



**Review and Evaluation of Proposed
Legislation Entitled:
“An Act Relative to Mental Health Parity”
House Bill No. 4432**

**Provided for
The Joint Committee on Health Care Financing**

July 2, 2008

Deval L. Patrick, Governor
Commonwealth of Massachusetts
Timothy P. Murray
Lieutenant Governor



JudyAnn Bigby, Secretary
Executive Office of
Health and Human Services
Sarah Iselin, Commissioner
Division of
Health Care Finance and Policy

EXECUTIVE SUMMARY

This report was prepared by the Division of Health Care Finance and Policy (the Division) pursuant to the provisions of M.G.L. c. 3, § 38C requiring the Division to evaluate the impact of mandated benefits bills referred by a legislative committee for review and to report to the referring committee. The Joint Committee on Health Care Financing referred House Bill 4432, “*An Act Relative to Mental Health Parity*,” to the Division for review on February 13, 2008.

Overview of Current Law and Proposed Bill

House Bill 4432 (H. 4432) would expand the scope of the Massachusetts parity law enacted in 2000 (Chapter 80 of the Acts of 2000). Under the Commonwealth’s current law, benefit parity exists for nine “biologically-based” mental health conditions for adults and for any conditions in children (18 and under) that limit functioning and social interaction. Conditions specified under this law are covered without annual or lifetime benefit limits and are also at parity with regard to cost sharing. Other conditions not included in these requirements must be covered for at least 60 inpatient days and 24 outpatient visits. Currently, benefits for alcoholism and chemical dependency are mandated to include 30 days of inpatient treatment and \$500 for outpatient treatment. H. 4432 extends this partial parity to full parity for both mental health and substance abuse services, requiring non-discriminatory coverage for the diagnosis and medically necessary treatment of mental health and substance abuse disorders as described in the most recent edition of the Diagnostic and Statistical Manual (DSM) of Mental Disorders.

Methodology

To prepare this review and evaluation, the Division:

- conducted interviews with insurers and providers in the Commonwealth,
- reviewed the relevant literature on the effects of mental health and substance abuse parity, and
- conducted an actuarial analysis of the fiscal impact of H. 4432 with input from an Advisory Panel¹ and summary-level data provided by four Massachusetts health insurers.

The Division engaged Compass Health Analytics, Inc. to conduct the actuarial analysis and Colleen Barry, PhD, a faculty member from the Yale School of Medicine and expert in mental health and substance abuse financing, to conduct background research on the relevant literature and help design the analysis. In applying findings from the literature on the cost impact of parity policies enacted in other contexts (e.g., Federal Employee Health Benefits Program parity and other state parity laws), the Division adjusted these findings for factors specific to Massachusetts. Such factors included:

- the level of benefits required by Massachusetts’ existing partial parity mandate, i.e., Massachusetts has a richer baseline of benefits, and therefore spending, compared to some of the contexts included in other studies;

¹ Richard Frank Ph.D. and Alisa Busch M.D. served as Advisory Panel members. Dr. Frank is a health economist on the faculty in the Department of Health Care Policy at Harvard Medical School and a nationally recognized expert in mental health economics and policy. Dr. Busch is an Associate Psychiatrist at McLean Hospital and Psychiatrist-in-Charge at McLean Hospital's Alcohol and Drug Abuse Partial Hospital Treatment Program. She is also an Assistant Professor of Psychiatry and Instructor in Health Care Policy at Harvard Medical School.

- the level of substance abuse benefits health plans are required to cover in Massachusetts, which are of a lower level than those which were covered in some of the contexts included in other studies; and
- the level of care management already in place in Massachusetts, i.e., since Massachusetts health plans have already implemented many managed care techniques in their management of behavioral health benefits, their ability to achieve further managed care savings may be limited.

Three different impact scenarios were developed—low, medium, and high—to present a range for the possible impact. In addition, summary-level data from Massachusetts health plans was used to assess the reasonableness of estimates developed.

Results

The projected increase in spending that would result from H. 4322 ranges from 0.1% to 0.3% of premiums or \$12.9 to \$38.8 million. The per member per month (PMPM) impact ranges from \$0.46 to \$1.39.

The five-year impact results are displayed in Exhibit 1. The results include three sets of estimates based on low, medium, and high impact scenarios corresponding to estimated percent of premium increases of 0.1%, 0.2%, and 0.3%, respectively. In 2008, these three scenarios resulted in estimated increased total spending (including both claims spending and administrative expenses) of \$12.9 million, \$25.8 million and \$38.8 million, respectively. These results were then trended forward five years using an annual trend rate of 6.5%.²

Exhibit 1

Estimated Cost Impact of HB4322 on Fully-Insured Health Care Premiums 2008-2012

Annual Trend in Behavioral Claims		1.065					
	2008	2009	2010	2011	2012	All 5 Years	
Fully Insured Enrollment	2,329,685	2,329,406	2,344,491	2,356,243	2,358,085		
Low Scenario							
Annual Impact Claims (000,000s)	\$ 11.4	\$ 12.1	\$ 13.0	\$ 13.9	\$ 14.8	\$ 65.2	
Annual Impact Administration (000,000s)	\$ 1.6	\$ 1.7	\$ 1.8	\$ 1.9	\$ 2.0	\$ 8.9	
Annual Impact Total (000,000s)	\$ 12.9	\$ 13.8	\$ 14.7	\$ 15.8	\$ 16.8	\$ 74.0	
Premium Impact (PMPM)	\$ 0.46	\$ 0.49	\$ 0.52	\$ 0.56	\$ 0.59	\$ 0.53	
Mid Scenario							
Annual Impact Claims (000,000s)	\$ 22.7	\$ 24.2	\$ 26.0	\$ 27.8	\$ 29.6	\$ 130.3	
Annual Impact Administration (000,000s)	\$ 3.1	\$ 3.3	\$ 3.5	\$ 3.8	\$ 4.0	\$ 17.8	
Annual Impact Total (000,000s)	\$ 25.8	\$ 27.5	\$ 29.5	\$ 31.6	\$ 33.7	\$ 148.1	
Premium Impact (PMPM)	\$ 0.92	\$ 0.98	\$ 1.05	\$ 1.12	\$ 1.19	\$ 1.05	
High Scenario							
Annual Impact Claims (000,000s)	\$ 34.1	\$ 36.3	\$ 38.9	\$ 41.7	\$ 44.4	\$ 195.5	
Annual Impact Administration (000,000s)	\$ 4.7	\$ 5.0	\$ 5.3	\$ 5.7	\$ 6.1	\$ 26.7	
Annual Impact Total (000,000s)	\$ 38.8	\$ 41.3	\$ 44.2	\$ 47.4	\$ 50.5	\$ 222.1	
Premium Impact (PMPM)	\$ 1.39	\$ 1.48	\$ 1.57	\$ 1.67	\$ 1.78	\$ 1.58	

