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# Achieving Mental Health and Substance Use Disorder Treatment Parity: A Quarter Century of Policy Making and Research

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**Keywords**

MHPAEA, mental health, substance use disorder, insurance coverage

**Abstract**

The Mental Health Parity and Addiction Equity Act (MHPAEA) of 2008 changed the landscape of mental health and substance use disorder coverage in the United States. The MHPAEA's comprehensiveness compared with past parity laws, including its extension of parity to plan management strategies, the so-called nonquantitative treatment limitations (NQTL), led to significant improvements in mental health care coverage. In this article, we review the history of this landmark legislation and its recent expansions to new populations, describe past research on the effects of this and other mental health/substance use disorder parity laws, and describe some directions for future research, including NQTL compliance issues, effects of parity on individuals with severe mental illness, and measurement of benefits other than mental health care use.

### Mental Health Parity and Addiction Equity Act (MHPAEA):

federal legislation passed in 2008 mandating insurance benefits for mental health/substance use disorder be comparable with those for medical/surgical treatments, if offered

### Mental Health Parity Act (MHPA):

first federal legislation on parity, passed in 1996; eliminated annual or lifetime dollar limits more restrictive than those imposed on medical/surgical services

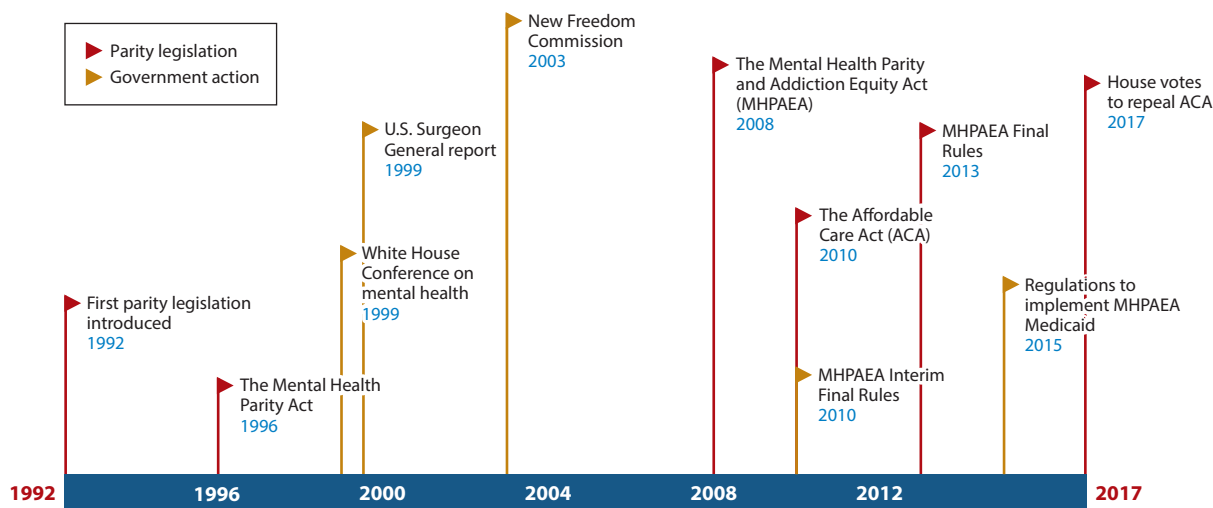
## INTRODUCTION

Historically, insurance benefits for mental health services were far more restrictive than benefits offered for medical/surgical services in the United States. However, for the past 20 years, parity legislation has significantly impacted the landscape of mental health treatment by eliminating or at least ameliorating that discrepancy. In this article, we review the history of mental health parity legislation, research on the effects of parity with a focus on research conducted since passage of the Mental Health Parity and Addiction Equity Act of 2008 (MHPAEA), and discuss some areas for future study.

## POLITICAL HISTORY: LEGISLATIVE MILESTONES

Although the notion of parity dates back to John F. Kennedy's presidency, the first federal legislation was not introduced until 1992 by Senators Pete Dominici and John Danforth. That bill, the Mental Health Parity Act (MHPA), was passed by Congress in 1996 and went into effect in 1998 (see **Figure 1**). While the MHPA did not require full parity in regard to insurance benefits, it took the initial step of eliminating annual or lifetime dollar limits on mental health care that were more restrictive than those imposed on medical/surgical services. Yet, several holes in coverage remained. Insurers were not required to provide mental health services as part of their plans and were still permitted to impose treatment limitations and to use differential mental health and medical/surgical care cost-sharing. Furthermore, small companies (<50 employees) were exempt from the law, and employers could also apply for an exemption if their compliance with the law led to a cost increase of at least 1%. Finally, MHPA standards did not apply to the individual (nongroup) health insurance market and did not cover substance use disorder (SUD) treatment services. These limitations led many to believe that the passage of the MHPA was more symbolic in nature than it was a signal of substantive policy change.

