



### **Adam Wagstaff presentation**

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In the early 1990s, payroll tax-financed social health insurance (SHI) was introduced in many Eastern European and Central Asian countries as a response to falling revenues and the collapse of the health system post-Communism. SHI was envisioned as a mechanism to mobilize revenues, recuperate salary levels for health workers and improve the efficiency and quality of delivery of health care via competitive purchasing of health care. Has SHI delivered on its promise?

On November 7, Adam Wagstaff (World Bank) presented his [recent work](#) with Rodrigo Moreno-Serra (University of York) at Brookings on the impact of social health insurance (SHI) on health spending, utilization, efficiency, clinical outcomes and the labor market in 28 countries in Eastern Europe and Central Asia. The study is among the few papers that empirically examine the aggregate effects of SHI – defined narrowly as the increment in health financing raised via a payroll tax -- in developing countries. Wagstaff and Moreno-Serra shed light on these effects with several interesting findings.

The authors find that SHI increases total public spending on health as well as health care utilization rates in the aggregate, while increasing hospital bed occupancy, decreasing average length of stay and reducing surgical infection rates reported by hospitals. Health sector salaries are also found to increase significantly as a share of total government spending. Findings with respect to health outcomes are mostly insignificant. On the economic side, SHI-destined payroll taxes are found to increase gross wages and unemployment (and reduce employment) although no impact was observed on the size of the informal economy.

Wagstaff concludes that the increment in total health spending generated by a payroll tax has not worked well to improve health, but making a causal link between the source of financing and health outcomes is both complex and challenging.<sup>1</sup>

The relationship between health insurance and health status operates through increasing the utilization of health care. If insurance does indeed increase utilization, but does not have an impact on health outcomes closely related to clinical care (Wagstaff chooses outcome variables that are both closely related, such as hospital discharges, and others that are more distal, such as life expectancy and infant mortality rates), then the absence of an impact on health is likely related to poor clinical quality. We know that the problem of poor clinical quality is not exclusive to SHI systems, and thereby requires other interventions.

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<sup>1</sup> Thanks to Ursula Giedion, a Brookings collaborator, for making these three points in a paper on Colombia. She notes: "For an excellent review of these issues see Buchmueller, T., R. Kronick, et al. (2005). "The Effect of Health Insurance on Medical Care Utilization and Implications for Insurance Expansion: A Review of the Literature." [Medical Care Research and Review Vol. 62\(1\)](#): 3-30 and Levy, H. and D. Meltzer (2001). What do we really know about whether health insurance affects health? [ERIU Working Paper 6](#). U. o. M. Economic Research Initiative on the Uninsured. Ann Arbor, Economic Research Initiative on the Uninsured, University of Michigan."

Health insurance benefits and payments vary widely from country to country, and perhaps within countries. Changes in utilization, access and related health outcome variables need to be directly related to the benefits offered in order for a connection to be made between insurance and outcomes. It is essential to describe the differences in benefits packages, or the differences in the organization of health care production and delivery, in order to assess if there is a direct connection.

The impact of health insurance on health status can appear to have varying effects depending on the variables chosen to measure health status. Levy et al find that studies using mortality rates as outcome variables may not capture changes in health-related quality of life. Also, health-related outcome variables must be chosen on the basis of a thorough knowledge of the benefits offered of the insurance coverage that is to be evaluated. For example, it would be of limited usefulness to evaluate the impact of health insurance on nutritional status of children if nutrition is only loosely related to the health care services offered under the benefits plan, as was done, for example, in a recent study by Gaviria et al on Colombia.<sup>2</sup>

### **What can be concluded?**

Increased utilization of health care, while an indispensable first step to improving health, will not translate automatically into health improvements if the quality of care is poor, if benefits plans are too restrictive, or if premiums and co-pays affect household behavior. Further analysis will have to account for the vast differences that exist between plans, premiums and payments among countries; effective coverage will be very different and will affect health status. On the financing side, complementary interventions such as provider payment reforms are required.

Changes in utilization, efficiency and other outcomes of clinical care (as well as equity and financial protection, although not discussed during the seminar) may have more to do with the scope of benefits packages, the structure of and incentives associated with provider payment mechanisms, the amounts of premiums and co-pays and regulatory efficacy, than with the source of financing. This point is noted by Wagstaff in his conclusions.

Payroll tax financing for insurance schemes can increase available funds for the sector but comes with costs for the labor market, so alternative financing sources are preferable. Yet it must be recognized that given the small tax base, difficulty in enforcement of tax collection and related political economy in many developing countries, mobilizing resources through payroll taxes is apparently more feasible to implement than higher VAT rates or income taxation as a mechanism to raise funds for the sector.

The Brookings Global Health Financing Initiative will soon release a set of studies analyzing similar concerns in Colombia over the next couple of months as well as a piece that examines the potential to scale up and rigorously evaluate those aspects of insurance that are hypothesized to generate health impact for the poor. This work will focus on issues such as

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<sup>2</sup> Alejandro Gaviria, Carlos Medina & Carolina Mejía, 2006. "[Evaluating The Impact Of Health Care Reform In Colombia: From Theory To Practice](#)," DOCUMENTOS CEDE 002647, UNIVERSIDAD DE LOS ANDES-CEDE. [Downloadable!]

(i) pooling of funding for health amongst the sick, healthy, rich, poor, old and young, (ii) creating an explicit benefits package built on financial protection and cost-effectiveness criteria, (iii) purchasing of health care services through contracts as an instrument to improve accountability between purchasers and providers, and (iv) subsidizing premiums or packages for the poor.



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