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## Letters to the Editor

### Risk equalization, competition and choice in Germany: A reply to Wysong and Abel

One of the most important items in recent health care reforms in Germany was the introduction of a risk equalization scheme (RES) in 1994 and the general freedom of choice among statutory sickness funds in 1996, which was not available previously for all insurees. The basic idea of these reforms is to increase competition among sickness funds. However, competition in terms of "cream skimming" for good risks was not regarded a desirable outcome. Thus the task of the RES is to redistribute contributions so that cream skimming does not pay. To achieve this goal, average cost profiles are calculated for the whole of all statutory sickness funds. The factors of these profiles are *age, sex, labour income (since fees are labour income related), number of dependend family members insured free of charge and vocationally disabled persons*.

A major conclusion of<sup>1</sup> is, that these socio-demographic variables only account for small fraction of the variation in expenditures and are thus not very well fit to the task. They refer to<sup>2</sup> and<sup>3</sup> who estimated for the US and the Netherlands in the 70's and 80's, that age and sex only account for about 2% of the total variance in individual health care expenditures. This result can be improved greatly if variables

regarding previous health care utilization and previous health states are included.

German data from 1992 indeed seconds this finding. A linear regression performed on the 1992 wave of the German socio-economic panel yielded virtually the same result. We calculated individual health care expenditures in ambulatory and stationary care by average costs of physician visits and days in hospital. Age and sex as explaining variables also only account for 2% of the total variance in the German case.

Does this mean, that the foundations of the German RES are very weak as Wysong and Abel argue? We don't think so for reasons explained below.

#### Individual vs. average risk

The RES does indeed not tackle the problem of predicting *individual* health care expenditures by age and sex but rather the *average* health care expenditures of an age-sex group. It is to be asked, if Wysong and Abel are correct in their statement that "*the current German formula is not likely to achieve the objectives...*".

It is obvious, that there is an incentive for cream skimming, if insurers

can obtain information that allows for a better assessment of individual expected health care expenditures. If insurers are able to identify good risks beyond the factors the RES accounts for, the RES is indeed to be questioned.

Unfortunately, Wysong and Abel seem to be in ignorance of some small details of the very strict German data protection laws regarding statutory sickness funds. Statutory funds are generally not allowed to maintain personal accounts for their insurees. They are required to keep the personal identification data separately from their expenditure data. They are allowed to merge these data for well defined special occasions but need to delete these data immediately afterwards and are not allowed to use these data for any other means.

§305 SGB V (the most important law regarding statutory sickness funds) illustrates the very strict handling of personal data: insurees are entitled to ask their fund for a list of all of their health care utilization and expenditures covered by the fund from the past year. The fund is now obliged to forward this request to the physicians' association (Kassen-(zahn)ärztliche Vereinigung) to obtain data on physicians' services in ambulatory and dental care. The association en-

closes this data in a sealed envelope and sends it back to the fund that forwards it to the insuree without breaking the seal. The fund needs the information from the physicians' association since they are not allowed to have this data themselves and the physicians' association cannot directly send it to the insuree since they only have an insurance number but are not allowed to keep data beyond this.

One may argue, that there is a chance of illegal use of this data by merging the data and using this data to personally identify previously "high-expenditure" insurees that promise to be "bad risks" in the future too. This is not a very probable scenario since the number of persons that would need to be involved in such a conspiracy

is too large to keep it secret and sanctions would be prohibitive.

To make a long story short: the legal handling of personal information by statutory sickness funds and physicians associations makes it impossible for insurers to distinguish good from bad risks by previous utilization data. Thus there is no need to include these variables into a RES to improve it.

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#### References

- 1 *Wysong JA, Abel T.* Risk equalization, competition and choice: A preliminary assessment of the 1993 German health reform. *Soz Präventivmed* 1996; *41*:212–223.
- 2 *Manning W, Newhouse J, Duan N, Keeler E, Leibowitz A, Marquis M.*

Health insurance and the demand for medical care: Evidences from a randomized experiment. *Am Econ Rev* 1987; *77*:1036–1045.

- 3 *Van-de-Ven W, Van-Vliet RVE, Lamers L.* Risk adjusted capitation; recent experiences in the Netherlands. *Health Affairs* 1994; *120*–136.

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