Tracking Financial Resources for Primary Health Care in Uttar Pradesh
2008 - 2014
What follows...

- RTM Framework
- Study objectives
- Scope
- Key research questions
- Process
- Methods - data sources & constraints
- Resource mobilization: trends & analysis
- Resource allocation: trends & analysis
- Expenditure analysis
  ✓ by levels of care – focus on primary care
  ✓ by types of inputs
- Budget execution and utilization analysis
- Resource productivity
- Policy Implications
The RTM Conceptual Framework

Resource Mobilization
- What is the potential for raising more resources for health? From where? What determines the resource envelope at national and sub-national levels?

Resource Allocation
- How are funds allocated to different programs and functions at national and sub-national levels? What factors determine the allocation to primary care?

Resource Utilization
- Are the allocated funds being utilized? What factors drive successful budget execution? What are the existing bottlenecks?

Resource Productivity
- How effectively are resources being translated into services? Is delivery efficient and what can be gained from efficiency improvements in terms of volume and quality?

Resource Targeting
- Are inputs benefiting the intended individuals and population? Is public spending reaching the poor?
Scope

• Time frame: 2008-09 to 2014-15

• Geographic scope: State level
  8 districts
  Bareilly, Ghaziabad, Gorakhpur, Hardoi
  Jaunpur, Sant Kabir Nagar, Shajahanpur, Unnao

• Inclusions: Treasury route (state & central contributions)
  Society route (NHM)

• Exclusions: Private sector
  Household level expenditure
Key Research Questions

1. What is the total government health allocation and expenditure in Uttar Pradesh and how is it distributed across cost categories, across time and across different grants within the health ministry?

2. What are the sources of financing for government spending through different channels of funding and what are their shares in the total?

3. What is the trend of expenditure versus budget/allocation across time?

4. What is the total government health expenditure as a percentage of the total government expenditure? What is the trend across time? How does it vary for National Health Mission (NHM) and Treasury?
5. What is the total expenditure on primary care as a share of the total government expenditure on health?

6. What is the per capita state public health expenditure over time?

7. Over time how much is the government spending on drugs and pharmaceuticals?

8. How efficiently are the funds utilized overall? Are there any differences in budget utilization between Treasury and NHM sources? What are the factors that facilitate or inhibit utilization of funds?
Data Sources...

Desk based analysis of secondary data:

- UP Economic Survey 2015-16
- GSDP data from Ministry of Statistics and Plan Implementation, Government of India:
- State budget documents, 2008-09 to 2014-15
- CAG Audit Reports
- State Health Society Bihar administrative and financial records
- NHM FMRs
- NRHM HMIS, GoI
- Annual Health Survey Bulletin, 2010-11, 2011-12, 2012-13, GoI
- Rapid Household Surveys, GoI
- State Finances: A Study of Budgets, RBI
Constraints

Limitations in financial data related to treasury funds
• Study scope was limited to Grants 31 to 36 within the Department of Health and Family Welfare. Health related budgets and expenditure in non-health ministries were not included.

Limitations in financial data related to NHM funds
• The financial management system under the NHM is structured program-wise, making it difficult to estimate expenditures by types of inputs.

• Financial Management Reports (FMRs) under the NHM are the only source for disaggregating budget and expenditure data into different cost or input categories.

• The mapping of NHM expenditure lines to cost categories is limited to only 2 financial years 2013-14 and 2014-15 due to lack of reliable data.

• Shares of cost inputs calculated based on FMR for these two years have been used for all previous years.
Constraints

Limitations in productivity analysis

- The productivity analysis is done at block level instead of at facility level.

- Data at facility level was not available to conduct a more robust analysis. Results of productivity analysis are based on HMIS data about which is widely viewed as having limited reliability.
## Expenditure definition and boundaries

### Streams of funding

<table>
<thead>
<tr>
<th>Total Government Health Expenditure (TGHE) (Estimated)</th>
<th>Government Primary Health Care Expenditure (GPHCE) (Estimated)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. State Health Society (NHM)</td>
<td>1. State Health Society (NHM)</td>
</tr>
<tr>
<td>2. State Treasury (Health)</td>
<td>2.1 Medical and Primary Health - Revenue and Capital (2210 and 4210)</td>
</tr>
<tr>
<td></td>
<td>2.2 Family Welfare - Revenue and Capital (2211 and 4211)</td>
</tr>
</tbody>
</table>

