



PHILIPPINE STATISTICAL ASSOCIATION, INC.

2/F Philippine Social Science Center
Commonwealth Avenue, Diliman, Quezon City
Telephone (632) 920-6513 Telefax (632) 456-1928
Email: psa.sec@gmail.com; psai.sec@gmail.com
PSA website : www.philstat.org.ph

THE PHILIPPINE STATISTICIAN
2008, Volume 57

Estimating Individual Health Expenditures Age Profiles from Household Level Data in the Philippine National Health Accounts

Rachel H. Racelis, John Michael Ian S. Salas, Fe Vida N. Dy Liacco, and Racquel Dolores V. Sabeñano

Abstract

The Philippine National Health Accounts (PNHA) is a framework for the compilation of information on the country's health expenditures and has been providing data important to health policy-making for more than a decade now. To maintain and further expand its usefulness, the PNHA underwent major restructuring in 2005 specifically in terms of health expenditure classification by uses of funds. The revised PNHA now includes a breakdown by age group of the beneficiaries of health care expenditures. The primary sources of data for household out-of-pocket (OOP) spending for health are the two surveys regularly conducted by the National Statistics Office (NSO), namely: the Family Income and Expenditure Survey (FIES) and the Annual Poverty Indicator Survey (APIS). These two surveys, however, only report health expenditure totals at the household level and actual health expenditures of individual household members are not known. Thus, household health spending attributable to specific groupings of household members, such as by age group, cannot be estimated directly from available survey data. To generate the age breakdown of household OOP health expenditures for the PNHA, a number of approaches were explored including: (1) the household per capita approach, (2) the simple regression approach, and (3) the use of related health information such as weights in a modified household per capita approach. Results from the application of these three approaches to data from a nationally representative household expenditure survey were generally found to be consistent – the age profiles all had the J-shape or U-shape, with higher mean spending for the very young and the elderly relative to the rest of the age groups. These overall shapes of the (indirectly estimated) per capita age profiles of household health spending were consistent with and validated by a reference per capita age profile that was computed from a small sample household health survey that collected health expenditure data at the individual person level. Furthermore, the indirectly estimated age profile is improved and was closer to the actual profile as more health related information is utilized in the estimation procedure (Mason 1987, 1988, 2001; Modigliani 1988; Lee and Edwards 2001; Mason and Lee 2004).

Keywords: *National Transfer Accounts, economic life cycle.*