Estimating the Costs of Parity for Mental Health

Methods and Evidence

Results from a workshop
Washington, D.C.
May, 2001

funded by THE ROBERT WOOD JOHNSON FOUNDATION®

In May 2001, The Robert Wood Johnson Foundation sponsored a one-day workshop to help federal officials in designing their evaluation of the implementation of parity in the Federal Employee Health Benefit Program. At the workshop, actuaries, economists, and key governmental officials examined the methods and evidence for estimates of the costs of parity for mental health. This report summarizes the lessons from the workshop.

Introduction

Counting the Health Security Act of 1994 as one, there have been five recent attempts to enact federal legislation to expand the private insurance coverage for treatment of mental disorders.[1] Special restrictions on insurance coverage for mental disorders in private insurance markets have elements of inefficiency and strike nearly everyone as unfair. The objective of so-called parity legislation is to move coverage for mental health care near to the same level as that available for general medical care. Yet parity has a cost, and when costs are imposed by federal legislation they deserve special scrutiny. A barrier to passage of a parity law has been the costs imposed on the private sector by a national "unfunded mandate."

The Congressional Budget Office (CBO) and a number of private actuarial firms hired by interested parties have estimated the impact of mental health parity on health insurance premiums. These various estimation efforts have produced widely disparate projections of the costs of the same legislative proposals to expand coverage for mental health care under private insurance. This was true during debates about the Clinton Health Security Act (Frank & McGuire, 1995), and more recently during consideration of S.1028 (the Domenici-Wellstone bill) in 1996, where estimated premium increases due to parity ranged from 3.2% to 11.4 percent (Bachman, 1996; Rodgers, 1996; Sing et al., 1998).[2] Mental health costs in many private plans are around 5 percent or less of total premium costs, so these impacts are both large and uncertain. The wide variations in these estimates and the potentially high costs led federal legislators to limit parity-level benefits greatly in the Mental Health Parity Act of 1996. There are many reasons to review these estimates in the context of further federal consideration of parity. One of the most important is the continuing decline in the "base" of mental health care use. As overall rates of mental health care use fall, the costs of

[1]In addition to the Health Security Act which was introduced in 1993, four other federal legislative proposals have been introduced to mandate mental health parity. During the 104th Congress, mental health parity legislation was offered three times by Senators Pete Domenici (R-NM) and Paul Wellstone (D-MN). In 1996, a parity amendment to S. 1028 would have required full parity for mental health benefits and S. 298 would have mandated parity for serious mental illnesses (SMI) only. Neither of these parity proposals passed into law. The Mental Health Parity Act (P.L. 104-204) was enacted in the fall of 1996. Most recently, Senators Domenici and Wellstone unsuccessfully attempted to enact full mental health parity (S.543) in December of 2001.

[2]Sing et al., 1998 reviewed the estimates for the Domenici-Wellstone Bill attempting to standardize the assumptions, and came up with a consensus estimate at the lower end of this range.

any coverage expansion must also fall (National Advisory Mental Health Council, 2000), a factor that may be contributing to more aggressive recent action on parity at the state level.[3]

Strictly defined, parity means an equivalent level of mental health and general health care benefits in private health insurance. Over the past 10 years, more than 30 states have enacted some form of parity legislation, though most of them do not require full equivalence. The Mental Health Parity Act passed by Congress in 1996 required equivalence in one area only—catastrophic benefits. Specifically, the act prohibited special annual or lifetime dollar limits on coverage for mental illnesses. Unlike state parity laws, the federal law applied to self-insured companies exempt from state mandates under ERISA. The law did not, however, apply to other kinds of benefit limits, such as day or visit limits, copayments, or deductibles.[4] While rejecting efforts by advocates to expand this law, the Congress voted in December 2001 to extend the existing act for an additional year.

Public decision-makers need valid estimates of the cost of mental health parity legislation done with methodologies that can be understood and critiqued. Given the sunset of the 1996 federal parity law and consideration of more extensive parity legislation in the U.S. Congress, it was timely to review existing methods of cost forecasting. "Actuarial judgment" often figures into past estimates in nontransparent ways. The Robert Wood Johnson Foundation, therefore, sponsored a *Workshop on Estimating the Costs of Parity* in May 2001 with three main aims: to clarify the key assumptions used in calculating parity cost estimates, to further the understanding of the basis for those assumptions, and to examine the evidence for their validity. Workshop panelists and discussants included actuaries, economists, and key governmental officials involved in research and policy development in this area. Few private consultants specialize in calculating the cost of parity. Individuals who forecasted costs during early rounds of the parity debate have passed the market test of being found valuable by their clients, and are therefore poised to play a role in current forecasting efforts. These actuaries and their models played a central role at the workshop.[5]

The immediate effect of parity is to shift costs from out-of-pocket payments by enrollees to insured coverage. The magnitude of this effect de-

---

[3]The National Advisory Mental Health Council estimated the cost of "full parity" to be 1.4 percent of total premiums.

