wisconsin chose to implement parity in the self-funded insurance plan available to state employees, the state could explore whether its insurance carriers could share claims information with researchers.

Appendix O:
Implications of Relying on Non-Wisconsin Data

In some parts of this report, the analysis has used data for the United States or a state other than Wisconsin. The reliance on data from outside of Wisconsin may affect the accuracy of this analysis' predictions. The application of national rates for mental illness prevalence and the proportion of commercially insured individuals seeking treatment to the Wisconsin population does not account for state-level variation and, thus, can bias overall estimates. The transient nature of the individual insurance market[51] rendered Wisconsin data on the individual market population, a point-in-time estimate, incompatible with data on individual market premiums, which were reported as an annual amount. As a result, the estimated increased premiums per individual policyholder used national premium figures, which may differ from those in Wisconsin. This report's cost estimates rely on actuarial models developed for the nation or a specific state other than Wisconsin. Although these estimates have been adjusted for total premiums, the distribution of insurance plan types and the proportion of single and family plans within Wisconsin, other differences between the nation or a specific state and Wisconsin may affect the predicted costs reported in this analysis. A more accurate method for gauging the expected costs of parity would be to survey the state's largest insurance providers (as has been done in cost-benefit studies of insurance mandates in New Jersey and California). If this is pursued, it should be acknowledged that insurance companies' traditional opposition to parity mandates suggest that they may overestimate the cost impacts of the policy.

[51] Many people rely on the individual market to fill gaps in employer-sponsored coverage. One study found that nearly half of all episodes of insurance coverage in the individual market lasted less than six months (Demchak, 2006).