² The historical growth in behavioral health trend according to a recent CMS study is 6.7%, which is below the 8% average trend in general medical care spending. We have assumed 6.5% annual growth to trend the PMPMs, as the per-person spending would be slightly less than the aggregate trend due to population growth. Mark, T.L., Levit, K.R., et. al. Mental Health Treatment Expenditure Trends, 1986-2003. (2007) Psychiatric Services 58:1041-1048.

INTRODUCTION

The purpose of H. 4432 is to equalize private insurance coverage for mental health and substance abuse with coverage for physical health. H. 4432 would broaden the scope of the mental health parity law enacted in Massachusetts in 2000. Over 40 states have enacted some type of parity mandate, although these laws vary widely in their scope. Some states that initially enacted limited mental health parity laws subsequently passed more expansive legislation as is being proposed in the Commonwealth. This introductory section summarizes the scope of the current Massachusetts law and describes how private insurance coverage for mental health and substance abuse benefits would change under the proposed bill.

Summary of Current Law

The Massachusetts Mental Health Parity Act was enacted as Chapter 80 of the Acts of 2000. It requires insurance carriers, health maintenance organizations, and Blue Cross Blue Shield plans to cover certain mental health services on a “non-discriminatory” basis such that a health plan may not impose any annual or lifetime dollar or unit of service limitations for treatment of mental health services. The mental health services subject to the “non-discrimination” requirement include nine biologically-based mental disorders specified by statute. These are: 1) schizophrenia, 2) schizoaffective disorder, 3) major depressive disorder, 4) bipolar disorder, 5) paranoia and other psychotic disorders, 6) obsessive-compulsive disorder, 7) panic disorder, 8) delirium and dementia, and 9) affective disorders.

Non-discriminatory coverage extends to non-biologically based mental, behavioral, or emotional disorders for children and adolescents under age 19 that substantially interfere with or limit functioning and social interactions including but not limited to: 1) an inability to attend school as a result of such a disorder, 2) the need to hospitalize the child or adolescent as a result of such a disorder, 3) a pattern of conduct or behavior caused by such a disorder, which poses a serious danger to self or others.

Conditions specified under this law are covered at parity with regard to cost sharing pursuant to DOI Bulletin 2000-10. For other mental health diagnoses, health plans must provide medically necessary annual coverage of up to 60 days of inpatient treatment, 24 outpatient visits, and must cover a range of inpatient, intermediate, and outpatient services that permit medically necessary care to take place in the least restrictive setting. In addition, M.G.L. Chapter 175, Section 110 requires the annual coverage of 30 inpatient days and outpatient benefits of up to \$500 for the treatment of alcoholism.

Summary of Proposed Bill

H. 4432 would broaden the 2000 Massachusetts parity law. It would require insurance carriers, health maintenance organizations, and Blue Cross Blue Shield plans to provide non-discriminatory coverage for the diagnosis and medically necessary and active treatment of mental disorders and alcoholism or other drug abuse or dependence disorders as described in the most recent edition of the Diagnostic and Statistical Manual (DSM) of Mental Disorders. In addition, H. 4432 would require health insurers to provide coverage on a non-discriminatory basis for the diagnosis and treatment of rape-related mental or emotional disorders to victims of a rape or victims of an assault with intent to commit rape, as defined by Sections 22 and 24 of Chapter 265, whenever the costs of such diagnosis and treatment exceed the maximum compensation awarded to such victims. Coverage consists of a range of inpatient, intermediate,

and outpatient services providing non-custodial treatment in the least restrictive, clinically appropriate setting.

Non-discriminatory coverage is described as coverage that does not contain any annual or lifetime dollar or unit of service limitation for the diagnosis and treatment of mental disorders that is less than any annual or lifetime dollar or unit of service limitation imposed for the diagnosis and treatment of physical conditions. As is the case for the 2000 Massachusetts parity law, the Division interprets conditions specified under this proposed legislation as covered at parity with regard to cost sharing pursuant to DOI Bulletin 2000-10. Coverage provided under this section may be denied only by licensed mental health professionals. Psychopharmacological services and neuropsychological assessment services shall be treated as medical benefits and shall be covered in a manner identical to all other medical services.

BACKGROUND

In this section, the Division provides information on coverage of mental health and substance abuse benefits under private insurance, reviews federal activity and legislative activity on parity in other states, and summarizes research evidence on the effects of parity mandates.

Coverage of Mental Health and Substance Abuse Benefits under Private Insurance

Private insurance coverage for mental health and substance abuse tends to be more limited than for physical conditions in the U.S. Data from the U.S. Bureau of Labor Statistics (BLS) indicate that most workers with private insurance have some coverage for mental health and substance abuse services. In 2005, of full-time workers with private health insurance coverage, 93 percent had inpatient mental health coverage, 90 percent had outpatient mental health coverage, 97 percent had inpatient alcohol and drug detoxification coverage, 84 percent had inpatient alcohol and drug abuse rehabilitation coverage, and 83 percent had outpatient alcohol and drug abuse coverage.¹ However, private insurance benefits for mental health and substance abuse commonly include higher cost sharing and deductibles than general medical care and unit of service limits including annual outpatient visit limits, and annual inpatient day limits.² One study reported, for example, that 74 percent of privately insured workers in the U.S. were subject to outpatient visit limits, 64 percent were subject to inpatient day limits, and 22 percent had higher cost sharing for mental health care compared with other services.³ BLS trend data indicate that the use of limits on mental health and substance abuse benefits have increased over time.⁴

Federal Legislative Activity

Federal Mental Health Parity Act of 1996

In 1996, the U.S. Congress enacted a law eliminating the use of special annual or lifetime dollar limits on mental health coverage. This law does not apply to other kinds of benefit limits, such as special annual day or visit limits and higher cost sharing and deductibles. It also does not apply to annual and lifetime dollar limits on substance abuse services.