[4]Companies with fewer than 50 employees and those that offer no mental health benefit are exempt from the provisions of the federal parity law. Payers experiencing more than a 1 percent increase in premiums as a result of parity implementation can apply for an exemption.

[5]The workshop program is included here as Appendix A; the list of participants list is Appendix B.

pends on the pattern of costs over which parity applies. This shift in the form of payment can then prompt behavioral changes by patients, payers, or providers. Patients may demand more care because they pay less at the time they use services. Payers, bearing more costs, may adjust their strategies for cost control and in doing so affect provider practice patterns. Additionally, the use of services that are not directly affected by parity regulation can also be expected to change, thereby altering costs. Products or services used alongside mental health treatment, such as prescription drugs, may be used more frequently with increased mental health utilization. In addition, costs newly covered by parity might substitute for other services. For example, expanded coverage for outpatient care might decrease the use of inpatient mental health treatment. If mental health treatment affects patients' health status, their use of other health care may also be affected. A methodology for comprehensively assessing the costs of a policy change such as parity must be simultaneously assessed along all of these dimensions.

It is clear that the cost estimate that a policy analyst concerned only with social welfare would undertake is substantially different from the cost estimate that CBO analysts are required by law to carry out. The CBO must make impact estimates that are consistent with the dictates of the 1995 Unfunded Mandates Act. In particular, that act requires the CBO to estimate private-sector costs of a mandate (such as parity legislation) *before* allowing for any response to policy changes. This is quite different from the standard approach to policy analysis that which considers costs *after* taking into account possible responses to the policy. Furthermore, the CBO estimates the costs that private insurance plans will be newly responsible for under any legislation. No "credit" is given for costs that otherwise would have otherwise been paid anyway by individuals and families, and thus do not represent new social costs.

The workshop organized these issues into four dimensions instrumental to estimating parity costs:

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.

This paper summarizes the lessons from the workshop along these four dimensions.

Characterizing the Baseline

Cost estimates begin with a baseline level of mental health spending and a secular trend in that spending. The baseline is often represented by the share of the total health insurance premium spent on mental health services without parity. The impact of parity is then expressed as a percentage change in baseline and reported in terms of the impact on the total health insurance premium. When forecasting for a privately insured population, the various plans people are enrolled in at the baseline must be considered. Baseline assumptions must include assumptions about (a) the distribution of people across different types of health plans; (b) the generosity of coverage for mental health care offered by those health plans; and (c) the level and composition of mental health spending within each type of plan. Parity costs are forecast for years beyond the baseline data. An actuary might have data for 1999, but be required to forecast the impact in 2002. In this common circumstance, assumptions about trends in the baseline are also needed in order to forecast costs. The workshop session brought out specifics about how baseline estimates are constructed and applied in cost forecasting.

Sources of Data

Most forecasters rely primarily on "convenience samples" to establish baseline cost levels and service utilization distributions. Convenience samples are composed of data from large privately insured populations that have a relationship with the actuarial firm. Assumptions about spending trends in these datasets are typically based on past trends in spending. The baseline distribution of people across types of health plans are is usually derived from a combination of convenience samples of large employers, private survey reports such as the Foster-Higgins Survey, and national surveys such as the Medical Expenditures Panel Survey (MEPS). Assumptions about the distribution of people across plan types are easy to modify based on outside information.

At the workshop, each panelist presented data on constructing baselines for estimating parity costs. A number of points were raised during discussion of these presentations. In-house client-based samples are readily available to actuaries, but there are disadvantages in relying on these data to construct national estimates because the underlying populations and patterns of use do not generally reflect the national market. With respect to the distribution of people across plans—although this is easier to adjust for—convenience samples differ both from national estimates and from each other. National

surveys such as MEPS and Foster-Higgins have their own problems. They suffer from low response rates, and may also fail to provide an accurate estimate of the distribution of people across health plans. The same data limitations apply to the distribution of plan designs (e.g., copayments, deductibles, and limits).

