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COMMENTARY

Assessing State Parity Legislation[†]

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Abstract

The temptation is great, but premature, to conclude from the Sturm study that parity mandates had no effect on access and insurance coverage for the mentally ill. The study lacks statistical power for those directly covered by the mandates, and it is unlikely adequate power exists for those only indirectly affected. The inclusion of the uninsured, Medicaid enrollees, and privately covered individuals not subject to the mandates, and the imprecise outcome measures, increase the likelihood that other factors dominate parity. The timing of implementation in some states is also problematic. But Sturm asks the right questions and future waves of the Healthcare for Communities survey and other data will be better able to address them. Copyright © 2000 John Wiley & Sons, Ltd.

The paper by Sturm appearing in this issue attempts to help fill a large void in what is known about the impact of state parity legislation. It examines the impact of parity mandates on their ultimate goals of improving the quality and coverage for and access to mental health treatment, rather than simply looking at costs. The study exploits the Healthcare for Communities (HCC) Survey, which is unique in its ability to examine the impact of state parity mandates for the general population and to provide comparison groups of people in states without parity. Sturm argues correctly that it is important to consider both the direct and indirect impacts of parity legislation, and includes in the analyses not only insured populations covered by state mandates but privately insured populations exempt from the mandates (either because their employers self-insure and are exempt under provisions of the Employment Retirement Income Security Act (ERISA), they work for small employers, or are self-employed). Medicaid enrollees, and the uninsured. He concludes that parity neither led to large increases in access and quality of insurance coverage for the general population, as proponents have claimed, nor led to large losses in health insurance coverage from employers dropping coverage, as opponents have also claimed.

The temptation is great, but premature, to conclude from the Sturm study that parity had no impact (or 'null impact' as described in the paper), either positive or negative. While it is probably reasonable to conclude that some of the more exaggerated claims of either opponents or proponents did not come to pass with the implementation of state parity legislation, there is a wide range of potential impacts relevant to the policy-making process that the study simply cannot address. I focus, in particular, on three important limitations of the study: (1) the lack of statistical power to detect the direct and indirect impacts of parity; (2) probable influence of confounding factors; and (3) problems introduced by the timing of parity implementation across states.

Magnitude of Direct and Indirect Impacts and Statistical Power

The most direct impacts of parity will obviously fall on those whose health insurance plans are covered by state parity mandates. Parity mandates are intended to increase at least the nominal coverage and access to mental health services for this population. But parity mandates might also lead insurers and employers to adopt more aggressive managed care, which affects the coverage and access employees receive in practice (or 'effective benefits'). Other indirect effects for this group include employers dropping health insurance coverage altogether, reducing the generosity of coverage for all services, or becoming self-insured in response to expected cost increases under the mandated benefit expansion.

The simplest and most direct test of the impact of parity would be to limit the study population to those covered by health insurance plans from employers without ERISA exemptions in 1996, and compare their experience in parity and non-parity states between 1996 and 1998, after parity had been implemented in some of the states. Unfortunately, it appears that in the HCC survey there is no power to detect the impact of parity, no matter how large, for this group because of extremely small sample sizes in states adopting parity. After excluding the uninsured (which can be as high as 25 percent of the population in some states),

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Medicaid enrollees, and those covered through ERISAexempt firms (as much as one-third to 40 percent of the privately insured,¹ it is likely that those directly affected by parity legislation comprise, at best, only one-half of the sample in parity states used in the analyses.

If there is no power to detect impacts for those directly affected by state parity legislation, it is reasonable to doubt that there is power to detect the weaker impacts of parity on those only indirectly affected. It is hard to see why parity would have any substantive effect for those who were working for employers that were self-insured prior to the enactment of parity. Possibly there might be small spillover effects from a general increase in the use of managed care in states adopting parity. It is also possible that parity may draw some of the uninsured and those currently on Medicaid into the private health insurance system, but again, the effects are likely to be small because those in the public mental health system are unlikely to gain employment, particularly jobs which provide insurance.²

Thus, the study is attempting to measure the combined impact of parity for those covered by the mandate, where there is no power to detect effects, and those only indirectly, and weakly, affected by the parity mandate. Sturm presents calculations of power to detect differences with combined, or total, effects as high as 7 percentage point changes in the loss of health insurance, 16 percentage point declines in insurance generosity, and 23 percentage point decreases in access to care. While these are acknowledged in the paper to be large effects, they become enormous when the directly and indirectly affected are combined together. To put these numbers in perspective, a drop of even 3 or 4 percent in the number of insured as a result of a mandate would be of great policy concern, yet would not be detectable in this sample.