Federal Employees Health Benefits Program 2001 Parity Directive

In 2001, a presidential directive requiring comprehensive parity was implemented in the Federal Employees Health Benefits (FEHB) Program. The FEHB Program parity directive constitutes the most extensive regulatory mandate of its kind covering all diagnoses listed in the DSM and all

aspects of in-network mental health and substance abuse benefits including cost sharing, deductibles, lifetime and annual dollar, day, and visit limits.

Federal Legislation Pending in the 110th Congress

Attempts have been underway to pass a broader federal parity law bill. Federal parity legislation is currently under consideration in the 110th Congress. The federal House bill (H.R. 1424) sponsored by Congressmen Patrick Kennedy (D-RI) and Jim Ramstad (R-MN) would apply to all medically necessary mental health and substance benefit conditions. This bill, modeled on the FEHB Program parity directive mentioned above, would cover all medically necessary conditions listed in the DSM. The Senate version (S.558), sponsored by Senator Ted Kennedy (D-MA) is similar to the House bill in many respects. Federal parity legislation pending in Congress would not preempt more extensive state parity laws. The most significant difference between the House and Senate versions is that the Senate bill would not specify the diagnoses that must be covered leaving this decision to insurers. President George W. Bush expressed support for equalizing coverage in 2002, and supports the Senate version of the federal parity bill. Efforts by conferees are ongoing to reconcile the differences between these bills.

Legislative Activity in Other States

Over the years, state lawmakers have enacted various regulations to eliminate differences in private insurance coverage for mental health and substance abuse with coverage for physical health conditions. In the 1970s and 1980s, many states, including Massachusetts, passed mandated benefit laws establishing minimum coverage levels for mental health and substance abuse coverage under private insurance. Data from the Blue Cross Blue Shield State Services Office indicate that 34 states passed mental health mandates, 44 states passed alcoholism treatment mandates, and 31 states passed drug abuse mandates during this period.⁵

By the 1990s, state legislative efforts shifted to enactment of parity policies requiring equal coverage rather than minimum benefit levels. While over 40 states have enacted parity laws, these policies vary in scope and most are not comprehensive. State policies vary substantially in terms of the type of benefits covered, diagnoses included, population eligible, and direction regarding use of managed care. Some policies are quite limited in scope. For example, South Carolina's parity law applies to public employees only and North Carolina's policy mirrors the federal parity law of 1996 by prohibiting special annual and lifetime dollar limits while continuing to allow other types of mental health benefit limits. More extensive state laws require equal cost sharing and prohibit the imposition of special inpatient day and outpatient visit limits. State laws also differ in the conditions covered with some applying to only a subset of severe or biologically-based disorders and other applying more broadly to medically necessary treatment of DSM disorders.

Research Evidence on the Effects of Parity Mandates

This section provides a brief summary of existing research evidence on the effects of mental health and substance abuse parity. Caution is warranted due to limitations in the generalization of prior studies of mental health and substance abuse parity with H. 4432. As noted above, H. 4432 would broaden the existing parity law in Massachusetts and affects only coverage for non-biologically-based mental health conditions for adults and coverage for substance abuse conditions. It is important to note that none of the prior studies reviewed below examined the effects of parity on non-biologically-based mental health disorders only, and only one prior study⁶ examined the effects of parity on substance abuse separately from mental health.

However, to the extent that the FEHB Program parity evaluation and other studies evaluated the utilization and cost impact of shifting from no parity to comprehensive parity, these findings may serve as an upper bound for the impact of the less dramatic shift from biologically-based parity for adults (with broader coverage for children) under the 2000 Massachusetts law to more comprehensive parity as proposed under H. 4432.

A second concern relates to substantial variability in the methodological rigor of existing studies on the effects of parity. For the most part, this overview focuses on studies that employ pre-post with comparison group design. Examining changes in utilization and cost before and after implementation of parity, including a comparison group, allows the identification of effects of parity controlling for secular trends in utilization and spending on mental health and substance abuse services.

Concerns related to rigor of research design (e.g., pre-post with comparison group only, exclusion of unaffected groups) are at issue for all but three studies on the effects of parity. These are studies by Goldman and colleagues,⁷ Azrin and colleagues,⁸ and Lichtenstein and colleagues⁹ on the effects of comprehensive parity in the FEHB Program. These studies examined the effects of shifting from no parity to comprehensive parity employing a pre-post with comparison group research design.

Research studies examine the effects of parity on various outcomes including utilization of mental health and substance abuse services, total mental health and substance abuse spending, and consumer out-of-pocket spending for mental health and substance abuse, quality of depression care, and perceived generosity of, and access to, mental health services.

A third concern with prior studies relates to the importance of including only privately insured individuals subject to the parity mandate. For studies examining the effects of state parity laws, excluding individuals enrolled in self-insured health plans not subject to state parity laws is important. The 1974 Employee Retirement and Income Security Act (ERISA) limits the reach of all state health care mandates by exempting employers that self-insure from state insurance regulations. The Kaiser Family Foundation estimated that, in 2000, between 33 and 50 percent of employees in the U.S. were in self-insured plans, and thus not covered by state regulation due to ERISA.¹⁰ Likewise, all parity studies should exclude uninsured individuals and those with public coverage (e.g., Medicare, Medicaid, SCHIP) not subject to a state parity mandate.

Finally, it should be noted that when examining other studies, the applicability of the results should be calibrated to the Massachusetts health insurance marketplace. For example, some would argue that the California marketplace has allowed for more rigorous implementation of managed care and other mechanisms to control costs and therefore the results of that study should be tempered to the unique marketplace conditions in Massachusetts. Also, the Massachusetts Division of Insurance has already interpreted that the current parity law applies to cost sharing and this study assumes that that ruling would apply to H. 4432 as well. Therefore, a key mechanism for containing costs, which has been used in other environments, is unavailable in Massachusetts.

