Distribution of Health Payments and Catastrophic Expenditures in Georgia

With financial support from World Health Organization (WHO)

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Tbilisi, Georgia

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Focus and purpose of analysis

The focus of the analysis:
Out-of-pocket (OOP) payments on health
(i.e. payments made by households at the point of receiving health services)

Purpose of the analysis:
- Explore level of catastrophic expenditures in Georgian households,
- Determine factors influencing this
Primary Data Sources & Survey Methods

Data source:
Nationally representative Household Budget Survey (IHS) - Quarterly Questionnaire of Expenditures (Shinda 04)

Data gathering method:
Face-to-face interview

Period covered:
2006-2010 (full year data)

Recall:
3 months prior to the interview

Study limitation:
It does not look at health service utilization in the households.
Definitions used in analysis

- **Capacity to pay (CTP)** - household non-subsistence spending, or household expenditures excluding food expenditures.

- **Catastrophic heath expenditure** occurs when a household’s total OOP health payments equal or exceed 40% of household’s CTP or non-subsistence spending.

- **Impoverishment** - a non-poor household is impoverished by health payments when it becomes poor after paying for health services.

- **Out-of-pocket health payments share of household capacity to pay (oopctp)** - The burden of health payments is defined as the out-of-pocket payments as a percentage of a household’s capacity to pay.
Analysis Method used

“Distribution of health payments and catastrophic expenditures methodology”

by Ke Xu

WORLD HEALTH ORGANIZATION
GENEVA
2005
Analysis Results
OOP on health as a share of hh total consumption & capacity to pay

While analysis show increasing trend in the share of OOP from households total consumption expenditure and CTP, it also indicates sharp decrease in households’ level of income across the years.
OOP on health as a share of household total expenditure (by consumption quintile groups)

... and the OOP on health as a share of household total expenditure is increasing in all quintile groups.
Household healthcare expenditure, across the years (in absolute terms, monthly averages in GeL, constant prices - CPI)

Results show increase in hh real OOP on health in all quintile groups: slightly higher rate is observed in the richest fifth from 2006 through 2010 (app. 1.6 times for the richest compared to 1.4. for the poorest).
Increasing trend is observed with regard to both parameters: a) the share of those households who faced catastrophic health expenditures and b) the share of those who were impoverished due to high health payments.
The share of households with catastrophic health expenditures (above 40% of CTP) by consumption quintile groups

<table>
<thead>
<tr>
<th></th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poorest</td>
<td>10.8%</td>
<td>11.6%</td>
<td>11.3%</td>
<td>12.2%</td>
<td>13.3%</td>
</tr>
<tr>
<td>2</td>
<td>6.5%</td>
<td>6.3%</td>
<td>8.1%</td>
<td>9.7%</td>
<td>9.8%</td>
</tr>
<tr>
<td>3</td>
<td>5.4%</td>
<td>4.5%</td>
<td>5.9%</td>
<td>7.5%</td>
<td>7.2%</td>
</tr>
<tr>
<td>4</td>
<td>4.0%</td>
<td>3.8%</td>
<td>4.9%</td>
<td>6.5%</td>
<td>5.8%</td>
</tr>
<tr>
<td>Richest</td>
<td>4.0%</td>
<td>3.7%</td>
<td>5.9%</td>
<td>9.0%</td>
<td>6.4%</td>
</tr>
</tbody>
</table>

The share of households with catastrophic health payments is increasing in all quintile groups, however the gradient between the poorest and richest fifths has been slightly but still decreased from 2.7 in 2006 to 2.1 in 2010.
The share of households **impoverished** due to catastrophic health payments from those who faced catastrophic health payments

Analysis show that in 2006 poorest household were 8.7 times more likely to be impoverished compared to better-off ones and in 2010 they are 33.6 times more likely, which shows increasing gradient between rich and poor over the time and increasing trend of impoverishment in general.
**OOP breakdowns used in analysis**

**I. Types of services (repeats the structure of the HBS):**
(1) Out-patient care (separately for chronic and acute conditions)
(2) In-patient care
(3) Pregnancy/deliveries
(4) Dental care
(5) Preventive care
(6) Medical supplies and equipment

**II. Types of expenditure:**
(1) Drugs
(2) Fees to provider
(3) Ambulance
(4) Other medical services
(5) Hospitalization (includes only hospital stay and surgery)
(6) Preventive care (includes only cost of preventive check-ups and screenings)
(7) Medical supplies and equipment
Analysis results indicate that the largest proportion of OOP was spent on out-patient care (both chronic and acute conditions) - that can be explained that the figures include pharmaceutical purchases as well.
Total household spending per annum for health by different type of expenditures (OOP structure)

When structure of HH health expenditures was analyzed by different type of expenditures (expenditure on drugs was extracted from different type of services and was separately summed) - drugs consume 58-60% of HH spending, followed by hospitalization (18.4-19.4%).
HUES analysis also showed that pharmaceutical expenditure increased from around 50% to more than 60% in 2010. The resources devoted to inpatient services declined in the overall structure of household health spending from 13% to around 11%.
Utilization of health services (proxy indicator, which shows % of households who incur cost (cost >0) related to out-patient service for chronic condition and/or received for free)