In the years following the passage of the MHPA, a majority of states passed their own state-based parity laws, although these varied considerably in their scope. Specifically, state laws differed on whether mental health coverage was mandated, which (if any) specific conditions plans covered, whether SUD treatment was included in benefits, whether laws extended to small group plans, and



**Figure 1**

Timeline of parity legislation and mental health milestones.

Quantitative treatment limits	Nonquantitative treatment limits
<ul style="list-style-type: none"> <li>Quantitative treatment limits must be no more restrictive than limits on medical/surgical benefits including: <ul style="list-style-type: none"> <li>Frequency of treatment</li> <li>Number of visits</li> <li>Days of coverage</li> </ul> </li> <li>Financial requirements must be no more restrictive than limits on medical/surgical benefits including: <ul style="list-style-type: none"> <li>Copays</li> <li>Deductibles</li> </ul> </li> <li>Parity requirements extend to out-of-network coverage</li> <li>Separate deductibles or out-of-pocket maximums for mental health/substance use disorder are not allowed</li> </ul>	<ul style="list-style-type: none"> <li>Nonquantitative treatment limits must be no more restrictive than limits on medical/surgical benefits including: <ul style="list-style-type: none"> <li>Prior authorization</li> <li>Medical necessity</li> <li>Utilization review</li> <li>Drug formulary design</li> <li>Network tier design</li> <li>Standards for provider admission to plan networks</li> <li>Methods for determining reimbursement for providers</li> <li>Fail first strategies</li> <li>Exclusions based on failure to complete a course of treatment</li> <li>Restrictions based on geographic location, facility type, and provider specialty</li> </ul> </li> </ul>

**Figure 2**

The Mental Health Parity and Addiction Equity Act (MHPAEA) provisions.

the extent to which inpatient or outpatient visit limits and differential cost-sharing were allowed. For instance, more comprehensive state laws required parity in all cost-sharing components without exemptions, whereas less comprehensive laws allowed a variety of exemptions, including small employers or employers who experienced cost increases as a result of legislation. The Employee Retirement Income Security Act (ERISA) of 1974 exempted self-insured employers from all state benefit mandates, thus significantly limiting the impact of all state parity laws (17).

In 2008, additional federal legislation, the Paul Wellstone and Pete Dominici Mental Health Parity and Addiction Equity Act (MHPAEA), was passed and went into effect in 2010. MHPAEA was more comprehensive than previous legislation at the federal or state level (see **Figure 2**). Extending beyond annual and lifetime dollar limits, the MHPAEA required that all financial requirements and quantitative treatment limitations (QTLs) for mental health disorders were comparable with those applied to medical/surgical benefits in employment-based plans. Notably, differential cost-sharing for out-of-network mental health care compared with out-of-network medical/surgical care was no longer permissible. The MHPAEA also extended these parity requirements to SUDs. The Interim Final Rule (IFR), issued in February 2010, extended the requirement of parity to nonquantitative treatment limitations (NQTLs), which refer to nonnumerical limits on the scope or duration of treatment or management techniques that may be used to curb the use of behavioral health treatments (66). The MHPAEA required that the processes by which these standards are determined for mental health/substance use disorder (MH/SUD) must be similar to the processes used to determine medical/surgical management. These included provisions related to management techniques used to affect treatment patterns, such as utilization review, standards for provider admission to plan networks, and fail first or step therapy strategies (see **Figure 2** for additional examples). The IFR also provided six classifications by which plans could determine if benefits were equivalent to medical/surgical care: in-network inpatient, out-of-network inpatient, in-network outpatient, out-of-network outpatient, emergency care, and prescription drugs. Separate deductibles for MH/SUD and medical/surgical care were also no longer allowed.

