

Horizontal equity in utilisation of care and fairness of health financing: a comparison of micro-health insurance and user fees in Rwanda

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Abstract

This paper uses two methods to compare the impact of health care payments under insurance and user fees. Concentration indices for insured and uninsured groups are computed following the indirect standardisation method to evaluate horizontal inequity in utilisation of basic health care services. The minimum standard approach analyses the extent to which out-of-pocket health spending contributed to increased poverty. The analysis uses cross-sectional household survey data collected in Rwanda in 2000 in the context of the introduction of community-based health insurance. Results indicate that health spending had a small impact on the socio-economic situation of uninsured and insured households; however, this is at the expense of horizontal inequity in utilisation of care for user-fee paying individuals who reported significantly lower visit rates than the insured. Copyright © 2005 John Wiley & Sons, Ltd.

References

- 1 Bennett S. The role of community-based health insurance within the health care financing system: a framework for analysis. *Health Policy Plann* 2004; 19(3): 147-158.

[PubMed](#)

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[Google Scholar](#)

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4 Bennett S, Creese A, Monasch R. *Health insurance schemes for people outside formal sector employment*. WHO Current Concerns WHO/ARA/CC/98.1. World Health Organization, Geneva, 1998.

[Google Scholar](#) 

5 Jimenez-Martin S, Labeaga J, Martinez-Granado M. Latent class versus two-part models in the demand for physician services across the European Union. *Health Econ* 2002; 11(4): 301–321.

[PubMed](#)  | [Web of Science®](#)  | [Google Scholar](#) 

6 Van Doorslaer E, Koolman X, Puffer F. Equity in the use of physician visits in OECD countries: has equal treatment for equal need been achieved? In *Measuring Up: Improving Health Systems Performance in OECD Countries*, (eds). OECD: Paris, 2002; 225–248.

[Web of Science®](#)  | [Google Scholar](#) 

7 Van Doorslaer E, Wagstaff A, van der Burg H. Equity in the delivery of health care: some further international comparisons. *J Health Econ* 2000; 19(5): 553–584.

[CAS](#)  | [PubMed](#)  | [Web of Science®](#)  | [Google Scholar](#) 


8 Waters HR. Measuring equity in access to health care. *Soc Sci Med* 2000; 51: 599–612.

[CAS](#)  | [PubMed](#)  | [Web of Science®](#)  | [Google Scholar](#) 

9 Bitran R, Munoz J, Aguad P, Navarrete M, Ubilla G. Equity in the financing of social security for health in Chile. *Health Policy Plann* 2000; 50: 171–196.

[CAS](#)  | [PubMed](#)  | [Web of Science®](#)  | [Google Scholar](#) 

10 Wagstaff A, Van Doorslaer E. *Paying for health care: quantifying fairness, catastrophe, and impoverishment, with applications to Vietnam, 1993–98*. The World Bank, Washington, DC, 2001. http://econ.worldbank.org/files/2601_wps2715.pdf

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12 Russell S, Gilson L. User fee policy to promote health service access for the poor: a wolf in sheep's clothing? *Int J Health Services* 1997; 27(2): 357-365.

[Web of Science®](#) | [Google Scholar](#)

13 Ensor T, San PB. Access and payment for health care: the poor of northern Vietnam. *Int J Health Plann Manage* 1996; 11(1): 69-83.

[CAS](#) | [PubMed](#) | [Web of Science®](#) | [Google Scholar](#)

14 Falkingham J. Poverty, out-of-pocket payments and access to health care: evidence from Tajikistan. *Soc Sci Med* 2004; 58: 247-258.

[PubMed](#) | [Web of Science®](#) | [Google Scholar](#)

15 Atim C. *Contribution of Mutual Health Organizations to Financing, Delivery, and Access to Health Care*. Technical Report No. 18. Partnerships for Health Reform (PHR), Abt Associates Inc., Bethesda, MD, 1998.

[Google Scholar](#)

16 Schneider P, Diop F. *Impact of Prepayment Pilot on Health Care Utilization and Financing in Rwanda: Findings from Final Household Survey*. TE002. The Partners for Health Reformplus (PHRplus) Project, Abt Associates Inc., Bethesda, MD, 2001.