Research on the Effects of the 1996 Federal Parity Law

A 2000 report by the U.S. General Accounting Office found that when the 1996 federal parity law eliminated the use of mental-health-specific dollar limits, 87 percent of employer plans complying with the law had at least one other benefit design feature differentially limiting coverage for mental health in their benefit package.¹¹ In addition, about two-thirds of compliant employers changed at least one other mental health benefit design component to be more restrictive in response to the law. The agency found that 51 percent of plans complying with parity reduced covered annual outpatient office visits and 36 percent reduced inpatient hospital days for mental health services after enactment of the 1996 law.

Research on the Effects of Comprehensive Parity in the FEHB Program

As noted above, the evaluation of parity in the FEHB Program employed a more rigorous before and after with comparison group research design to account for secular trends in the use of mental health and substance abuse services. Goldman and colleagues found that the effect of parity on the probability of use for six of seven health plans was either not significantly different from zero or was significant but negative.¹² In one health plan, a PPO in the Mid-Atlantic, researchers identified a significant effect of parity on the probability of use (of 0.78 percentage points). This health plan was the only FEHB plan studied that did not carve out mental health and substance abuse to a managed care company. Spending in FEHB plans after parity was on a par with or below that of other large privately insured populations indicating no significant increase in total costs attributable to the implementation of parity. Goldman and colleagues also found that parity was associated with a significant reduction in annual out-of-pocket expenditures per user in six of the seven PPO health plans studied.

Goldman and colleagues' analyses of the effects of parity among FEHB Program adult enrollees in health plans located in the Northeast (i.e., Northeastern PPO 1, Northeastern PPO 2) are particularly informative in assessing the likely effects of H. 4432 in Massachusetts. For Northeastern PPO 1, no significant differences in utilization, spending, or out-of-pocket spending attributable to parity were detected. For Northeastern PPO 2, no significant differences in utilization attributable to parity were detected. However, a significant decrease was detected in total spending per user of -\$119.29 (-\$234.46 to -\$4.06) and out-of-pocket spending per user of -\$48.12 (-\$66.85 to -\$29.39) attributable to parity among enrollees in Northeastern PPO 2.

A number of additional results from the FEHB Program parity evaluation are relevant to understanding the possible effects of H. 4432. First, a study examining the effect of the FEHB parity directive on total and out-of-pocket spending among children found similar results as the study described above.¹³ In this study of children, only one PPO health plan experienced a significant increase in the probability of children's mental health and substance abuse service use attributable to parity of 0.73 (0.01-1.46). As with adults, this health plan was the only FEHB plan studied that did not carve out mental health and substance abuse to a managed care company. There was no evidence of spending increases for children's mental health or substance abuse services attributable to parity. Out-of-pocket expenditures per user declined significantly for children in three of the seven PPOs studied, with reductions ranging from \$62 to \$200. Second, separate analyses on the effects of comprehensive parity on utilization, total spending, and out-of-pocket spending for substance abuse only were largely consistent with the aggregated findings for adults and children.¹⁴ Third, federal employee plans were significantly more likely to increase managed care through contracts with managed behavioral health 'carve-out' firms after parity.¹⁵

Last, Busch and colleagues examined the association between the FEHB Program parity directive and changes in major depression treatment quality.¹⁶ After parity, the authors found that several plans showed modest improvement in the likelihood of receiving antidepressant medication. However, this result was also consistent with secular trends in major depression treatment seen in other research¹⁷ and therefore may not be a result of parity. In addition, this study also found that parity did not result in changes in the identification rate of major depressive disorders. In the acute-phase episodes, the greatest improvement was seen in the likelihood of follow up. Few or no other changes were observed in the acute-phase treatment intensity or duration quality measures. A limitation with this study was the lack of a control for secular trends that might affect quality independent of parity.

Research on the Effects of Parity Laws in Other States

Prior research on the effects of state parity laws consists of a report evaluating comprehensive parity in Vermont and five peer-reviewed, multi-state analyses. The Vermont study found that consumers paid a smaller share of the total amount spent on mental health and substance abuse services after implementation of parity.¹⁸ For those with serious mental health conditions, the decrease in out-of-pocket spending following parity was particularly large. Among individuals spending more than \$1,000 annually on mental health and substance abuse services, out-of-pocket spending was reduced by more than half. Within the two Vermont health plans studied, use of outpatient mental health services increased without prompting substantial spending growth after implementation of parity. For the two largest health insurers in the state of Vermont, the level of use increased slightly in one plan and decreased in the other. A key limitation with this report was the lack of a comparison group study design.

Three multi-state studies found little to no impact of parity. One study by Sturm using Community Tracking Study (CTS) detected no statistically significant differences in perceptions of perceived insurance generosity or access among those living in parity and non-parity states.¹⁹ In a subsequent analysis using the HealthCare for Communities (HCC) data, Pacula and Sturm found that state parity laws appear to have a small positive effect on the level of utilization among adults in poor mental health but not for other adults.²⁰ In a recent paper using two waves of HCC data, Bao and Sturm found no statistically significant effects of state parity laws on perceived quality of health insurance coverage, perceived access to needed health care, and use of mental health specialty services among those needing mental health care.²¹

A fourth study found that families living in a parity state had a significantly lower financial burden due to caring for children with mental illness compared with families in non-parity states.²² The likelihood of a child's annual out-of-pocket health care spending exceeding \$1,000 was significantly lower among families of children needing mental health care living in parity states compared with those in non-parity states. Families of children with mental health conditions in parity states were also more likely to view out-of-pocket spending as reasonable compared with those in non-parity states. Living in a parity state significantly lowered the likelihood of a family reporting that a child's health needs caused financial problems. The likelihood of reports that additional income was needed to finance a child's care was also lower among families with mentally ill children living in parity states.