In March 2010, Congress passed the Patient Protection and Affordable Care Act (ACA), the most comprehensive health care bill in US history. The ACA significantly extended the impact

**Quantitative treatment limit (QTL):** numerical limit (e.g., number of visits) on the scope/duration of treatment, which were historically more restrictive for mental health disorders

**Nonquantitative treatment limit (NQTL):** nonnumerical limit on the scope/duration of treatment traditionally used to curb use of behavioral health treatments

**Mental health/substance use disorder (MH/SUD) treatments:** pharmacological and therapeutic interventions aimed at treating mental health or substance use disorders

**Affordable Care Act (ACA):** federal health care legislation passed in 2010 that extended the effects of parity to new populations of patients

of parity in several important ways (14). First, the ACA extended parity regulations from group health plans to the individual health insurance market, including plans offered through state health insurance exchanges. Thus, plans that might have been exempt from parity under the MHPAEA were now subject to the same regulations. This provision alone impacted an estimated 11 million individuals who purchase individual health insurance plans through state marketplaces (3).

Second, the MHPAEA did not require plans to offer MH/SUD benefits—merely that if benefits existed, they were to be comparable with medical/surgical benefits. However, the ACA categorized MH/SUD as an essential health benefit (EHB), which guaranteed coverage of services and treatment of MH/SUD in nongrandfathered plans in both the small group and the individual private insurance market, including plans sold in state health insurance exchanges. Relatedly, the ACA also mandated coverage of preventive MH/SUD services, including depression screening (for both adults and children), behavioral counseling for alcohol abuse, tobacco screening and cessation intervention, and alcohol and drug use screening for adolescents. Additionally, the ACA required that insurers maintain an adequate network of behavioral health providers to ensure that all services are accessible without unreasonable delay.

Third, the ACA expanded Medicaid to cover low-income Americans aged 19–64, who had previously been ineligible. Low-income populations tend to have a higher concentration of MH/SUD, partially because the presence of these disorders can reduce earning capacity (14). Under the ACA, Medicaid included MH/SUD treatment as an EHB and was required to comply with MHPAEA provisions. Among states that chose to expand Medicaid, an additional 14 million people enrolled, which may have important impacts on access to behavioral health services.

Taken together, the ACA substantially broadened insurance benefits of MH/SUD services and increased the number of Americans who could access insurance coverage. Together, the MHPAEA and the ACA affected insurance benefits for more than 170 million people (32).

In November 2013, the MHPAEA Final Rule was issued and further elaborated on the ways in which the MHPAEA interacted with the ACA (66). The Final Rule maintained the IFR's NQTL parity stipulation and clarified that all health care costs, including both MH/SUD and medical/surgical, must accumulate toward the same out-of-pocket maximum. Additionally, insurance plans and issuers were required to use comparable network admission standards for all providers, whether they were behavioral health or medical providers and use comparable reimbursement rates.

## CLINICAL AND POLITICAL DEVELOPMENTS THAT CONTRIBUTED TO THE PASSAGE OF THE MHPAEA

In addition to legislation, advancements in the field of mental health and key political milestones built momentum and contributed to the development of and ultimate support for the MHPAEA (see **Figure 1**).

### Clinical Developments

The first edition of the *Diagnostic and Statistical Manual* (DSM), released in 1952, clarified clinical diagnoses and facilitated the reimbursement process from third-party payers (26). Future editions of the DSM added new diagnostic categories, adding potential patients to the psychiatric population and further streamlining the diagnostic process (26).

The field also experienced a substantial shift in treatment modalities away from long-term psychoanalysis toward short-term evidenced-based models of psychotherapy (39). Cognitive-behavioral therapies emerged (12, 29), and behavior modification approaches were also developed (31). An ever-growing body of literature demonstrates that these therapeutic approaches lead to significant improvements in symptomatology in a relatively short time period (24, 50). Effective

behavioral treatments for SUD also arose with strong and positive effects on treatment outcomes (56). Pharmacological treatments vastly improved from the initial use of highly addictive medications in the 1950s to treat anxiety to the development and use of a wide array of safe options over the past few decades (62). Additionally, the proliferation of nonpsychiatrist prescribers (e.g., primary care physicians, psychiatric advanced practice registered nurses) allowed these medications to become more widely available (24).

## Public Opinion

It was once commonly believed that mental illness was untreatable; however, advancements in diagnosis and treatment have helped to shift this perspective. A recent public opinion survey indicated that the majority of respondents believed that full recovery from MH/SUD was possible (9). Stigma and false beliefs remain, however, as the same public opinion survey revealed that Americans still hold significantly more negative views of individuals with SUD than they do of individuals with mental health disorders. These negative views are associated with lower support for policies aimed at improving access to treatment, insurance parity, and funding for housing and job support (9). Furthermore, an early review of public opinion related to parity indicated that when parity was associated with higher taxes or premiums, support dropped (36).