Workshop participants agreed that most forecasting models have not revised their trend assumptions to account for significant reductions in the growth in of mental health spending that have recently appeared. Data from the CSAT/CMHS/ SAMHSA National Spending Estimates Study showed a decline in the percentage of total national health care spending accounted for by mental health and substance abuse (MH/SA) care (excluding MH/SA prescription drug spending) from 8.5 percent in 1987 to 7.5 percent in 1997 (Coffey et al., 2000). That same study also showed a reduction in the share of private health care spending accounted for by MH/SA from 6.1 percent in 1987 to 4.4 percent in 1997. Similarly, data presented for the Federal Employees Health Benefit Program (FEHBP) showed that the share of health spending going to mental health care between 1990 and 1997 was reduced from 4.1 percent to 2.9 percent.[6] The causes for those declines were attributed by the Office of Personnel Management of the Actuaries to a switch to a more visible form of cost sharing (a change from a percentage to a dollar price per day), but this change in form of payment seems unlikely to explain the full long-term drop in use. Workshop participants generally argued that failure to account for such downward trends in cost projections would result in over-estimates of the cost impacts of parity.

Data on baseline levels of spending and utilization patterns were presented and discussed in detail. First to be presented were data on levels of spending across types of health plans. Data from one sample of private health plans available to one actuarial firm indicated that about 1.9 to 2.0 percent of total health spending in indemnity plans was for mental health care compared to 1.6 percent in (PPO/POS) plans and 1.9 percent in HMOs. Data from MEDSTAT's MarketScan database, a large employer claims database, also a convenience sample, showed that mental health accounted for about 3.2 percent of total health spending in indemnity plans, 3.7 percent in POS plans and 3.4 percent in PPO plans. The variation in these data demonstrates how selection of a convenience sample can have a large effect on baseline spending levels.

---

[6]Based on Blue Cross Blue Shield, Mail Handlers, Government Employees Hospital Benefit, and American Postal Workers Union FEHB plans. Source: Office of Personnel Management, Office of the Actuaries, April 25, 2001.

Similarly, the distribution of utilization within a plan at baseline may have important effects on the impact of parity policies that eliminate service and spending limits in health insurance. Data from the FEHBP presented at the workshop showed that fewer than 1 percent of people hospitalized for psychiatric care had stays that exceeded 20 days. In contrast, data used by another forecaster indicated that about 26 percent of people hospitalized for inpatient care in indemnity policies stayed at least 29 days, while 12 percent of PPO/POS inpatients and 8 percent of HMO inpatients stayed at least 29 days. Given these baseline estimates, the effects of lifting a 30-day limit on psychiatric inpatient care under parity legislation will differ dramatically depending on which convenience sample is chosen and how people are distributed across types of health plans.

Three practical implications emerge from this state of affairs:

1. We may not be in a position to greatly improve upon the use of convenience samples to derive baseline at this point in time.
2. Differences in estimates may be explained in part by the sample used to assign people to coverage at baseline.
3. Recent changes in trends are not well handled in the existing models.

Incorporating Demand Response

In order to estimate the costs of parity, forecasters must account for how consumer demand changes with the expansion of mental health benefits. As demand-side cost sharing is reduced or eliminated, people are more likely to begin using or consuming more health services. Research has demonstrated that consumers are more sensitive to changes in the price of mental health services than of other health care services. The RAND Health Insurance Experiment (HIE) established that increased utilization of services by consumers in response to decreased out-of-pocket costs was apparently twice as great for outpatient mental health services as for ambulatory health services as a whole (Manning et al., 1989). Actuarial firms take account of this by incorporating a so-called induction factor into their cost estimates in order to model this demand response to benefit change.

The Basis for Inducement Assumptions

The workshop examined the specifics of the induction factors. There was broad agreement among participants on a key point. No one challenged the

fundamental principle that more coverage increases demand and use. An induction factor must be included in models to reflect how much use would increase when demand-side cost sharing is lowered because of parity.

Workshop presenters were forthcoming on how data and reasoning informed the assumptions used to account for demand response in their estimates, revealing that starkly different induction factors were used among actuarial firms. The most transparent was that of the Hay Group, the actuarial model underlying previous CBO estimates of parity in the 1990s. The Hay Group induction approach, based explicitly on the findings of the RAND HIE research study, was couched in terms of demand elasticities—the percentage change in quantity used in response to a percentage change in insurance coverage. For inpatient mental health care the Hay model arrives at a 9 percent increase stemming from a change from 30 percent to 0 percent cost sharing; for outpatient mental health care the assumed elasticity is 1.0. This model is completely transparent in the sense that the induction factor is revealed, and the basis for the assumption is revealed. By telling the user the basis of the inducement assumption, the consumer of the model can make an independent assessment of the reasonableness of the logic behind the assumption.