Actuarial Estimates of Parity Costs

The absence of quantity increases due to parity across these studies is consistent with more recent actuarial estimates of the effect of parity on premiums. Actuarial estimates are calculated as the expected change in total premium due to parity. Studies conducted in the early and mid-1990s produced widely disparate estimates ranging from a 1 percent to an 11.4 percent increase in total premiums due to federal parity, with the Congressional Budget Office (CBO) estimating a 4 percent increase in 1996.^{23- 27}

After updating its estimation methods to incorporate managed care effects in 2001, the CBO scored comprehensive parity as increasing group health insurance by an average of 0.9 percent.²⁸ CBO analysts also forecast a net 0.4 percent estimated increase in total premiums after accounting for the offsetting impact of behavioral responses by health plans, employers, and workers.²⁹ Most recently, a March 2007 CBO report on S. 558 pending in the U.S. Congress estimated that, if enacted, the bill would increase premiums for group health insurance by an average of about 0.4 percent before accounting for responses of health plans, employers, and workers.³⁰ CBO expects that those behavioral responses would offset 60 percent of the potential impact of the bill on total health plan costs. A 2007 actuarial study on the effects of legislation proposing to expand California parity from biologically-based conditions only to comprehensive parity (AB423) in 2007 estimated a 0.16 percent increase in total health care expenditures attributable to the bill.

METHODOLOGICAL APPROACH

Overview of Approach

The Division engaged an economics and actuarial firm, Compass Health Analytics, Inc. (Compass), to estimate the financial effect of the passage of H. 4432. A consultant, Colleen Barry Ph.D., a faculty member at Yale University School of Medicine, also worked with Division and Compass to estimate the likely effects of the proposed bill. Dr. Barry is an expert on mental health care and substance abuse financing, has authored 12 peer-reviewed research publications on the effects of mental health and substance abuse parity, and was a member of the research team that evaluated the effects of parity in the FEHB Program. In addition, the Division organized an Advisory Panel to provide consultation on development of the methodology for estimating the impacts of H. 4432. Richard Frank Ph.D. and Alisa Busch M.D. served as Advisory Panel members. Dr. Frank is a health economist on the faculty in the Department of Health Care Policy at Harvard Medical School and a nationally recognized expert in mental health economics and policy. Dr. Busch is an Associate Psychiatrist at McLean Hospital and Psychiatrist-in-Charge at McLean Hospital's Alcohol and Drug Abuse Partial Hospital Treatment Program. She is also an Assistant Professor of Psychiatry and Instructor in Health Care Policy at Harvard Medical School.

A number of steps were involved in preparing this review and evaluation of H. 4423:

- First, the Division conducted interviews with stakeholders in the Commonwealth to ensure that we were accurately interpreting the proposed change in law, and to understand perceptions about how the law would be interpreted, if enacted, and expectations about its likely impacts. The Division completed interviews with the bill's lead sponsor, Representative Ruth Balser, and key contacts with the Massachusetts

Psychological Association, Blue Cross Blue Shield of Massachusetts, and the Massachusetts Association of Health Plans, including representatives of member health plans.

- Second, the Division reviewed existing literature on the costs and quality impacts of parity policies enacted in other contexts (i.e., effects of federal parity, FEHB Program parity, and other state parity laws). This research included identification of appropriate parameters for estimating cost impacts of H. 4432.
- Third, the Division requested summary-level data from health plans in the Commonwealth to establish a Massachusetts-specific baseline to calculate cost impacts. This data request was prepared by Compass in collaboration with Division staff and in consultation with the Advisory Panel. The Division held a conference call with health plans in the Commonwealth to discuss and respond to questions on an initial draft of this data request on May 5, 2008.
- Fourth, after receiving aggregate baseline data from health plans, the Division applied parameters from the literature and actuarial studies to the Massachusetts-specific health plan baseline data collected from health plans to produce a cost estimate.
- Finally, the Division conducted sensitivity analysis to develop a range of likely cost outcomes.

Approach for Determining Medical Efficacy

M.G.L. c. 3, § 38C (d) requires the Division to assess the medical efficacy of mandating the benefit, including the impact of the benefit on the quality of patient care and the health status of the population, and the results of any research demonstrating the medical efficacy of the treatment or service compared to alternative treatments or services or not providing the treatment or services. To determine the medical efficacy of H. 4432, we relied on extensive prior research on the efficacy of available treatments for mental health and substance abuse conditions, and limited evidence available on the effects of parity on quality of mental health care.

Approach for Determining Fiscal Impact of the Bill

The steps required to identify the costs implied by this mandate were as follows.

1. estimate the size of the affected insured population
2. estimate the baseline claims costs for the affected benefits
3. estimate the range of potential impact factors on claims costs due to the incremental impact of the mandate's required benefits
4. estimate the impact administrative expenses of the relevant insurers

Following these steps, estimates were done for the entire covered population for a five-year timeframe (2008-2012) for a range of "low case" to "high case" scenarios.

To estimate these effects, we developed the following model parameters.

Model Parameters

In consultation with the Advisory Panel, the Division developed model parameters related to four dimensions instrumental to estimating the fiscal impact of H. 4432. This framework is based in part on an approach recommended in a workshop funded by the Robert Wood Johnson Foundation in 2001 with actuaries, providers, health insurance industry representatives, academics, and public officials on methods for estimating the costs of parity for mental health.³¹ The final report resulting from this workshop, *Estimating the Costs of Parity for Mental Health*, identified guiding principles for four dimensions relevant to estimating the fiscal impact of parity:

1. Baseline estimates of insurance coverage and spending
2. Demand response to changes in benefit design
3. The impact of managed care on parity
4. The cross-sector effects especially related to prescription drugs and medical cost offsets

Massachusetts-specific Baseline Estimate. There are approximately 2.32 million individuals in Massachusetts ages 0 to 64 enrolled in health plans or policies that would be covered by H. 4432. This population does not include privately insured individuals employed by self-insured firms and those with publicly funded coverage. The Division collected survey data from major health plans operating in Massachusetts. The health plans included Blue Cross Blue Shield of Massachusetts, Harvard Pilgrim Healthcare, Tufts Health Plan, and Fallon Community Health Plan.³ The plans responding to the cost survey represent approximately 85% of the fully-insured under age 65 market. The plans were asked about behavioral health (mental health and substance abuse) benefit structures, their arrangements and methods for managing behavioral health, behavioral health costs, and the frequencies with which behavioral health benefit limits have been exceeded. In order to promote consistency in responses, the Division provided detailed instructions for the data extraction required to answer the cost and utilization questions.

