Impact of Catastrophic Out-of-pocket Health Expenditure on Households

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Overview of Catastrophic Health Expenditure

• When the medical bills of one or more of their members are high in relation to their capacity to pay, households must reduce their expenditure on other necessities for a period of time. This is catastrophic expenditure.
  – the percentage of households with catastrophic health expenditure ranges from less than 0.1% up to 10.5%

• This results in more households living under the poverty line.
  – impoverishment attributable to health payments ranges from less than 0.1% to 5%
What Has Been Done?

• Study:
  - Cross-country study on understanding system level characteristics associated with a higher proportion of households facing catastrophic out-of-pocket payment (59 countries)

• Data:
  - Household survey data

• Possible explanatory variables:
  - service supply (total health expenditure share of GDP)
  - risk sharing (out-of-pocket expenditure share of total health expenditure, OOP%THE)
  - households’ capacity to pay (% of poor)
Proportion of Households with Catastrophic Expenditures vs. Share of Out-of-pocket Payment in Total Health Expenditures (OOP%THE)
Results from Cross Country Analysis

• Higher percentage of households with catastrophic expenditure is associated with:
  – higher share of OOP in total health expenditure (low risk pooling)
  – higher percentage of population under poverty line
  – higher percentage of total health expenditure share of GDP (greater availability of health services)

• Important message:
  The improvement of physical access could contribute to problem of catastrophic expenditure unless accompanied by financial protection mechanisms.
Country Case Studies-Key Issues

• Who uses health services?
• Who pays how much and for what kinds of health services?
• How those payments impact on a household’s financial situation?
• What kinds of households are more likely to face catastrophic expenditure?
Evidence and Information for Policy

Percentage of households with catastrophic health expenditure and impoverishment

Needs and utilization of health services
### Logistic Regression: Risks of Catastrophic Expenditure

| Variables           | Odds Ratio | Std. Err. | z    | P>|z| |
|---------------------|------------|-----------|------|--------|
| old 65ys            | 1.546      | 0.003     | 220.6| 0.000  |
| hh size             | 0.779      | 0.000     | -441.7| 0.000  |
| female              | 1.341      | 0.003     | 137.0| 0.000  |
| education           | 0.836      | 0.000     | -320.9| 0.000  |
| urban               | 0.321      | 0.001     | -400.1| 0.000  |
| insurance           | 0.996      | 0.000     | -10.8| 0.000  |
| reporting illness   | 1.470      | 0.001     | 406.7| 0.000  |
| gvn't hosp.         | 9.561      | 0.020     | 1054.0| 0.000  |
| community center    | 2.350      | 0.006     | 327.0| 0.000  |
| private facility    | 2.438      | 0.005     | 395.5| 0.000  |
| traditional med.    | 3.601      | 0.012     | 390.1| 0.000  |
| home visit          | 5.300      | 0.017     | 528.3| 0.000  |
| pharmacy            | 1.156      | 0.003     | 66.6 | 0.000  |
### Regression Results: Vietnam

<table>
<thead>
<tr>
<th>Higher risk</th>
<th>Lower risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Senior family members</td>
<td>• Bigger family</td>
</tr>
<tr>
<td>• Female household head</td>
<td>• Urban area</td>
</tr>
<tr>
<td>• Less healthy and more use of health services</td>
<td>• Higher education level</td>
</tr>
</tbody>
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**Highlighted issues:**

- Expenditure associated with hospitalization care contributes largely to catastrophic expenditure
- Health insurance does not seem to function well - policy question
Ongoing Activities

• Building country capacity to analyze micro level data
  – Identify data sources with countries WHS, LSMS, SES, ...
  – Develop guidelines for data analysis
  – Conduct training workshops
  – Provide technical support
• Facilitate policy dialogue