Name of the Candidate: Aditi Aeron Bansal Name of Supervisor: Professor Shahid Ashraf Department: Department of Economics

Title: Ill-health and catastrophe: an analysis of the burden of healthcare costs on households in Delhi

Health is a basic need just as food, water, electricity, clothing and shelter. In countries where payments for healthcare are mostly made out of pocket, healthcare competes with other basic needs for a place in the household's budget so much so that if expenditure required for healthcare is large enough households may have to choose between the two. Most studies on catastrophic health expenditures (CHE) define it as expenditures on medical care, that are large enough to force households to cut down its consumption of other basic needs. Objectively, a household is considered to have experienced CHE if its healthcare budget exceeds 10 percent of its total budget or 40 percent of its capacity to pay, where capacity to pay is defined as the income left after subsistence expenditures have been met. The present study is based on the argument that since health is also a basic need then, households which have to avoid healthcare in order to pay for other basic needs, must also be classified as having faced CHE.

On the basis of a primary survey of 800 households in Delhi, the present study revised the methodology for calculating the catastrophic headcount ratio by including such households which avoided or discontinued medical care due to their inability to pay for it. In order to do so, specific questions were added to the questionnaire to understand if medical care (including consultation, diagnostic tests, treatment, medicines and follow up) was availed, not availed or discontinued at any stage during the illness of any member of the household within a recall period of 30 days for outpatient care and 365 days for in-patient care. The questionnaire also probed into the reasons for avoidance and only such households were added in the catastrophic headcount ratio where the reasons were financial. The revised methodology turned out to be an improvement over traditional methodologies which were found to underestimate the extent of CHE by 4-5 percent as they ignored households that chose to sacrifice healthcare.

The survey was followed by 30 in-depth interviews and 3 FGDs, for which households were selected purposively. Qualitative data revealed that households often resorted to selling assets or borrowing at high rates (3-10 percent per month) to pay for healthcare. Although this prevented the immediate crisis but the family's condition worsened as debt mounted. A debt trap was created as repayment of loan from one source was done by borrowing from another source. When this was not possible, the only recourse left for the household was to earn more, save more and repay, which required cutting back on consumption, especially milk and *roti* (bread). It could take them from 2-3 months to 2-3

years to repay the loan, thereby bringing about a delayed but prolonged drop in consumption. Chronically ill patients often left their medication to relieve themselves of the financial burden but it deteriorated their condition.

Binary logistic regression revealed that health expenditures were regressive. The proportion of household income spent on healthcare and the risk of incurring CHE was also found to be much higher for the poorer households. Households accessing healthcare from private facilities were 4-8 times at a greater risk of experiencing CHE than those going to public hospitals. Yet, government facilities were unable to protect households fully from CHE. This is because even though services in government hospitals were almost free, the burden of expensive medicines and diagnostics fell on the patient. There is therefore a need to stock check public facilities at regular intervals and also encourage the sale and use of medicines with the same generic formula but costing lesser than their branded counterparts. This will also help reduce the financial burden of chronic illnesses which were also found to increase the risk of CHE significantly along with large family size and greater proportion of elderly members.

Preventive illnesses like dengue fever, diarrhea and pregnancy complications were also found to bag high proportions of household income pointing at the urgent need to spread awareness about best practices to prevent them.

Regression results could not throw much light on the effect of health insurance on CHE, probably because only 3.6 percent of the households in the survey had any form of health expenditure coverage. Focus group discussions revealed that this was mainly because poor households were busy paying for their immediate needs and planning for future illness was not on their minds. Lack of awareness and lack of trust on insurance companies was another reason. Government policy should continue to focus on growth and increasing employment opportunities, especially in the organized sector to improve standards of living before relying largely on insurance. Awareness about health insurance along with the ability to contribute together could increase the number of subscribers. Given that the government spends only 1 percent of GDP on health in India, and the minimum required to prevent the people of a country from CHE is 5-6 percent, this current level is low. Therefore, anothergoal of policy should be to raise this expenditure to 5 percent of GDP.