Demand Response. In estimating the fiscal impact of parity, it is important to take into account demand response to changes in benefits design. The literature shows that the impact of benefit structures on behavioral health costs has evolved over time. The RAND Health Insurance Experiment in the 1970s found that use of mental health services in an unmanaged indemnity insurance environment is more sensitive to the price paid by users of care (determined by cost sharing provisions of the benefits) than other medical care.³² Differential benefit structures with visit limits and higher cost sharing have been one way that this issue was addressed historically.

Managed Care. The minimal effects of parity on utilization and costs identified in prior research have been attributed in part to the role of care management through health plans directly or via contracts with managed behavioral health care organizations (MBHOs). Evidence on the effects of managed care suggests that these mechanisms have been instrumental in reducing inpatient admissions, inpatient lengths of stays, and total spending on inpatient care with a concomitant increase in outpatient visit rates across the health sector.³³ In the mental health context, MBHOs have been shown to reduce costs by limiting inpatient care and substituting outpatient care. Observational studies of contracting with carve-outs have consistently produced evidence of substantial reductions in mental health and substance abuse costs even in the context of benefit

³ A partial submission from Fallon Health Plan was received. This information was not readily combinable with the other submissions but it was reviewed and helped to form judgments about the overall marketplace.

expansion in both the private sector^{34- 37} and public sector.^{38- 44} Enactment of parity legislation tends to be accompanied by increased reliance on MBHOs and other approaches to utilization management.^{45,46} In evaluating mental health and substance abuse benefit expansion by the state employees in Massachusetts, Ma and McGuire estimated a minimum of 30-40 percent overall mental health and substance abuse cost reduction after the simultaneous expansion of benefits and initiation of a carve-out contract.⁴⁷ They found decreases in consumer mental health and substance abuse spending, the probability of outpatient use, outpatient visits per user and inpatient length of stay with no change in inpatient admissions (but some shift to less intensive treatment settings). A key challenge in interpreting the findings from these studies involves disentangling the effects due to initiation of mental health benefit changes from those due to simultaneously occurring shifts in managed mental health care.⁴⁸

Since the intensity of management varies in different markets and regions of the country, and also varies over time, it is important to identify the degree of managed care in the baseline population. This information will inform how much potential exists to alter management in response to parity. To assess baseline information on care management under private insurance in the Commonwealth, the Division asked health plans to characterize current management of behavioral health benefits (either in-house or through a vendor) indicating the use of utilization management techniques including gate keeping by primary care physicians, prior authorization for specialty mental health and substance abuse services, treatment plan requirements, concurrent review, closed or preferred provider panels, disease management, and other approaches.

Cross-sector Effects. The Division considered two types of cross-sector effects related to pharmaceuticals and medical cost offsets. The Division excluded pharmaceutical costs from the estimate of the fiscal impact of H. 4432. Psychotropic drug costs are typically treated as part of the pharmaceutical benefit by health plans. Therefore, prescription drug costs for the treatment of mental health and substance abuse disorders are not typically subject to benefit limits. There is some possibility that if enactment of H. 4432 led to increased utilization of mental health or substance abuse services, increased service use could prompt greater use of psychotropic drugs among the privately insured. However, no evidence is available to support the view that substantial prescription-drug-related cross-sector effects are likely if H. 4432 is enacted. Conversely, psychotropic drug use could potentially decrease if enactment of H. 4432 prompted increased utilization of psychotherapy providing a treatment alternative to medication use. Again, no information is available to estimate the magnitude of such a decrease. The Division made the determination not to request baseline pharmaceutical information from plans since cross-sector effects were uncertain, and in recognition that collecting these baseline data would impose an additional burden on health plans.

Second, the Division did not include a medical cost offset factor in the fiscal impact estimate. The Division concluded that the research evidence on a medical cost offset was inconclusive.⁴⁹ It is worth noting that this decision is conservative to the extent that the Division's fiscal impact estimate is overestimating the increase in spending associated with H. 4432 if a medical offset exists. These assumptions regarding prescription drugs and medical cost offsets are in keeping with the recommendations of our Advisory Panel, and consistent with guidelines from the RWJF workshop on estimating the costs of parity⁵⁰ and prior cost estimates.⁵¹⁻⁵³

SUMMARY OF FINDINGS

Medical Efficacy

Mental Health: A Report of the Surgeon General released in December 1999 summarizes the central findings of a vast body of scientific literature on the prevalence and treatment of mental illness.⁵⁴ The evidence amassed in this report demonstrates that a range of efficacious treatments exist for most mental disorders. Likewise, clinical trial and observational studies have demonstrated a range of pharmacological (e.g., methadone, disulfiram, buprenorphine, naltrexone, acamprosate) and outpatient treatments (e.g., cognitive behavioral therapy, family education and brief interventions) to be efficacious for treating substance abuse problems. Overall, significant gains have been made in advancing the evidence base for treating substance abuse and mental health conditions,⁵⁵ although both sectors face challenges in translating these advances to routine care.⁵⁶

The Surgeon General's report also provided evidence indicating that a large share of those with mental health and substance abuse conditions do not receive treatment at all or receive inadequate care.^{57,58} The report noted that of the 28 percent of the U.S. population with a behavioral health disorder, only 15 percent receive services and only 8 percent of the population have both a diagnosis and receive services.⁵⁹ Rates of services use among those with a substance abuse diagnosis are particularly low. It is estimated that only 10 to 17 percent of those who need substance abuse treatment receive specialty care.⁶⁰ Among adolescents, only about 9 percent of those classified as needing specialty treatment for illicit drug use and 7 percent needing alcohol treatment receive it.⁶¹ The problem of unmet need is attributed in part to stigma and the marginalized role of these groups in society. Many in treatment do not receive appropriate care. McGlynn and colleagues found that those with medical records indicating alcohol dependence received recommended care 10 percent of the time and patients treated for clinical depression received recommended care 58 percent of the time.⁶²