## Political Milestones

In addition to and in response to clinical developments, key political milestones demonstrated a growing interest in and awareness of mental health advocacy from politicians. In 1999, US President Bill Clinton held the first ever White House Conference on Mental Health and directed the Office of Personnel Management to implement full parity for federal employees. This directive was the most comprehensive parity endeavor to date and represented a symbolic step forward (8). The year 1999 also saw the first ever US Surgeon General Report on mental health, which revealed that efficacious treatments did in fact exist for the majority of mental illnesses. Yet, most individuals who needed treatment did not seek it (63). The report advocated for continued research, reduced stigma, improved public awareness of available treatments, increased supply of mental health providers, delivery of evidence-based treatments in community settings, cultural sensitivity, and improved access to treatment (63). In 2003, President George W. Bush formed the New Freedom Commission on Mental Health to conduct a comprehensive study of the mental health services in the United States in an effort to reduce inequalities for Americans with disabilities. Following the results of the study, Bush publicly endorsed parity, making him the first prominent Republican to do so (8).

The 2008 passage of the MHPAEA was also facilitated by political strategy from parity advocates. Barry et al. (8) identified three political factors that were influential to MHPAEA's passage. First, research on the financial costs of parity, which found no strong evidence of increased spending (7), alleviated the concerns of multiple parties, including employers, insurers, and policy makers. Second, members of Congress called on their families' personal experiences with mental illness and addiction to effectively advocate for more comprehensive legislation. Last, members of Congress strategically wrote separate bills for the Senate and the House of Representatives aimed at passage in each chamber, which eventually paved the way for negotiations and compromise (8).

## RESEARCH ON PARITY PRIOR TO PASSAGE OF THE MHPAEA

Before the MHPAEA passed, numerous studies had documented the effects of changes in MH/SUD plan benefits, the introduction of state-based parity laws, and implementation of parity in the Federal Employees Health Benefit (FEHB) plan. These studies were influenced by the

RAND Health Insurance Experiment (HIE), conducted in the 1970s, which found that reduced cost-sharing for mental health services resulted in more substantial increases in demand for these services than did reduced cost-sharing for general medical services (52). In contrast with the RAND HIE, later studies examining the effects of changes in benefit design and state-based parity laws found mixed results. A comprehensive review of the effects of Vermont's parity law found increased use of mental health services but declines in use of SUD services (58). Other studies that simultaneously examined multiple state laws found mixed effects of parity on mental health service utilization, in some cases finding no effects but increases in use for some groups (5, 20, 27, 37, 53). For instance, one study considered the effect of state-based mental health parity laws on treatment admissions for SUD and found that parity was associated with a 13% increase in treatment admissions to SUD treatment facilities (27). Overall, studies more consistently found that state-based parity laws resulted in reduced out-of-pocket spending on mental health care, leading to important reductions in the financial burden for patients and their families (6, 58).

Perhaps the most influential and comprehensive studies of parity prior to the MHPAEA were evaluations of parity in the FEHB plans. Most notably, Goldman et al. (33) used a difference-in-differences design and found little evidence of increased MH/SUD use or spending in response to parity. They attributed this finding to increased use of management techniques to restrict utilization (10, 57). Consistent with the findings from state parity law effects, the majority of plans experienced significant reductions in out-of-pocket costs, reducing the financial burden on individuals treated for mental health disorders (4, 33).

In a 2006 study on patients with major depression in FEHB plans, Busch et al. (18) found some evidence of improvements in treatment quality following parity implementation; patients were more likely to receive at least one antidepressant medication and to have a treatment duration greater than four months. Busch et al. (19) also examined diagnosis-specific effects of FEHB plan parity and found that spending on more severe and chronic conditions (e.g., major depression, bipolar disorder) had no measurable changes. But adjustment disorder, the often less severe condition, was associated with a significant decrease in spending owing to a significant reduction in the number of psychotherapy visits. This decline in spending may be due to an increased use of managed care techniques to control potential increases in low-value utilization.

## RESEARCH ON PARITY FOLLOWING MHPAEA PASSAGE

Numerous peer-reviewed research studies and government reports have been published since the passage of the MHPAEA to document its effects. These evaluations report on changes in benefit design and treatments covered, and they examine effects on use and expenditures for individuals with mental health or SUDs.