Two other actuaries revealed their specific inducement assumptions, and in this sense they were transparent. However, they did not provide evidence supporting their models' assumptions. One firm reported inducement factors that were much lower than the Hay model factors. Specifically, with respect to inpatient care utilization, this firm's model predicted that by moving from 30 percent to 0 percent cost sharing for inpatient care, service use would go up by only 3 percent. In comparison, the Hay Group assumption for inpatient care would translate into an increase in use of at least 9 percent—triple the increase of the second model. For outpatient care, the second model also forecasted lower increases than the Hay model following a coverage improvement, though the differences were not as dramatic as for inpatient care.[7]

Finally, the third actuary appeared to be using still another set of inducement assumptions. This model differentiated its parity cost estimates by five impacted systems of care: unmanaged indemnity, managed indemnity, PPO/POS, HMO/gatekeeper, and HMO/capitated. The pure demand response assumption applies only to the unmanaged indemnity system. In this model, the demand response assumption is quite high. Moving from a pre-

[7]The second firm adjustment factor for moving from 50 percent coverage to 100 percent coverage was to increase costs by 40 percent. This corresponds to a demand elasticity of less than 1.0.

parity unmanaged indemnity system of 50 percent coverage with a 20-visit limit for outpatient care and 80 percent coverage with a 30-day limit for inpatient care to a post-parity system with 80 percent to 100 percent coverage without day or visit limits increases the covered costs by 200 percent.[8] We can use these numbers to back into what the demand response assumption must be behind them. The move from 50 percent coverage to 80 percent coverage induces 86 percent more use, a bigger demand response than is seen in the RAND HIE.[9]

Similarly, large demand response assumptions are also behind this actuary's estimates of the effect of parity on managed indemnity and the PPO/POS systems. Oddly, however, the model seems to include no demand response at all in the HMO system. In this case, the estimated impact of parity is to move the cost per member per month (PMPM) from $2.12 to $3.43. Since the coverage in the HMO pre-parity is 80 percent/30 days inpatient and 80 50 percent/20 visits outpatient, a change from 50 percent coverage to 80 percent coverage accounts for the entire increase in the forecasted PMPM assuming no demand response at all.[10]

The RAND HIE and the private experiences of actuarial consultants constitute the primary sources of assumptions about inducement/demand response. There are drawbacks to relying on either of these sources. First, data from the RAND HIE are now more than 25 years old and are based on a radically different health care system from the one to which they are being applied. In 1974, participants in the RAND HIE faced no constraints on demand other than the RAND-created cost sharing. Providers consisted only of psychiatrists and psychologists who could freely set their own fees. Long-term psychotherapy was widely practiced, and little use was made of drug treatment for conditions treated on an outpatient basis. Demand response to changes in cost sharing in this environment is undoubtedly higher than we would observe in plans with other constraints on use. Based on these considerations, Hay's RAND-based elasticities can be viewed as representing the extreme upper bound of inducement effects.

---

[8]The actual numbers reported were a PMPM of $3.83 under the typical System 1 benefit and $11.37 under parity.

[9]Let x be the inducement factor. Ignoring the 20-visit limit (which rarely binds with a 50 percent cost sharing), initial use would have been twice $3.83 or $7.66. The inducement factor behind the model can be found by noting that 7.66x$ is the new use, and 80 percent of this is $11.37. x = 11.37/(.8*7.66) = 1.86.

[10]Neglecting the limit effect, use must be $4.24 (to get 50 percent to be $2.12). 80 percent of $4.24 is $3.39, virtually the entire increase in the PMPM. An increase due to the raising of the limit from parity is ignored in the number, as is any demand response.

The more subjective methodologies by which the other actuarial firms derived their inducement factors cannot be judged. We can observe, however, that the methodology or logic differs greatly between the two models described above. While one concluded on the basis of experience that the elasticities do not vary by system and are much lower than the RAND numbers, the other produced inducement factors that do vary by system and are even greater than the RAND estimates.

One factor behind assumptions of large demand response may be a tendency for actuaries to be conservative in their cost estimates; that is, to err on the side of counseling clients that a change will be larger than it is likely to be. Factors pushing actuaries toward conservative estimates were discussed in the workshop. For example, participants noted that in order to be "safe," a private insurer or firm might appreciate such a conservative estimate. From the individual actuary's point of view, being wrong by forecasting too high is less likely to provoke the wrath of a client than being wrong by forecasting costs too low. There was some discussion about whether serving the needs of a presumably risk-averse private client might be different than from estimating national parity costs for the U.S. Congress. In any case, in the absence of reporting a "most likely" effect or another interpretation of central tendency, at minimum a forecaster should be obliged to inform public decision-makers that an estimation model is conservative by intention.