Analysis show noticeable increase in utilization of outpatient service for chronic conditions from 30.3% in 2006 vs. 47.6% in 2010. Over the time increases the share of those too who reported receiving the service for free (0.4% vs. 1.9%).
Utilization of health services (proxy indicator, which shows % of households who incur cost (cost >0) related to out-patient service for acute diseases and/or received for free)

Slight increase is revealed with regard of outpatient service utilization for acute conditions (26.8% in 2006 vs. 29.9% in 2010). Important to note that share of those who reported receiving service for free is 6 times higher in 2010 compared to 2006 (1.8% vs. 0.3% respectively)

<table>
<thead>
<tr>
<th>Year</th>
<th>Yes, paid out-of-pocket</th>
<th>Yes, received for free</th>
<th>Yes, mixed (paid &amp; free)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td>25.5</td>
<td>0.3</td>
<td>1.0</td>
<td>26.8</td>
</tr>
<tr>
<td>2007</td>
<td>25.7</td>
<td>0.4</td>
<td>2.3</td>
<td>28.4</td>
</tr>
<tr>
<td>2008</td>
<td>24.6</td>
<td>0.7</td>
<td>2.1</td>
<td>27.4</td>
</tr>
<tr>
<td>2009</td>
<td>24.6</td>
<td>0.8</td>
<td>1.9</td>
<td>27.2</td>
</tr>
<tr>
<td>2010</td>
<td>24.3</td>
<td>1.8</td>
<td>3.8</td>
<td>29.9</td>
</tr>
</tbody>
</table>
Utilization of health services (proxy indicator, which shows % of households who incur cost (cost >0) related to in-patient service and/or received for free).

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<th>Yes, received for free</th>
<th>Yes, mixed (paid &amp; free)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td>2.2</td>
<td>.1</td>
<td>.2</td>
<td>2.5</td>
</tr>
<tr>
<td>2007</td>
<td>1.8</td>
<td>.2</td>
<td>.4</td>
<td>2.4</td>
</tr>
<tr>
<td>2008</td>
<td>2.8</td>
<td>.3</td>
<td>.4</td>
<td>3.6</td>
</tr>
<tr>
<td>2009</td>
<td>3.4</td>
<td>.2</td>
<td>.2</td>
<td>3.8</td>
</tr>
<tr>
<td>2010</td>
<td>2.3</td>
<td>.8</td>
<td>.9</td>
<td>4.0</td>
</tr>
</tbody>
</table>

Increase is observed with regard of in-patient service utilization as well, however with lower pace. Despite the fact that share of those who reported receiving IP service for free is very small from those who utilized the service, this share is 8 times higher in 2010 compared to 2006 (0.8% vs. 0.1% respectively).
% of households who faced **in-patient care** related costs by consumption quintile groups (cost >0)

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<th>2009</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Richest quintile</td>
<td>44.0</td>
<td>49.9</td>
<td>52.6</td>
<td>53.9</td>
<td>52.8</td>
</tr>
<tr>
<td>4</td>
<td>29.3</td>
<td>24.3</td>
<td>22.8</td>
<td>23.4</td>
<td>22.4</td>
</tr>
<tr>
<td>3</td>
<td>15.9</td>
<td>15.6</td>
<td>12.3</td>
<td>11.2</td>
<td>12.4</td>
</tr>
<tr>
<td>2</td>
<td>8.2</td>
<td>7.3</td>
<td>7.7</td>
<td>7.7</td>
<td>8.1</td>
</tr>
<tr>
<td>Poorest quintile</td>
<td>2.6</td>
<td>2.9</td>
<td>4.6</td>
<td>3.8</td>
<td>4.3</td>
</tr>
</tbody>
</table>

However, findings shows that the share of poorest households who is paying out-of-pocket for in-patient care services is also increasing over the time (2.6% in 2006 vs. 4.3% in 2010)
Administrative data also proves the trend on increased utilization of in-patient services. Hospitalization is increasing from 63 to 75.3 per 1000 population across the years.
Determinants of catastrophic health expenditures
Logit Regression Model

- The results suggest that hospitalization, chronic diseases and acute conditions related to the probability of a household facing high expenditures.

-Hospitalization represents greatest risk factor (OR 70-30.1), followed by chronic (OR 8.2-6.5) and acute diseases (OR 2.9 - 2.3) respectively.

-However, risk of incurring catastrophic health payments caused by hospitalization is decreasing gradually and this risk is decreased more than twice since 2006 (OR=70 in 2006 vs. OR=30.1 in 2010).

-the model also confirms that the households in the poorest quintile were more likely to face catastrophic expenditure compared to the richest fifth (OR 8.2 – 6.1)

-besides, hhs with family member above 60 year were more likely to face catastrophic health expenditure (OR 1.4 ) rather than otherwise
Policy options and suggestions

- There is a **need to further increase population protection** against financial risks arising from ill health.

- **Reducing OPP spending levels for drugs** through various policy efforts could help increase protection.

- Further expansion of protecting population and primarily poor from financial risk **should be focused on**:
  - Increasing protection for those **above 60**
  - Increasing protection from financial risk arising from chronic conditions which could be done through **expansion of drugs benefits** for most prevalent chronic conditions
  - Expansion of population **enrollment in pre-paid risk pools**
Thank you for attention!

Questions?