### Changes in Benefits

Studies of benefit design changes and compliance with MHPAEA provisions generally fall into two categories: surveys of plans or direct examination of plan benefit documents.

**Surveys of plans.** Horgan et al. (40) conducted a nationally representative telephone survey of health plan executives to compare changes in plan benefits from 2009 to 2010 (before and after MHPAEA implementation). They found that by 2010 plans were generally in compliance with financial requirements with differential QTLs eliminated. For example, the proportion of plans with annual limits on outpatient care for either mental health or SUD declined from 26–28% in 2009 to 3–4% in 2010. Additionally, approximately 95% of plans reported mental health and

addiction treatment coverage in 2010, suggesting that plans did not drop MH/SUD coverage in response to the MHPAEA (40).

Regarding plans' use of NQTLs, Horgan et al. (40) found that a preexisting trend toward fewer preauthorization requirements continued post MHPAEA; only 5% of plans required preauthorization for mental health or SUD services by 2010. Regarding provider network size, 80% of plans reported an increase in the number of providers in their behavioral health network. Furthermore, 65–68% of plans reported no significant changes in provider fees, 21–23% reported an increase in fees, and 11% reported a decline in the fee schedule (40).

**Studies of plan benefit documents.** Studies that examined plan benefit documents (which are perhaps a more reliable indicator of QTL changes than are surveys relying on administrator reports) yielded results similar to prior studies. Thalmayer et al. (60) found that differential financial requirements were close to eliminated, with plans expanding coverage to comply with the MHPAEA.

A study by Goplerud (35), sponsored by the US Department of Health and Human Services (HHS) and the Assistant Secretary for Planning and Evaluation, examined several benefit plan design databases supplemented with employer surveys and plan interviews. Results were generally consistent with previous studies, as more than 90% of plans were compliant with financial requirements by 2011. Still, 20–40% of plans (predominantly midsized plans) were not consistent with MHPAEA requirements for outpatient cost-sharing. This study also found that in 2010 many plans had differential NQTL provisions for MH/SUD. For example, 28% of plans included MH/SUD precertification requirements that were stricter than those for medical/surgical services (35).

Berry et al. (15) examined ACA Marketplace plan documents from two states and found that overall only about 75% of studied products appeared to be in compliance with MHPAEA requirements. Because little information on NQTLs was available in these plan documents, the authors evaluated only prior authorization requirements. In one state where few plans were offered, differential preauthorization requirements for behavioral health were found in approximately 75% of products.

## Changes in Use and Spending

Ettner et al. (30) used administrative data and an interrupted time series approach to examine the effects of federal parity in carve-out plans, specifically on specialty mental health providers. Consistent with previous parity studies, these researchers found few meaningful changes in utilization, although results varied across types of services and specifications/samples studied. They found more evidence that patient out-of-pocket payments declined somewhat after parity was implemented. A similar study on carve-in plans found modest increases in use and spending per enrollee, mostly due to increases in outpatient services (38). This study also found meaningful declines in the use of intermediate care services.

In a series of papers, McConnell and colleagues (45) evaluated the effect of Oregon's 2007 state parity law, which had comprehensive provisions (e.g., SUD treatments, NQTL requirements) deemed similar to those of the MHPAEA. We include this study with other post-MHPAEA studies because the examination of Oregon's law provided unique information on the expected effects of the MHPAEA, and findings were published after the passage of the MHPAEA in 2008. In the Oregon plans studied, changes in expenditures did not differ from existing trends. Examining effects on provider choice, McConnell et al. (44) found that parity led to a small but significant increase in the use of nonphysician specialists (relative to general practitioners, psychiatrists, and psychologists).

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**Serious mental illness (SMI):** mental health diagnoses defined by duration of illness and disability it produces (includes major depression, psychotic disorders, schizophrenia, bipolar)

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**Effects on individuals with severe mental illness.** In an evaluation of the Oregon state parity law, McConnell (43) examined the effects on individuals with severe mental illness (SMI) and found that parity resulted in significant increases of \$335 in spending on behavioral health services compared with a preparity mean spending of \$1,059, suggesting a meaningful increase in provided services. This stands in contrast with the Oregon-based study noted above, which included all individuals (those with and those without SMI) and found no significant changes in spending. Importantly, researchers found no evidence that this increase in spending was associated with increases in out-of-pocket costs for individuals with SMI (43).

