

Investment in Health Sectors: Economic Impact using Input Output Analysis

Topic: (3.2) Impact Analysis: Multipliers (1)

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Background/Objective

In a very important initiative to revise the health policy in 2013 by introducing the National Urban Health Mission (NUHM) as a Sub-mission of an over-arching National Health Mission (NHM), with National Rural Health Mission (NRHM) being the other Sub-mission of National Health Mission. There is no systematically examined the distribution of medical expenses by types of households I India. The major objective of the paper is to use Input-Output analysis to quantitatively estimate economic impact of investment on health sectors and examine its range with sensitivity analysis. Using the latest input output table (2012-13) and the 71st Round of the National Sample Survey data we attempt to analyse the impact of investment on health sector on different types of households.

Data

Input-Output 2010-11 from CSO India updated to 2012-13 by NCAER. NSS health survey (2013-14), data collected had enabled assessment of the role of medicine in respect of prevalence of use, cost of treatment and type of ailments covered. Using the latest input output table and the 71st Round of the NSSO we attempt to analyse the impact of investment on health sector on different types of households. The survey aimed to generate basic quantitative information on the health sector. Measurement of the extent of use of health services provided by the Government was also part of this exercise. Special attention was given to hospitalisation, or medical care received as in-patient of medical institutions. Emphasis was laid on collecting information on 'out of pocket' expenditure for various episodes of illness. For most important parameters, the survey provided estimates separately for males and females. Special attention was given to hospitalisation, or medical care received as in-patient of medical institutions. Emphasis was laid on collecting information on 'out of pocket' expenditure for various episodes of illness. Also we use NSSO 67th Round on UNINCORPORATED NON-AGRICULTURAL ENTERPRISES (EXCLUDING CONSTRUCTION). Given this rich data set we disaggregate the health consumption by workers differentiated by gender. These workers are also identified across types of sectors and also then mapped to various classes of households.

Method

We have aggregated the latest IO table from 130 sectors first to 10 sectors that focus on women's employment and then disaggregate the medical sector into Medical Package, Doctor's/ surgeon's fee, Medicines Diagnostic Test, Bed Charges, and Other medical expenses. We get the shares of production and intermediate requirements of the new health sectors by using the NSSO 67th Round on Unincorporated Non-agricultural Enterprises (excluding Construction).

Thus the 15 sectors are proposed to be:

1)Agriculture , 2)Mining & Quarrying , 3)Food Processing, 4)Textile Sector , 5)Other Manufacturing , 6)Capital Goods, 7)Construction, 8)Medical Packages, 9)Doctor Services, 10)Medicines, 11)Diagnostic, 12)Hospital Beds, 13)Other medical services, 14)Other Services and 15)Public Administration.

The consumption of health sectors are further disaggregated by sectoral workers distinguished as: Own Account Workers, Regular Wage Worker, Casual Labor and Others and further by gender. We also map the workers to three types of households: Rich. Middle and poor based on per capita monthly expenditure information.

Expected Outcome

We propose that the contribution to medical care should be evaluated more explicitly in national medical care expenditure policies. We also examine the prevalence of health problems of workers distinguished by type of work and sector.