[Google Scholar](#)

17 Wagstaff A, Van Doorslaer E. Equity in the finance and delivery of health care: concepts and definitions. In *Equity in the Finance and Delivery of Health Care: An International Perspective*, E Van Doorslaer, A Wagstaff, F Rutten (eds). Oxford University Press: Oxford, 1993.

[Google Scholar](#)

18 Culyer A, Wagstaff A. Equity and equality in health and health care. *J Health Econ* 1993; 12: 431-457.

[CAS](#) | [PubMed](#) | [Web of Science®](#) | [Google Scholar](#)

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21 Wagstaff A, Van Doorslaer E. Equity in the delivery of health care: methods and findings. In *Equity in the Finance and Delivery of Health Care: An International Perspective*, E Van Doorslaer, A Wagstaff, F Rutten (eds). Oxford University Press: Oxford, 1993.

[Google Scholar](#)

22 Wagstaff A, Van Doorslaer E. Catastrophe and impoverishment in paying for health care: with applications to Vietnam 1993–1998. *Health Econ* 2003; **12**(11): 921–933.

[CAS](#) | [PubMed](#) | [Web of Science®](#) | [Google Scholar](#)

23 Wagstaff A, Van Doorslaer E. Equity in health care finance and delivery. In *Handbook of Health Economics*, JP Newhouse (ed.). Elsevier, North-Holland: Amsterdam, 2000; 1803–1862.

[Google Scholar](#)

24 Shepard DS, Carrin G, Nyandagazi P. Household participation in financing of health care at government health centers in Rwanda. In *Health Economics Research in Developing Countries*, A Mills, K Lee (eds). Oxford University Press: Oxford, 1993; 140–164.

[Google Scholar](#)

25 Schneider P, Diop FP, Bucayana S. *Developing and Implementing Prepayment Schemes in Rwanda*. Technical Report No. 45. Partnerships for Health Reform (PHR), Abt Associates Inc., Bethesda, MD, 2000.

[Google Scholar](#)

26 Schneider P. *The contribution of micro-health insurance to equity and sustainability in Rwanda*. London School of Hygiene and Tropical Medicine, University of London, London, 2004.

[Google Scholar](#)

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29 Deaton A. *The analysis of household surveys. A microeconomic approach to development policy*. The World Bank, Washington, DC, 1998.

[Google Scholar](#) 

30 Ettner S. Adverse selection, the purchase of medigap insurance by the elderly. *J Health Econ* 1997; 16(5): 543-562.

[CAS](#)  | [PubMed](#)  | [Web of Science®](#)  | [Google Scholar](#) 

31 Jowett M, Deolalikar A, Martinsson P. Health insurance and treatment seeking behaviour: evidence from a low-income country. *Health Econ* 2004; 13(9): 845-857.

[CAS](#)  | [PubMed](#)  | [Web of Science®](#)  | [Google Scholar](#) 

32 Blaxter M. A comparison of measures of inequality in morbidity. In *Health Inequalities in European Countries*, J Fox (ed.). European Science Foundation, Gower: London, 1989.

[Google Scholar](#) 

33 Schneider P, Diop F, Maceira D, Butera D. *Utilization, Cost and Financing of District Health Services in Rwanda*. Technical Report No. 61. Partnerships for Health Reform (PHR), Abt Associates Inc., Bethesda, MD, 2001.

[Google Scholar](#) 

34 Mukherjee C, White H, Wuyts M. *Econometrics and Data Analysis for Developing Countries*. London: Routledge, 1998.

[Google Scholar](#) 

35 Wagstaff A, Van Doorslaer E, Paci P. Equity in the finance and delivery of health care: some tentative cross-country comparisons. *Oxford Rev Econ Pol* 1989; 5(1): 89-112.

[Google Scholar](#) 

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38 Ministry of Economics and Finance. *A profile of poverty in Rwanda: An analysis based on the results of the Household Living Condition Survey 1999–2001*. MINECOFIN, Kigali, Rwanda, 2002.

[Google Scholar](#)

39 StataCorp. *STATA7*. Stata Press: College Station, TX, 2001.

[Google Scholar](#)

40 Schneider P, Diop F, Leighton C. *Pilot testing Prepayment for Health Services in Rwanda: Results and Recommendations for Policy Directions and Implementations*. Technical Report No. 66. Partnerships for Health Reform (PHR), Abt Associates Inc., Bethesda, MD, 2001.

[Google Scholar](#)

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