**Effects on SUD treatments.** In one early study, Busch et al. (21) examined the effects of the MHPAEA on SUD service usage and expenditures between 2009 and 2010. In the first year of implementation, they found no changes in the proportion of enrollees using SUD treatment. They did find a modest increase (of approximately \$10) in spending on SUD treatment per plan enrollee; the increase was large but imprecisely measured and not statistically significant when the sample was limited to users of SUD treatment. Researchers examining the Oregon state law also found significant increases in spending on alcohol treatment services but not on other SUD treatments (46).

**Types of diagnoses and services covered.** Prior to the implementation of the MHPAEA, there was concern that plans may exclude specific types of high-cost MH/SUD treatments. A US Government Accountability Office survey of 170 employers revealed that the proportion of plans reporting exclusion of certain types of MH/SUD treatments increased from 33% in 2008 to 41% in 2010–2011 (67). The survey conducted by Horgan et al. (40) showed that 22% of plans did not cover treatments for eating disorders, and 7% did not cover treatment for autism spectrum disorder–related services in 2010, although information is not available prior to this time. Horgan et al. conducted a second follow-up survey and found that by 2014 no plans reported exclusions of eating disorder coverage. However, up to 24% of plans excluded autism treatment (40). Despite these reported autism treatment exclusions, other examinations of national health insurance commercial group claims data found trends suggesting an increased number of autism services were provided postparity implementation (59).

**Out-of-network treatments.** At least two papers looked specifically at the use of out-of-network providers post MHPAEA. These papers both used administrative data and an interrupted time series design to examine whether more patients used out-of-network services after MHPAEA implementation. McGinty et al. (47) found that, for SUD treatment services, the use of out-of-network services increased, which suggests that the extension of parity to out-of-network providers did improve access to treatments. Using similar methods, these same researchers examined the effects on out-of-network mental health care (23). In contrast with the results on SUD treatments, this study found a decline in out-of-network service use after parity implementation, although by 2012 the effect on out-of-network expenditures returned to predicted values in the absence of the MHPAEA (23).

## ADDITIONAL RESEARCH AVENUES

There are many avenues for future research, including NQTL noncompliance, effects of parity on individuals with serious mental illness or Medicaid coverage, and spillover effects to other areas of the economy.

## Addressing NQTL Noncompliance

That plans have failed to meet NQTL requirements in full is not surprising. In some cases, this may be due to plan uncertainty about whether certain strategies are in compliance. NQTL compliance is likely difficult to monitor, making full compliance a lower priority for plans. Yet, noncompliant NQTLs likely create barriers to treatment thus warranting greater enforcement efforts. Regulators may benefit from evidence on specific strategies most likely to improve compliance and access to evidence-based treatments, without placing an unduly high burden on plans. Strategies to address NQTL compliance discussed below include additional public disclosure requirements of plan management processes, greater education of patients on MHPAEA requirements, appeals processes and avenues for submitting complaints to regulators, increased enforcement of NQTL provisions by state and federal governments, and structured competition among plans to incentivize NQTL compliance.

Specific information about management techniques is not typically noted in publicly available plan documents. Increased disclosure would allow patients and regulators to identify differential management strategies more readily. However, commonly agreed upon metrics would need to be developed that could be consistently applied across MH/SUD and medical/surgical treatments. These metrics would need to capture relevant differences in management techniques as well as consider trade-offs among simplicity, ease of collection, and costs to plan. For some easily identifiable NQTLs (e.g., preauthorization requirements), this may be relatively easy to accomplish. For example, Berry et al. (15) examined plans from two different states' insurance exchanges and identified differences in preauthorization requirements for outpatient and inpatient services in plan documents. Yet, comments submitted to the Obama administration's Mental Health and Substance Use Disorder Parity Task Force (Parity Task Force) between March 2016 and October 2016 indicated that plans need more guidance on transparency issues and disclosure requirements related to NQTLs (49).

The Parity Task Force final report also highlighted the need for greater patient education on the requirements of plans under the MHPAEA and the appeals processes available to consumers (49). An American Psychological Association–sponsored survey conducted by Harris Poll in 2014 indicated that only 7% of adults were aware of the term “mental health parity,” a percentage that increased to 13% among those who had used insurance to pay for treatment from a mental health provider (2). Further adding to the confusion, the agency to which a patient can file a formal complaint depends on the type of plan; complaints are handled by the state department of insurance, HHS, the federal Department of Labor, or state medical agencies (34). One report notes that relatively few complaints of violations have been made to these agencies but that significant evidence from other sources indicates the occurrence of violations and the need for additional enforcement (34). Despite the efforts of a select number of states to actively enforce NQTL provisions, the majority of state insurance commissioners may be preoccupied with issues related to other significant changes to the health care marketplace. The Parity Task Force report noted that states need more resources for enforcement (49).