Confounding Factors

The analyses of the impacts of parity in the Sturm study are very susceptible to biases introduced by confounding factors, i.e. trends and changes not related to parity mandates but correlated with the states which passed mandates. A large number of other factors, largely or totally unrelated to parity, may have differentially affected insurance coverage and access to care in parity and non-parity states, leading to biases in the estimates of the effect of parity. For example, while the U.S. economy as a whole prospered between 1996-1998, the economies of some states clearly did better than others, which may have led to differential changes in access to and generosity of private health insurance coverage through employers. There may also be other changes in health insurance markets, such as managed care penetration and increased market share of managed behavioral health care organization, that differed across states.

More importantly, the inclusion of populations not directly affected by parity legislation, such as the uninsured and Medicaid enrollees, greatly increases the likelihood that other factors will dominate the indirect impacts of parity. Certainly those on Medicaid will be much more greatly influenced by the course of changes in Medicaid programs at the state level, such as movements to managed care and Medicaid waiver programs, as well as implementation of welfare reform in different states. The uninsured, likewise, may be affected by Medicaid and other state health insurance reforms.

The three outcomes variables studied (access to care, generosity of coverage, change in insurance status) compound the problems of confounding factors. These outcomes are imprecise measures for determining the impact of parity, because they encompass access to and coverage for all health care services, not just mental health treatment. Thus, the effects of parity legislation may be diluted in these broad measures. While the sample is limited to those with probable mental disorders, access to and insurance coverage for all health care services would still likely be a concern for them, and evidence from the Epidemiologic Catchment Area³ and National Comorbidity Surveys⁴ suggest that many, if not most, of those considered as having probable mental disorders would not seek mental health treatment regardless of insurance coverage. As a consequence, the outcome measures are likely to be influenced by a large number of other factors having little or nothing to do with parity mandates. In addition to the effects of changes in state Medicaid programs and other state health care reforms on Medicaid enrollees and the uninsured, general trends in insurance markets may affect perceptions of the privately insured concerning access and quality of insurance coverage.

While difference-in-difference methods, such as those used by Sturm, offer some potential methodological advantages over cross-sectional methods, they are still susceptible to biases from confounding factors. The effects of confounding factors can be minimized by including state fixed effects or additional control variables. However, the small number of parity states limits the degrees of freedom for including these types of controls, and Sturm omits them in his difference-in-difference analyses. These analyses, therefore, must rely on the strong assumption that all the potential confounding factors are exogenous, or uncorrelated with the states that passed parity mandates. This assumption is especially strong given that many of the included populations and the outcomes measures are more plausibly influenced by other factors and trends that vary across the states during the 1996-1998 study period. The concern about potential idiosyncrasies of parity states is heightened by the fact that over 40 percent of the population in these states live in Texas. As a result, any systematic differences between Texas and other states will likely have a strong effect on the estimates of parity.

Timing of Parity Implementation and Legislative Variations

A final concern is that the study relies on survey respondents' perceptions in the outcomes measures of differences pre and post parity (1996–1998) to estimate the effect of

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parity legislation, but the timing of parity implementation in some of the states is problematic. The effective date of parity for some states (Maryland, Minnesota, New Hampshire, Rhode Island) was before 1996 so there appears to be no pre-period. For these states, the outcomes measures may simply be picking up differences in perceptions over a two-year period after parity had been implemented. For two other states, Vermont and Texas, the opposite problem appears with parity not becoming effective until January 1, 1998. Since state mandates typically become effective at annual contract renewal dates, parity for some employer groups may not have become effective until later in 1998 and possibly after the interview date for some survey respondents. More importantly, there may be some lag between the implementation of parity and it's ultimate impact on the perceptions of consumers of mental health and substance abuse treatment about access and coverage.

Concluding Thoughts

While we can probably rule out extremely large effects of parity at the population level, there is a wide range of important, plausible effects of state parity legislation that the Sturm paper simply cannot address. State parity mandates may have had very substantial effects, particularly for those directly covered by such legislation, but these effects cannot be detected because of a lack of statistical power, the large number of other factors that affect health insurance coverage and access, and because of differences in implementation dates of parity across states. Studying the effects of parity mandates is an intrinsically difficult undertaking, compounded by limitations in available data including the HCC. However, now that 31 states have passed parity mandates and there is greater accumulated experience with parity, it will be possible to say more about the effects of parity mandates using future panels of the HCC Survey, as well as other surveys and data sources. But Sturm has greatly expanded the scope of inquiry regarding the effects of parity, beyond the cost issue, and to the fundamental question of "Does parity make a difference?".

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