In addition, both mental health and substance abuse disorders impose costs on society.^{63- 67} Psychiatric disorders and alcohol use ranked among the 10 leading causes of disability worldwide in 1990.⁶⁸ Beyond direct treatment costs, mental illness, heavy drinking, or dependence on illicit drugs have been shown to lower earnings and reduce the likelihood of being employed.^{69- 80} In addition, substance abuse in particular confers significant negative externalities including those associated with driving impaired, transmitting communicable diseases through unprotected sex, and crime.^{81- 83}

It is important to note that doubts about the effectiveness of treatments for some mental health and substance abuse disorders may influence the perceptions about the value of parity legislation. Insurer groups in the Commonwealth have raised specific concerns about the evidence base for treating certain disorders included in the DSM such as jetlag disorder. Parity advocates respond that the inclusion of medical necessity criteria in H. 4432 addresses concerns about the provision of low value care under expanded parity.

To the extent that comprehensive parity increases rates of use of appropriate, evidence-based treatments, this policy has the potential to improve mental health and substance abuse status.

Financial Impact of Mandate

1. The Division is required to assess the extent to which the proposed insurance coverage would increase or decrease the cost of the treatment or service over the next five years.

As noted above, the Division's actuarial consultants, Compass, estimated the fiscal impact of the bill (see Appendix I). Estimated impacts of H. 4432 on Massachusetts health care premiums for fully-insured products were calculated as follows:

- i. Based on data from the Division's 2007 Employer Survey, we assumed that the 2007 premium for a fully-insured business is \$434.
- ii. We applied low, medium, and high percent of premium factors of 0.1%, 0.2%, and 0.3% to this premium, producing estimated impacts on the premium of \$0.43, \$0.87, and \$1.30 PMPM. (The rationale behind the 0.1%, 0.2%, and 0.3% premium impact is described below.)
- iii. The PMPM impacts, which consist of behavioral health costs, are trended forward to 2008 through 2012 by applying the historical growth rate in behavioral health care costs. The historical growth in the behavioral health trend according to a recent CMS study is 6.7%, which is below the 8% average trend in general medical care spending.⁸⁴ We have assumed 6.5% annual growth to trend the PMPMs, as the per-person spending would be slightly less than the aggregate trend due to population growth.
- iv. The trended PMPMs are multiplied by the fully-insured population projection for the corresponding year to arrive at estimated annual impact dollars.

The five-year impact results are displayed in Exhibit 2. In 2008, these scenarios result in estimated increased total spending of \$12.9 million, \$25.8 million, and \$38.8 million respectively.

Exhibit 2

Estimated Cost Impact of HB4322 on Fully-Insured Health Care Premiums 2008-2012

Annual Trend in Behavioral Claims		1.065					
	2008	2009	2010	2011	2012	All 5 Years	
Fully Insured Enrollment	2,329,685	2,329,406	2,344,491	2,356,243	2,358,085		
Low Scenario							
Annual Impact Claims (000,000s)	\$ 11.4	\$ 12.1	\$ 13.0	\$ 13.9	\$ 14.8	\$ 65.2	
Annual Impact Administration (000,000s)	\$ 1.6	\$ 1.7	\$ 1.8	\$ 1.9	\$ 2.0	\$ 8.9	
Annual Impact Total (000,000s)	\$ 12.9	\$ 13.8	\$ 14.7	\$ 15.8	\$ 16.8	\$ 74.0	
Premium Impact (PMPM)	\$ 0.46	\$ 0.49	\$ 0.52	\$ 0.56	\$ 0.59	\$ 0.53	
Mid Scenario							
Annual Impact Claims (000,000s)	\$ 22.7	\$ 24.2	\$ 26.0	\$ 27.8	\$ 29.6	\$ 130.3	
Annual Impact Administration (000,000s)	\$ 3.1	\$ 3.3	\$ 3.5	\$ 3.8	\$ 4.0	\$ 17.8	
Annual Impact Total (000,000s)	\$ 25.8	\$ 27.5	\$ 29.5	\$ 31.6	\$ 33.7	\$ 148.1	
Premium Impact (PMPM)	\$ 0.92	\$ 0.98	\$ 1.05	\$ 1.12	\$ 1.19	\$ 1.05	
High Scenario							
Annual Impact Claims (000,000s)	\$ 34.1	\$ 36.3	\$ 38.9	\$ 41.7	\$ 44.4	\$ 195.5	
Annual Impact Administration (000,000s)	\$ 4.7	\$ 5.0	\$ 5.3	\$ 5.7	\$ 6.1	\$ 26.7	
Annual Impact Total (000,000s)	\$ 38.8	\$ 41.3	\$ 44.2	\$ 47.4	\$ 50.5	\$ 222.1	
Premium Impact (PMPM)	\$ 1.39	\$ 1.48	\$ 1.57	\$ 1.67	\$ 1.78	\$ 1.58	

The low, medium, and high scenarios of 0.1%, 0.2% and 0.3% respectively were developed based on the following information. Research and actuarial studies estimate that the cost impact

of parity implementations, excluding a managed care response by plans, are in the range of 0.4% to 0.6% of overall health care premiums. These percentage estimates were judged too high to be applicable to H. 4432 for the following reasons:

- i. A complete lack of managed care response is not plausible, particularly for non-biologically-based services, for which plans have relied on benefit limits to restrain excessive costs. It is assumed that health plans would employ strategies to manage utilization of these services if H. 4432 were to pass.
- ii. Significant portions of benefits typically affected by parity laws are already covered by Chapter 80 (especially services for biologically-based conditions for adults) and so we would expect the impact to be smaller than when the baseline benefits are further from full parity. Based on 2007 claims data provided by the plans, approximately 29% of current claims spending is for conditions not covered at full parity.