Estimating the Impact Impact of Managed Care

Over the last decade, managed care has fundamentally altered the delivery of mental health care services. By shifting the focus from demand-side to supply-side mechanisms of controlling health care costs, managed care profoundly affects the impact of parity laws. Rather than restricting the use of mental health services through benefit design, managed care systems use financial incentives, networks of providers, and other administrative mechanisms to limit use and spending. Various research findings suggest that the presence of managed care would probably make parity much more affordable (Bloom et al., 1998; Callahan et al., 1995; Christianson et al., 1995; Goldman et al., 1998; Ma & McGuire, 1998; National Advisory Mental Health Council, 1998). However, this literature is grounded in case studies; no "demand elasticity" equivalent number exists that cost estimation studies could use to generalize a managed care parameter. On average, the literature suggests that managed care reduces costs by perhaps around 25 percent on average; however, the elements of managed care responsible for this effect have not been isolated. Furthermore, the cumulative effect of managed care

seems to have changed the entire atmosphere of medical practice, making it hazardous to conjecture that the experience of groups in the early days of managed care diffusion would continue to apply in the outer tail of the diffusion curve. For these reasons, translating qualitative observations about the effects of managed care on parity costs into quantitative elements of a cost estimation model would seem to be a daunting task.

No disagreement was expressed at the workshop to the view that the presence of managed care in the form of various restrictions on use would tend to dampen the impact of a reduction in demand-side cost sharing. Yet the workshop produced little specific information on how the managed care effect could be modeled by cost forecasters, and therefore scant information was provided on how managed care alters parity estimates. In the one model that differentiated the parity impact by type of system, the more managed the system, the lesser was the impact of parity. In another model presented, the rationale given for low demand response to cost-sharing assumptions was the supply-side checks of managed care. Given the depth of actuarial experience, there is certainly as much familiarity with payers transitioning to managed care (both carve-outs and integrated systems) as there is with coverage change decisions. Therefore, we attribute the lack of reporting of adjustment factors to the inability, given the current state of professional knowledge and experience, to "build in" a management adjustment in a model as is regularly done for coverage changes. Actuarial consultants at the workshop did offer advice to firms about the cost consequences of moving to managed care, but this advice is dependent on an individual client's circumstances; it is not a parameter to be added to a cost model.[11]

There was consensus among the workshop participants that managed care affects the relation between demand-side coverage and premium costs in still another way. Both managed care and demand-side coverage directly affect the premium necessary to pay for a health plan. A legislated change in demand- side coverage under parity may lead a plan to change plan management (or individuals/firms to seek plans with other types of management) or demand-side coverage, thereby affecting costs. For example, when a health plan is forced by regulation to loosen up its cost control by increasing insurance benefits, it will tend to tighten up controls elsewhere. In one pertinent example of such a response pattern, the U.S. General Accounting

[11]One set of numbers presented by one firm about the base line costs of a population in different "systems" with various degrees of management could be interpreted as a set of managed care impacts (ie, what would happen if a population in "managed indemnity" switched to a "gatekeeper HMO") but the firm's representative did not put them forward in that fashion.

Office (GAO) found that when employers were forced to eliminate dollar spending limits under the 1996 Domenici-Wellstone partial parity law, they compensated by increasing demand-side cost sharing through day and visit limits (Allen, 2000). Similarly, managed care can be tightened. It is no coincidence that private-sector employers who adopt more generous parity-like insurance benefits do so in conjunction with imposing of managed care strategies that allow them to augment supply-side utilization controls.

Furthermore, workshop participants stressed that a legislated increase in benefits will affect health plans differently. Unmanaged indemnity plans will be forced to accommodate to any demand increase, while plans with active management will experience a smaller direct effect but will also have the option of further tightening management, if desired. Actuaries and researchers at the workshop also anticipated some degree of migration of enrollees from plans unable to limit use increases to more tightly managed plans that are better able to compensate for expanded benefits under parity, although participants could not offer a quantitative estimate of this effect.

Both the management response to parity (the within-plan response) and the migration effect to more tightly managed plans (the across-plan response) work to ameliorate the direct effect of parity on demand and premium costs. As parity pushes demand and premiums up, management and plan migration tend to clamp them back down. Despite consensus about these effects, workshop participants presented no model that was able to parameterize these phenomena.

Cross-Sector Effects—Prescription Drugs and Medical Care

Specialty mental health services are part of a larger insurance benefit, and payers are ultimately concerned about the cost of the entire insurance plan. Some services not considered part of the mental health benefit, such as psychotropic prescription drugs, are often used in conjunction with mental health care. All forecasting efforts assumed that there would be no effects on prescription drug spending stemming from changes in the mental health insurance benefit. Similarly, mental health care and physical ailments are intertwined in ways that have been extensively documented. A longstanding hypothesis in the mental health sector is that expansion in access to mental health care will result in reduced use of medical care. This proposition is known as the medical cost-offset hypothesis. No forecast included consideration of any cost-offset associated with an expansion of mental health coverage.