McGuire (48) has proposed a different tack to increase plan compliance with NQTL provisions, suggesting that competition can play an important role in encouraging plans to provide access to high-quality care. In a managed competition framework, similar to that used in state Marketplaces and Medicare Advantage, payments to plans are adjusted on the basis of the health profile of their members. Evidence indicates that risk adjustment typically underpays for mental health conditions, effectively incentivizing plans to avoid these patients; one research group estimated that this underpayment was 16% overall in state Marketplaces, with only 20% of individuals with a MH/SUD condition recognized by the risk adjustment model studied (51). A risk

adjustment scheme that paid adequately for individuals with mental health conditions would reduce incentives to use management techniques to restrict treatment use and intensity. Instead, plans would be incentivized to manage treatment in ways that would attract these individuals. If mental health services were considered to be underprovided under the current system, a regulator might reimburse for mental health conditions at amounts even greater than current expected spending. Another proposal is for more active purchasing of plans, with the idea that plan purchasers are best equipped to identify plans that skimp on mental health care using management techniques (48).

### **Effects for Individuals with Severe Mental Illness and Medicaid Beneficiaries**

Although the results of prior research do not consistently find service use increases after parity implementation, studies indicate that there may be a reallocation of resources toward those with more severe mental illness. The examination by Busch et al. (19) of diagnosis-specific effects of FEHB plan parity suggested that declines in the number of psychotherapy visits were limited to those patients with less severe disorders. A second study found some improvements in quality of care for major depression (18). In an evaluation of the Oregon state parity law focused specifically on individuals with SMI, researchers found that parity did result in significant increases in spending, and these increases were concentrated on the highest spenders (43). Taken together, these studies indicate that although parity has little meaningful effect on overall use, for the small group of individuals with more severe disorders, there may be important increases in service use.

As noted above, the ACA expanded provisions of the MHPAEA to many Medicaid enrollees. Yet, regulations related to implementation of the MHPAEA were not released until Spring 2016 (64). Given that many individuals with SMI are likely to be covered by Medicaid, the effects of the MHPAEA in the Medicaid population, particularly as it relates to the NQTL management provisions in Medicaid managed care, hold significant interest. Evidence-based treatments for SMI are complex and involve multidisciplinary treatment approaches, including Assertive Community Treatment, supported employment, and family psychoeducation, and would be difficult to find for comparable medical/surgical treatments (11). These will be important areas for future study.

### **Important Spillover Effects of Parity**

Although most of the research on the effects of parity focuses on health care use and spending, spillover effects may also have significant value. The fragmented nature of health and social service spending in the United States leads to a less-than-full accounting of the value of health care policies that also lead to benefits in other sectors. Yet, these may be important, particularly in the area of MH/SUD, where there are likely benefits of treatment related to education (22), worker productivity (13), future spending on disability payments (28), and others. Although many studies have failed to find significant changes in use or spending, some evidence has shown that service use or spending increased or at least was maintained among those with SMI, relative to other diagnoses (19, 43). Furthermore, several studies do suggest increases in SUD treatment (21, 27) and, in particular, alcohol (46). Thus, parity may have led to a reallocation of treatment to those most likely to benefit, to some improvements in quality of care, and to improvements in treatments for those with SUD. It is perhaps among these groups that spillovers are most likely to occur.

In a study using state parity as an instrumental variable for SUD treatment, first-stage regressions suggested a 10% increase in the rate of SUD treatment due to the introduction of state parity laws. These increases in treatment were associated with an economically meaningful reduction in rates of robbery, aggravated assault, and larceny theft, with an estimated benefit from crime reduction of \$2.5–4.8 million (68). Relatedly, Popovici et al. (55) note that one-third of all fatal

traffic accidents involve alcohol, while 20% of fatal traffic accidents involve psychotropic drugs. Consistent with the expectation that SUD parity would affect access to effective treatment and, in turn, reduce fatal traffic accidents, they found that the implementation of a state parity law that includes SUD-related treatment reduced traffic fatalities by approximately 4–5%, increasing to 7–9% when considering only weekend fatalities (which are more likely to involve substance use) (55).

