## The distributional impact of public health transfers in-kind in Italy

By Conchita D'Ambrosio<sup>\*</sup> and Chiara Gigliarano<sup>†</sup>

## Abstract

The analysis of the distributional effects of public policies is generally performed on interventions aimed directly at the individual's income, such as taxes and cash transfers. Equally crucial is the evaluation of the impact of public expenses for services, i.e. transfers in kind, such as education and health. The importance of this assessment is particularly relevant for the policy implications of monetary transfers vs. services supply.

Quite rich is the literature on the distributional impact of transfers in kind, and health in particular, in an international context; see, e.g., Smeeding et al. (1993), Steckmest, (1996) and Marical et al. (2006), Garfinkel et al. (2006), Smeeding and Rainwater (2002).

Only a few studies, instead, focus on the distributional impact of health related public transfers in Italy. The most recent studies, to the best of our knowledge, are Citoni (2001), Turati and Sonedda (2005), Pacifico (2006) and Baldini et al. (2006).

The aim of the paper is to translate into a monetary form the benefits received by the provision of health related public goods, analyze their incidence and relevance in the Italian context and study their implication on income distribution. The most common way to measure health benefits in-kind is to use the costs due to produce the health transfers as a proxy of such benefits. We hypothesize that the marginal costs to produce such goods by the state are equal to the marginal benefits received by the agent that asks for such goods. In case of inefficient operators in the market of such goods, the marginal cost is not anymore an adequate proxy for the marginal benefit.

The costs for healthcare are assigned to the individuals according to the so-called insurancebased approach; the method does not require information on the individual health condition nor on the usage of healthcare services, but rather assigns health related transfers to the individuals proportionally to some socio-economic characteristics, such as gender, age and geographical area. The transfer may be considered as the premium an individual should have paid in order to be

Università di Milano-Bicocca and DIW, Berlin

<sup>&</sup>lt;sup>†</sup> Università Politecnica delle Marche, Ancona

insured against the risk of illness. The amount of such premium should be proportional to the probability of loosing good health condition, where the probability is a function of observable variables such as age and gender.

For the empirical analysis, data on income are taken from the European Survey of Income and Living Conditions (EU-SILC 2004), while information on the public costs for healthcare is provided by the Italian General Accounting Office.

We obtain health-care amounts per capita per age group, calculated for different regions and different kinds of health-care services, and add them to the individual cash income, in order to obtain an accurate value of personal income that explicitly takes into account also the benefits from the public service of health.

We focus then on the changes in income distribution and on the implications on inequality induced by health transfers in kind. In particular, inequality has decreased when including health transfers in the income of the entire population.

We underline, moreover, which are the groups that are the most affected by such public intervention, comparing their final income distributions. Higher percentage increase in income and decrease in inequality appear in favour of the over65, the old singles and couples, the households with unemployed, the pensioners and the less educated householders. Disaggregating by regions, after the health related transfers in kind, very slight re-ranking of the regions occurs, in term of income position.