Prescription Drug Spending

Prescription drug spending has been growing at very high rates with especially rapid growth in prescribing psychotropic drugs. Data presented at the workshop showed that PMPM spending on psychotropic drugs is similar to per member PMPM spending collectively on inpatient and outpatient mental health care. Thus, as much as 30 percent to 50 percent of total spending on treatment for mental health care may take place outside the specialty benefit. All workshop presenters suggested that there might be so-called cross-price demand responses that result from implementing parity legislation. For example, existing evidence suggests that when cost-sharing provisions are reduced, demand response prompts an increase in the number of people seeking treatment. Presenters speculated that this would be associated with more demand for psychotropic drugs. It was also observed that when drugs are used in the treatment of depression there tend to be fewer psychotherapy visits and the average per-episode cost decreases. This reflects a general trend associated with technology change in the treatment of a number of prevalent mental disorders.

The expanded use of managed behavioral health carve-outs also affects the treatment of mental disorders. The fact that drugs are typically "off-budget" to the behavioral health carve-out creates an incentive to treat disorders with prescription drugs. There are a few studies that offer evidence that implementing a behavioral health carve-out results in increased probability of use of antidepressant medication in the treatment of depression (Busch et al., 2000). Carve-outs are also associated with encouraging use of specialty mental health care. One panelist provided estimates of savings stemming from more appropriate prescribing that might result from a shift in care toward specialty treatment.

Thus, overall there appears to be evidence present suggesting that the practice of assuming no relation between the mental health and drug segments of the insurance benefit is probably not appropriate. It is unclear, however, how including such cross-sector effects might affect existing estimates.

Medical Costt-Offsets

Medical cost-offsets have been extensively studied. Several randomized assessments have been conducted (Fiedler & Wight, 1989). The most rigorous evidence has generally not supported the existence of substantial cost-offsets, though one recent study (Rosenheck et al., 1999) of a large employer

observes increases in general medical costs associated with cutbacks in mental health coverage. Moreover, even if there were evidence in favor of cost-offsets comparing some mental health treatment to none (as the studies have generally done), this would not be sufficient to conclude that incremental changes in coverage such as reducing copayments and eliminating visit and day limits on mental health services would result in significant medical cost-offsets for the nation. For this reason, there appeared to be little enthusiasm among workshop participants for including parameters representing a medical cost-offset in future spending projections.

Conclusions

Although no claim is made to represent the views of all parties, we believe four main conclusions emerged from the workshop, corresponding to the four elements behind cost projections: baseline coverage and spending, demand response, managed care impacts, and the relations between mental health coverage and medical and pharmacy spending. Notably, assumptions in three out of the four areas push estimates in the direction of overestimating the costs of parity. With respect to the fourth area, our conclusion does not imply that costs are over- or underestimated, only that the effect is not known.

Baseline. Characterization of baseline spending in actuarial models has inadequately accounted for recent reductions in the rate of growth in mental health spending when making estimates of the cost of parity. Specifically, national data from the CSAT/CMHS/SAMHSA National Spending Estimates Study and the FEHBP show strong downward trends in the share of health care spending for mental health care. This signals that the growth in mental health spending is considerably below growth rates for health care overall. All forecasting models discussed have tended to use trends with mental health shares remaining constant or falling by considerably less than the actual experience, thereby overestimating the rate of growth in mental health spending. This would serve to overstate mental health spending in the future after parity is implemented.

Demand response. Most of the models discussed make use of inducement factors that are at the extreme end of possible demand response parameters. Reliance on demand parameters based on the RAND HIE fails to account for the important changes that have occurred in the health care market over the past 25 years. Most important among these are the use of methods other than benefit design to control costs (e.g., utilization review,

provider payment systems) and the dramatic changes in clinical practice, including more use of psychotropic drugs and new short-term psychotherapies. It was particularly surprising to discover that some actuaries use inducement factors that are larger than those estimated by RAND. Again, the use of an inducement factor equal to or greater than that of the RAND study would tend to produce overestimates of the cost of parity.

Managed care. All models make assumptions about the impact of different managed care arrangements. These are typically specified as one-time reductions in baseline spending relative to an indemnity insurance plan. No models take account of the evidence that managed care plans respond to changes in the economic environment by changing the intensity of management effort and adopting practices to compensate for factors that drive benefit costs upward. In general, participants recognized that managed care plans adapt to their economic circumstances. Therefore, by not allowing a managed care response to expansions in benefit design current forecasting models will tend to overstate the expected costs of parity.