The same sources of information indicate that after allowing for a care management response by the plans, the impact of parity implementation may be slightly above zero (research studies with data from 1997-2002) or may be in the range of 0.1% to 0.16% (more recent actuarial estimates). The lower of these estimates are assessed to be too low to be applicable to H. 4432 for the following reasons:

- i. Outpatient substance abuse benefits in Massachusetts, at a \$500 per person cap, are below the pre-parity levels present in the other contexts in which parity was implemented and evaluated. We would therefore expect a larger response than has been measured in previous studies.
- ii. The managed care response for mental health benefits that contributed to the findings of studies for parity implementations 8-10 years ago may not be fully realizable in today's climate in which the techniques that achieved these reductions have already been applied, at least in part, by application to those benefits affected by Chapter 80 and most possible savings already achieved. An important finding of the survey of Massachusetts health plans is that these plans already use available tools for behavioral health management.

The foregoing discussion asserts that factors near zero are likely to be too low and those in the range of 0.4% to 0.6% are likely to be too high. This would suggest that in the current Massachusetts environment with the existence of Chapter 80, percent of premium factors in the range of 0.1% to 0.3% are more likely.

2. The Division is required to assess the extent to which the proposed coverage might increase the appropriate or inappropriate use of the treatment or service over the next five years.

There is no data available that would permit the Division to quantify the extent to which the proposed coverage might affect the appropriate or inappropriate use of the treatment or service over the next five years. As noted above, if the scope of mental health parity expands beyond the requirements of the 2000 law, insurers would no longer be allowed to limit medically necessary outpatient care to a minimum of 24 outpatient visits or inpatient care to 60 days for mental health. For substance abuse benefits, insurers would no longer be allowed to limit medically necessary alcoholism treatment to 30 inpatient days and \$500 outpatient visits

mandate under current Massachusetts law. Under more comprehensive parity, mental health and substance abuse providers who believe their patients would be better served by a more extensive duration of care or a more intensive care setting, might request additional services. In the absence of limits on the number of services provided, health care expenditures attributed to these patients could increase if their care is deemed medically appropriate and approved by insurers. However, the services requested would be required to be medically necessary and H. 4432 would not affect health plan reliance on managed care to ensure the provision of high quality care.

3. The Division is required to assess the extent to which the mandated treatment or services might serve as an alternative to more expensive or less expensive treatment or service.

There is no data available that would permit the Division to quantify the extent to which the mandated treatment may result in the establishment of additional inpatient or residential treatment facilities. Should H. 4432 become law, providers may determine that demand for additional intermediate level treatment options may increase and it is possible that additional treatment facilities could be established to provide this specialized care.

4. The Division is required to assess the extent to which the insurance coverage may affect the number or types of providers of the mandated treatment or service over the next five years.

There is no data available that would permit the Division to quantify the extent to which the mandated treatment would affect the number or types of providers of the mandated treatment.

5. The Division is required to assess the effects of the mandated benefit on the cost of health care, particularly the premium, administrative expenses, and indirect costs of large and small employers, employees, and non-group purchasers.

H. 4432 will likely lead to an increase in health plan administrative costs if mental health or substance abuse claims increase. Exhibit 2 above includes the administrative cost estimates. Incremental administrative expenses would be incurred for activities associated with the implementation of the mandate such as modifications to benefit plan materials, claims processing system changes, training/communication material for staff, etc. These costs would be non-zero but less than the administrative costs of an average benefit. The assumption that incremental administrative costs are equal to current average administrative costs should be a conservatively high allowance for any incremental expenses required.

In addition, incremental margin is required in order for the insurer to maintain adequate reserve levels as required by the Massachusetts Division of Insurance. Required reserves are based on the claim levels for the insurer, and since the mandate would increase claims levels, it would increase required reserve levels and therefore incrementally increase the total dollars of margin required to meet those reserve levels.

6. The Division is required to assess the potential benefits and savings to large and small employers, employees and non-group purchasers.

Some clinicians argue that early treatment, using a multidisciplinary approach, offers many patients the best opportunity to improve and many to recover. As noted above, little rigorously conducted evidence is available to suggest that increasing access to mental health services produces a medical cost offset. Some small employers could benefit by increased employee satisfaction if some of their employees or their family members avail themselves of additional treatment options offered by this mandate. This mandate would not affect the many large employers who are self-insured unless they choose to adopt this standard.

7. The Division is required to assess the effect of the proposed mandate on cost-shifting between private and public payers of health care coverage.

The proposed mandate applies only to commercial insurance carriers, health maintenance organizations, and Blue Cross Blue Shield plans. There is no data available that would permit the Division to quantify the extent to which the proposed mandate would result in cost-shifting between private and public payers of health care coverage. It is not expected that H. 4432 would result in substantial cost shifting between public and private payers. Publicly funded coverage programs (e.g., MassHealth and Commonwealth Care) currently have processes in place to ensure that employer-sponsored insurance is accessed as primary coverage where available. Such processes would continue if H. 4432 were enacted. However, under current law privately insured individuals may take advantage of publicly funded health services which would now be covered through the expanded mental health parity requirement (e.g., substance abuse treatment programs funded by the Department of Public Health) or pay for care out of pocket. In addition, health insurers in the state have also raised concern that H. 4432 would result in cost-shifting from school systems and the Department of Education. There is no available research evidence to inform whether such shifts would occur if H. 4432 were enacted.

8. The Division is required to assess the cost to health care consumers of not mandating the benefit in terms of out-of-pocket costs for treatment or delayed treatment.

There is no data available that would permit the Division to quantify the extent to which the mandated treatment might affect out-of-pocket costs or delays in treatment in the Commonwealth. However, prior research on the effects of parity has consistently demonstrated a decrease in consumer out-of-pocket spending on mental health and substance abuse services attributable to parity. As noted above, the FEHB Program evaluation identified a significant decrease in out-of-pocket spending per user on mental health and substance abuse attributable to parity for both adults and children.^{85,86} Another recent study on the effects of state parity laws found that the likelihood of a mentally ill child's annual out-of-pocket health care spending exceeding \$1,000 was significantly lower among families living in parity states compared with those in non-parity states.⁸⁷

9. The Division is required to assess the effects on the overall cost of the health care delivery system in the Commonwealth.

The estimated overall impact on health insurance premiums and spending is included in Exhibit 2 above.

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