4. The Problems with Estimates

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THE ARTICLE BY SHERRY GLIED, DAHLIA REMLER, and Joshua Graff Zivin is a useful summary and comparison of estimates of the impacts of proposals to subsidize the purchase of health insurance (private or public) as a way to reduce the number of uninsured persons. I will make one technical comment at the end of this discussion, but generally I agree with the article. What I want to discuss here is the contention (in Glied and her colleagues' article and elsewhere) that these "cost" (really, spending) estimates either are or should be "central to the legislative prospects" of such proposals. I hasten to add that I am not arguing that the government can or should function without budgetary estimates. Of course, some numbers must be entered and then summed in order to provide estimates of total spending to be compared with estimates for total revenues. Instead, I will offer some reasons why, especially in the case of this policy intervention, such numbers need not and ought not to be central to the policy discussion. I will close with some suggestions about policy in the absence of "central numbers."

About 15 percent of the U.S. population is uninsured for a full year. (The counts of this number also are very imprecise and debatable, as is what ought to constitute the primary measure: the number uninsured on a given day [no matter how long], the number uninsured for a

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prespecified period of time, or the number [with or without insurance] facing out-of-pocket costs high enough to deter the use of socially desirable amounts of care.) The population of uninsured does not perfectly match the entire under-65 population in the United States, but it does encompass a wide range of household and family incomes, risk levels, work statuses, putative insurance-purchasing opportunities, and tastes for risk. Most of the proposals would provide substantial subsidies, in the form of either tax credits or Medicaid-type eligibility, to those uninsured persons with incomes above the poverty line but below the median household income. Even in this population, most of the people have private health insurance, in most cases obtained through the workplace.

All these facts contribute to the severe difficulty in generating credible estimates of what various proposals would do. To begin with, almost all the proposals would offer substantial subsidies for health insurance to that portion of the population that has never received such subsidies, the “tweeners” with incomes between the poverty line and the median. Empirical economic analysis is best at providing policy estimates when information is available about “natural experiments” that approximate the policy intervention. In such cases, economists have sophisticated econometric techniques that can separate the effect of the policy from all the other things that also vary across populations or over time and that can distinguish correlation from causation. But this magic works only when there is something to work with, and that is not the case for health insurance subsidies for this population. We do know what happens when we give generous tax subsidies to upper middle-income families: most of them obtain health insurance (although the fraction that does not buy it constitutes more than a quarter of the uninsured). We also know what happens when we use Medicaid to provide free health insurance to the poor and the near poor: most (though by no means all) of them accept it. But for the most part, the tweeners have benefited from only very small subsidies in the form of excluding income from payroll taxes, and most credit proposals do not offer credits large enough to cover the full premium for comprehensive coverage. Such credits would be “partial” but “large,” and we have never had such an arrangement for this population. So we must find approximations for what we have not observed and cannot directly observe: insurance prices that vary with the size of the employment-related groups and the small fraction of any workforce refusing insurance that includes an employee

premium. In both cases, because of self-selection, differences in the way choices are made, and simple noncomparability, we are trying to discover the unseen, so any estimates are highly uncertain. Almost all the point estimates show that the demand curve for insurance slopes downward and to the right, but they vary substantially on its magnitude.

A second problem is that even in the best of statistical circumstances, estimates necessarily contain some errors. Careful statisticians thus always report both the point estimate and the confidence interval. The problem is that the tyranny of the budgetary analogue ignores these confidence intervals. Only one number can be entered as “the estimate” (although sometimes careful and scrupulous researchers provide several estimates conditional on different behavioral or statistical assumptions). I think it is virtually certain that the confidence intervals overlap for all the estimates that Glied and her colleagues summarized (if confidence intervals could be estimated). I know that my own estimates have a wide range of plausible values. All too often, researchers first apologize for the imperfections of their data, the crudeness of their models, and the ambiguity of their assumptions, and then when asked to provide policy estimates (especially in congressional testimony), they defend their point estimates to the death against all competitors. If this task were not so serious, it would be silly.

A third problem with using Glied and her colleagues’ estimates is that the response to a subsidy often depends on the way a subsidy is offered, whether it is easy or difficult to claim, whether the organization supplying insurance is rewarded or punished for signing up people for the insurance (profit-seeking insurers and Medicaid programs in states with budgetary difficulties differ in this regard), or what course of action is the “default option” if the person does nothing. Insurance needs marketing as well as low prices (though the two do substitute for each other to some extent), and estimates of “effectiveness” vary substantially depending on what is assumed about such efforts. For example, I have advocated giving the target population “\$1,500-off” coupons for health insurance, informing insurers who the recipients are, and permitting insurance to be priced so as to yield a profit. Such a strategy would surely produce a very different marketing effort and a different take-up rate than if people had to trek to government office to claim a subsidy or track down a reluctant insurer themselves (Pauly 2001).

Finally, there is a serious technical problem in comparing the estimates of “price elasticity” that I would add to those cited by Glied and

her colleagues: the studies do not even agree on what they mean by, or how they would measure, the “price of insurance.” Insurance theory says that the appropriate price measure of insurance for a given person, even for a standardized policy, is not the premium but the difference between the premium the person pays and that person’s expected benefits, the so-called administrative loading. Although some studies use this measure, others use a measure of the premium, either standardized for coverage or not. Some cases use partial measures of risk but pay no attention to data on the difference between premiums received and benefits paid out. The result is that both the magnitude and the interpretation of the different elasticities are substantially confused (and confusing).

In the face of such uncertainty, what can analysts offer policymakers? Estimates can tell them only that (1) subsidies matter and that (2) large subsidies could matter a lot. That is, we know that we do not know whether subsidies would be ineffective; they may be quite effective or they may not be. What then for policy? Pondering and reanalyzing the imperfect raw materials for estimates will yield neither truth nor certainty.

My own suggestion (see Pauly 2001) is to stop analyzing because we are close to the range of zero marginal returns. Instead, we should design a subsidy policy that is incremental and automatically monitors the effects. After all, it is not as though once offered, we could never change a specific subsidy program. Such a policy could be designed at either the federal or the state level. It should begin with the “tweeners;” make everyone who obtains insurance, regardless of whether it is individual or group, eligible for the same net subsidy for public or private insurance; and make that subsidy at least 50 percent of the premium. The worst that can happen is that not very many uninsured people will accept the subsidy. In that case, the cost will be low and will primarily take the form of a tax cut for lower-middle-income people who have already obtained health insurance, a macroeconomic strategy that may actually be desirable. Of course, it still might also cause the uninsured to become insured. That is, if the private markets behave reasonably well, coverage could be extended, by means of vouchers, to those below the median income.

At that point, we would have the information we need to make reliable estimates of the budgetary cost. And we would finally have started doing something about the uninsured.

Reference

- Pauly, M.V. 2001. An Adaptive Credit Plan for Covering the Uninsured. In *Covering America: Real Remedies for the Uninsured*, edited by E. Wicks, 137–52. Washington, D.C.: Economic and Social Research Institute.

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