Cross-sector effects. Models do not take adequate account of the impacts of parity legislation on either the medical or the pharmacy benefit. Although the discussion at the workshop presented evidence and observations that these effects may be significant, no clear consensus emerged about the impact on cost estimates of not accounting for these cross-sector effects.

In closing, we mention that at the workshop there was some confirmation of our conclusion that the models overestimate mental health care costs under parity. The models have been used to forecast parity costs for private and state government clients, so there is some data against which to test the forecasts. The group was challenged to identify an employer or a state where forecasting models had understated the costs of parity policies. It is telling that none were identified.

References

Allen, K. (2000). *Mental Health Parity Act: Employers' Mental Health Benefits Remain Limited Despite New Federal Standards*. Testimony before the Committee on Health, Education, Labor & Pensions, U.S. Senate, GAO/T-HEHS-00-113, 2000.

Bachman, R.E. (1996, April). *An Actuarial Analysis of the Domenici-Wellstone Amendment to S. 1028, 'Health Insurance Reform Act' to Provide Parity for Mental Health Benefits Under Group and Individual Insurance Plans*. Atlanta: Coopers & Lybrand, April 2000.

Bloom, J., et al. (1998) Mental Health Costs and Outcomes Under Alternative Capitation Systems in Colorado: Early Results *Journal of Mental Health Policy & Economics*, 1: 3–13, 1998.

Busch, Susan, et al. (2000). *Specialty Health Care, Treatment Patterns and Quality: The Impact of a Mental Health Carve-Out on Care for Depression*. Unpublished manuscript, 2000.

Callahan, J. J., et al. (1995). Mental Health/Substance Abuse Treatment in Managed Care: The Massachusetts Medicaid Experience. *Health Affairs*, (Millwood) 14: 173–184, 1995.

Christianson, J. B., et al. (1995). Utah's Prepaid Mental Health Plan: The First Year. *Health Affairs*, (Millwood) 14: 160–172, 1995.

Coffey, R., et al. (2000). *National Estimates of Expenditures for Mental Health and Substance Abuse Treatment, 1997*. CSAT/CMHS. U.S. Department of Health & Human Services, Substance Abuse & Mental Health Services Administration, 2000.

Fiedler , J. L. & and J. B. Wight, J. B. (1989). *The Medical Offset Effect and Public Health Policy: Mental Health Industry in Transition*. New York: Praeger, 1989.

Frank, R. G. and T. G. McGuire. Estimating Costs of Mental Health and Substance Abuse Coverage. *Health Affairs*, 1995.

Frank, R. G. and T. G. McGuire. Parity for Mental Health and Substance Abuse Care Under Managed Care. *Journal of Mental Health Policy and Economics*, 1998.

Hope: Should be Cuyler?

Frank, R. G. & and T. G. McGuire, T. G.. (2000). Economics and Mental Health. In A. J. Culyer and J. P. Newhouse, (Eds.), New York: *Handbook of Health Economics*. New York: Elsevier, 2000.

Frank, R. G. and McGuire, T. (1998). Parity for Mental Health and Substance Abuse Care Under Managed Care. *Journal of Mental Health Policy and Economics*.

Frank, R. G. and McGuire, T.G. (1995). Estimating Costs of Mental Health and Substance Abuse Coverage. *Health Affairs*, Fall 1995.

Goldman, H., et al. (1998) Costs and Use of Mental Health Services Before and After Managed Care. *Health Affairs*, (March/April) 17(2), 40–52, 1998.

Ma, C. A. and T. G. McGuire. T. G. (1998). Costs and Incentives in a Behavioral Health Care Carve-Out. *Health Affairs*, (Millwood), 17, 53–69, 1998.

Manning, W. G. et al. (1989). *Effects of Mental Health Insurance: Evidence from the Health Insurance Experiment*. Santa Monica, Calif.: RAND Corporation, 1989.

National Advisory Mental Health Council (1998, May). *Parity in Financing Mental Health Services: Managed Care Effects on Cost, Access, & Quality*. An interim report to Congress. U.S. Department of Health & Human Services, National Institutes of Health (NIH Publication Pub. No. 98-4322), May 1998.

National Advisory Mental Health Council (2000, June). *Insurance Parity for Mental Health: Cost, Access, and & Quality*. Final report to Congress. U.S. Department of Health & Human Services, National Institutes of Health, June 2000 (mimeo).

Neisner, J. A. *The Mental Health Parity Act of 1996: Overview and Issues. Congressional Research Services Report for Congress*, April 3, 1998.

