Commentary: What Is the Right Price of Health Insurance? A Rejoinder

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In his commentary on our article “The Role of Product Design in Consumers’ Choices in the Individual Insurance Market,” Dr. Feldman asserts that our analysis of decisions to elect insurance may be biased by our use of a premium price adjusted for the actuarial value¹—which he characterizes as price adjusted for quality (Feldman 2007; Marquis et al. 2007). We respectfully disagree for three reasons.

We adjusted the premium prices by dividing them by the actuarial value of the policy. This produces a set of relative prices that would be paid if all policies provided the same quantity of financial protection. The premium price divided by the actuarial value measures 1 + the load on the policy. This is the classic textbook version of the price of 1 unit or dollar of insurance (Pauly 1997; Phelps 1997; Feldstein 1999; Chernew and Hirth 2002; Blumberg and Nichols 2004). The load also measures the amount the consumer must pay to transform the uncertain costs if uninsured into certain costs, which is called the risk premium. Our measure is the risk premium for the specific subscriber because the actuarial adjustment is specific to the age and health of the subscriber. The load or risk premium (or a proxy for it such as a tax rate) has been used as the price measure in other works on the demand for insurance (e.g., Phelps 1973; Taylor and Wilensky 1983; Gruber and Poterba 1994; Royalty 2000).

The second reason we disagree with Dr. Feldman’s analysis of our specification is that we do not see our price measure as one that adjusts for the quality of the policy. Insurance policies do differ in ways other than the quantity of financial protection, and we have accounted for quality variation in part by using a nested model. The nests, which distinguish HMO from PPO plans and different insurance carriers, reflect perceived quality differences. Benefit features may also reflect specific plan attributes related to quality and we control for these as well in our model. These other attributes include

the deductible level and coverage of specific services such as mental health care.^{2,3}

Third, as we report in the paper, our results were largely unchanged when we use the unadjusted premium price as Dr. Feldman prefers. Thus, our empirical work is not sensitive to the price specification. We agree with Dr. Feldman that this might not always be the case, and that future researchers should continue to explore the sensitivity of results to the price specification.

Moreover, we agree that Dr. Feldman presents a model that is consistent with consumer utility and it is one that that future researchers in this area would do well to consider. Researchers considering how to specify health insurance price might do well to also read the excellent discussion of the subject in Chernew and Hirth (2002), in which they point out that “defining and measuring price is not straightforward.” In our application we continue to believe that the adjusted premium, reflecting the loading fee and controlling for the quantity of insurance, is the correct price to enter into our purchase equation.

NOTES

1. Technically, our adjustment to premium prices is to multiply the premium by the average actuarial value of all policies divided by the actuarial value of the specific policy. Variation in our price measure, therefore, is due to variation in the load.
2. These attributes are also important aspects of the financial “quantity” of protection provided by the plan and are factors in the actuarial adjustment. The actuarial value adjustments, however, do not adjust for unmeasured quality differences that may be correlated with these benefit features because the adjustment for any plan is based on a standardized spending distribution. Thus, it does not account for differences such as network size or plan management that might be manifest in spending differences between plans, so it is important that the benefits be included in the model as well as in the actuarial adjustment.
3. Dr. Escarce is a co-author on both this manuscript and “The Role of Product Design in Consumers’ Choices in the Individual Insurance Market.” Accordingly, all editorial decisions about the original manuscript and Dr. Feldman’s commentary were handled by Senior Associate Editor [SAE] Catherine McLaughlin and the *Health Services Research (HSR)* Co-Editor-in-Chief [EIC] Harold S. Luft. Editorial decisions regarding this document were handled by SAE Michael Chernew and EIC Ann Barry Flood. Both papers went through the same submission and review process as all other papers submitted to *HSR*.

REFERENCES

- Blumberg, L., and L. Nichols. 2004. "Why Are So Many Americans Uninsured?" In *Health Policy and the Uninsured*, edited by C. McLaughlin, pp. 35–95. Washington, DC: The Urban Institute Press.
- Chernew, M., and R. A. Hirth. 2002. "Modeling the Causes and Consequences of Lack of Health Insurance Coverage: Gaps in the Literature." Economic Research Initiative on the Uninsured Working Paper #1 [accessed on June 11, 2007]. Available at <http://eriu.sph.umich.edu/pdf/wp1.pdf>
- Feldman, R. 2007. "What Is the Right Price in Discrete Choice Models of Health Plan Choice?" *Health Services Research* DOI: 10.1111/j.1475-6773.2007.00727.x.
- Feldstein, P. J. 1999. *Health Care Economics*. Albany, NY: Delmar Publishers.
- Gruber, J., and J. M. Poterba. 1994. "Tax Incentives and the Decision to Purchase Health Insurance: Evidence from the Self-Employed." *Quarterly Journal of Economics* 109 (3): 701–33.
- Marquis, M. S., M. B. Buntin, J. J. Escarce, and K. Kapur. 2007. "The Role of Product Design in Consumers' Choices in the Individual Insurance Market." *Health Services Research* DOI: 10.1111/j.1475-6773.2007.00726.x.
- Pauly, M. V. 1997. *Health Benefits at Work: An Economic and Political Analysis of Employment-Based Health Insurance*. Ann Arbor: University of Michigan Press.
- Phelps, C. E. 1973. *Demand for Health Insurance: A Theoretical and Empirical Investigation R-1054-OEO*. Santa Monica, CA: RAND.
- . 1997. *Health Economics*. Reading, MA: Addison-Wesley.
- Royalty, A. B. 2000. "Tax Preferences for Fringe Benefits and Workers' Eligibility for Employer Health Insurance." *Public Economics* 75: 209–27.
- Taylor, A. K., and G. R. Wilensky. 1983. "The Effect of Tax Policies on Expenditures for Private Health Insurance." In *Market Reforms of Health Care*, edited by J. Meyer, pp. 163–84. Washington, DC: American Enterprise Institute.