Two studies examined the effect of state parity laws on suicide rates. These studies found conflicting results. One study found that state parity mandates did not effectively reduce rates of suicide (41), whereas another found significant reductions in suicide rates (42).

Parity requirements may also affect employment outcomes (including employer-sponsored insurance), though studies differ on the effects. Andersen (1) focused on individuals with moderate levels of mental distress and found that state-based parity laws were associated with increases in overall employment, weekly wages, and hours worked per week. Andersen attributes these changes to increased productivity among these workers. Family members of these individuals were also affected, with increases in the number of hours worked (but not wages) (1).

Cseh (25) hypothesized that additional mandates related to mental health coverage would affect wages, hours worked, or employee contributions to employer-sponsored health insurance premiums if employers passed on the additional costs of these services to workers. In studies of state-based parity laws, no such effects were found, most likely because evidence suggests that parity laws do not lead to meaningful increases in overall total health spending (25).

## CONCLUSION

Recent research finds that MHPAEA resulted in important changes to health plan coverage of MH/SUD treatments, including the elimination of differential annual limits, differences in many cost-sharing arrangements, and elimination of many treatment limits imposed on MH/SUD treatments. These changes to QTLs made an observable difference in benefit design; studies have shown high compliance with these aspects of MHPAEA. In addition, prior to MHPAEA, there were significant concerns among policy makers related to whether plans would drop coverage for MH/SUD to avoid insuring at parity, or perhaps plans would implement more restrictive coverage of medical/surgical care to avoid expanding coverage for MH/SUD. These concerns were not realized, and there is almost no evidence of these contractions in coverage.

Although parity is an important step forward, it does not solve problems with mental health treatment access. In 2015, only 65% of adults with SMI used services in the prior year, and about 38% perceived an unmet service need (54). Among those with unmet service needs or no services received, unaffordable care was the most commonly cited reason (55%), and lack of knowledge about where to receive services (33%) was another (54). Access issues may be partially due to many mental health providers continuing to refuse private insurance, Medicare, and Medicaid patients at much higher rates than other medical professionals do (16), suggesting higher reimbursement rates may be needed. Indeed, much of the United States faces a significant shortage of mental health care professionals (61, 65) due in part to high turnover, an aging workforce, and inadequate compensation (54). It may also be beneficial to put other mechanisms in place (e.g., supervision/training in evidence-based models of care, employee benefits that improve self-care) to reduce burnout of mental health providers, particularly those working with severe populations in community-based settings. Access to treatment is further complicated by stigma. Among adults with SMI with unmet service needs, 27% reported that they believed they could handle the problem without treatment, and 22% reported concerns about being committed or having to take medication. Concerns related to discrimination were also prevalent (54).

Furthermore, even among individuals with access to treatments, those treatments are not always evidence based despite evidence-based treatments existing for most disorders. This gap between research and practice may be due to insufficient provider training, workforce shortages, organizational and logistical challenges within community-based clinics, inadequate funding, and severity of health conditions among patient populations (which differ significantly from highly controlled populations in clinical trials).

### SUMMARY POINTS

1. The MHPAEA was more comprehensive than previous legislation at the federal or state level and required that QTLs and NQTLs for MH/SUD benefits are comparable with those applied to medical/surgical benefits.
2. The ACA extended parity through the expansion of Medicaid, classification of MH/SUD as an EHB, and extension of parity to individual plans. Together, MHPAEA in conjunction with the ACA affected insurance benefits for 170 million individuals.
3. Parity implementation has not resulted in substantial increases in service utilization or expenditures.
4. With regard to QTL and financial requirements, plans are generally in compliance with MHPAEA, but more enforcement may be needed to improve compliance with NQTL provisions.
5. Even with fully compliant parity implementation, MH/SUD services remain difficult to access owing to provider shortages and lack of evidence-based treatment options in community settings.

### FUTURE ISSUES

1. Does parity lead to improved health outcomes, particularly for individuals with SMI?
2. What are the effects (and limitations) of MHPAEA provisions, particularly those related to NQTLs, on access to care, use, and expenditures in Medicaid populations?
3. Within the context of managed competition, can changes to risk adjustment incentivize plans to provide access to high-quality mental health care?
4. Do population-level expansions in MH/SUD coverage lead to measurable benefits beyond the health care system?

### DISCLOSURE STATEMENT

The authors are not aware of any affiliations, memberships, funding, or financial holdings that might be perceived as affecting the objectivity of this review.

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