Rodgers,J. *Analysis of the Mental Health Parity Provision of S. 1028, Washington, DC: Price Waterhouse*, May, 1996.

Rosenheck, R. A., B. Druss, M. Stolar, D. Leslie, and W. Sledge. (1999). Effect of Declining Mental Health Service Use on Employees of a Large Corporation. *Health Affairs*, 18(5): 193–203, 1999.

Sing, M., S. Hill, S. Smolkin and N. Heiser. (1998). *The Costs and Effects of Parity for Mental Health and Substance Abuse Insurance Benefits*. U.S. Department of Health & Human Services, Substance Abuse and & Mental Health Services Administration.

APPENDIX A
WORKSHOP AGENDA

Workshop on Estimating the Costs of Parity
Tuesday, May 1, 2001
Association of American Railroads Conference Center
50 F Street, N.W.
Washington, D.C.

8:00 AM **Continental Breakfast**

8:30 **Welcome and Overview of Meeting**

Constance Pechura
The Robert Wood Johnson Foundation

8:45 PANEL 1
Characterizing the Baseline Mental Health Care Delivery System

Ronald Bachman
PricewaterhouseCoopers

Nancy Kichak
U.S. Office of Personnel Management

Tami Mark
The MEDSTAT Group

Moderator: Howard Goldman
University of Maryland

10:30 PANEL 2
Estimating the Demand Response to Cost Sharing

Edwin Hustead
The Hay Group

Stephen Melek
Milliman and Robertson, Inc.

Moderator: Linda Bilheimer
The Robert Wood Johnson Foundation

12:00 PM **Lunch**

12:45 PANEL 3

Estimating the Effect of Managed Care

Jim Mays
Actuarial Research Corporation

Tom Thomas Wildsmith
Health Insurance Association of America

Thomas McGuire
Boston University

Moderator: Audrey Burnam
RAND Corporation

2:30 PANEL 4

Estimating Effects of Mental Health Parity on Costs for Primary Care and Prescription Drugs

Jack Rodgers
PricewaterhouseCoopers

Stephen Melek
Milliman and Robertson, Inc.

Richard Frank
Harvard University

Moderator: Darrel Regier
American Psychiatric Institute for Research and Education

4:00 **General Discussion**

5:00 **Adjourn**

APPENDIX B
PARTICIPANTS LIST

Ronald Bachman, PricewaterhouseCoopers

+Colleen Barry, Harvard University

* Linda Bilheimer, The Robert Wood Johnson Foundation

Jeffrey Buck, Center for Mental Health Services, Substance Abuse and & Mental Health Services Administration

Jennifer Bullard Bowman, Congressional Budget Office

Audrey Burnam, RAND Corporation.

William Cartwright, National Institute on Druge Abuse

Mady Chalk, Center for Substance Abuse Treatment, Substance Abuse and & Mental Health Services Administration

Chia-Chia Chang, Staff for Senate Committee on Health, Education, Labor, & Pensions

Rosanna Coffey, The MEDSTAT Group

+Julie Donohue, Harvard University

Mary Jane England, Washington Business Group on Health

Elizabeth Field, Staff to Senator Edward Kennedy

* Richard Frank, Harvard University

Mike Gaffney, The Hay Group

Ellen Gerrity, Staff for Senator Paul Wellstone

Howard Goldman, University of Maryland

Junius Gonzales, National Institute of Mental Health

Stuart Hagen, Congressional Budget Office

Kevin Hennessy, Office of the Assistant Secretary for Planning and Evaluation, Department of Health and & Human Services

Mike Hilton, National Intitute on Alcohol Abuse & Alcoholism

Edwin Hustead, The Hay Group

Nancy Kichak, Congressional Budget Office

Judith Lave, University of Pittsburgh

Tami Mark, The MEDSTAT Group

Jim Mays, Actuarial Research Corporation

* Thomas McGuire, Boston University

Stephen Melek, Milliman and Robertson, Inc.

* Constance Pechura, The Robert Wood Johnson Foundation

* Darrel Regier, American Psychiatric Institute for Research & Education

Jack Rodgers, PricewaterhouseCoopers

Agnes Rupp, National Institute of Mental Health

Merrile Sing, Mathematica Policy Research, Inc.

Madeline Smith, Congressional Research Service

Stuart Sotsky, George Washington University

Richard Scheffler, University of California, Berkeley

Thomas Wildsmith, Health Insurance Association of America

Samuel Zuvekas, Agency for Healthcare Research & Quality

+ indicates workshop reporters
* indicates members of workshop planning committee

THE ROBERT WOOD JOHNSON FOUNDATION®