### Specific components included to estimate Health Care Expenditure

<table>
<thead>
<tr>
<th>Streams of funding</th>
<th>Specific components included to estimate Health Care Expenditure</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. State Health Society (NHM)</td>
<td>1.1 Central Releases</td>
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<tr>
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<td>1.2 State Releases</td>
</tr>
<tr>
<td></td>
<td>1.3 Accounts Balance carried over</td>
</tr>
<tr>
<td>2. State Treasury (Health)</td>
<td>2.1 Medical and Primary Health - Revenue and Capital (2210 and 4210)</td>
</tr>
<tr>
<td></td>
<td>2.2 Family Welfare - Revenue and Capital (2211 and 4211)</td>
</tr>
<tr>
<td></td>
<td>2.3 Central Transfers under Infrastructure and Maintenance</td>
</tr>
</tbody>
</table>
Key Findings
UP’s fiscal space:

- Steady macro-economic growth
- Gross State Domestic Product (GSDP) has grown at an average rate of 14 percent in the past 6 years.
- Strong population growth rate mitigates the impact of the macro-economic growth.
Resource Mobilization: Trends & Analysis

State’s capacity to generate its own revenue (tax and non-tax revenue) & Central Government’s support *increased about 2.6 times* in the same time period.
Resource Mobilization: Trends & Analysis

Central Grants and Share of Central Taxes in UP
(in Rs crores)

Following 14th Finance Commission recommendations
- Central Grants have plateaued
- Share of central taxes is up by 15%

- 2008-09
- 2009-10
- 2010-11
- 2011-12
- 2012-13
- 2013-14
- 2014-15 (RE)
- 2015-16 (BE)

Central Grant
Share of Central Taxes
Resource Mobilization: Trends & Analysis

- No change in levels of investment in social sectors
- It has neither deprioritized nor emphasized social sectors following the fiscal devolution.

Distribution of funds between sectors over time

<table>
<thead>
<tr>
<th>Year</th>
<th>Social services</th>
<th>General Services</th>
<th>Residual (Economic + Grants)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005-06</td>
<td>22%</td>
<td>45%</td>
<td>34%</td>
</tr>
<tr>
<td>2006-07</td>
<td>22%</td>
<td>43%</td>
<td>35%</td>
</tr>
<tr>
<td>2007-08</td>
<td>24%</td>
<td>39%</td>
<td>38%</td>
</tr>
<tr>
<td>2008-09</td>
<td>24%</td>
<td>37%</td>
<td>39%</td>
</tr>
<tr>
<td>2009-10</td>
<td>19%</td>
<td>44%</td>
<td>37%</td>
</tr>
<tr>
<td>2010-11</td>
<td>19%</td>
<td>44%</td>
<td>37%</td>
</tr>
<tr>
<td>2011-12</td>
<td>20%</td>
<td>41%</td>
<td>40%</td>
</tr>
<tr>
<td>2012-13</td>
<td>20%</td>
<td>41%</td>
<td>39%</td>
</tr>
<tr>
<td>2013-14</td>
<td>22%</td>
<td>39%</td>
<td>39%</td>
</tr>
<tr>
<td>2014-15</td>
<td>27%</td>
<td>36%</td>
<td>38%</td>
</tr>
<tr>
<td>2015-16</td>
<td>23%</td>
<td>38%</td>
<td>39%</td>
</tr>
</tbody>
</table>

Legend:
- Social services
- General Services
- Residual (Economic + Grants)
## Resource Mobilization: Trends & Analysis

### Total Government Health Budget (by sources):

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>State government</td>
<td>4,904</td>
<td>5,720</td>
<td>5,950</td>
<td>6,177</td>
<td>7,344</td>
<td>8,143</td>
<td>12,346</td>
</tr>
<tr>
<td>Central government</td>
<td>1,624</td>
<td>2,623</td>
<td>2,435</td>
<td>2,244</td>
<td>3,959</td>
<td>2,949</td>
<td>3,086</td>
</tr>
<tr>
<td>Total Government Health Budget (THB)</td>
<td>6,528</td>
<td>8,343</td>
<td>8,384</td>
<td>8,421</td>
<td>11,303</td>
<td>11,092</td>
<td>15,432</td>
</tr>
<tr>
<td>Center's share in THB</td>
<td>25%</td>
<td>31%</td>
<td>29%</td>
<td>27%</td>
<td>35%</td>
<td>27%</td>
<td>20%</td>
</tr>
</tbody>
</table>

Source: Detailed Demand for Grant, UP; NHM audit reports, NHM Record of Proceedings

All figures are nominal in Rs crores
Resource Mobilization: Trends & Analysis

- NHM constitutes a significant portion of total government health budget
  *Ranging between 25% and 39% during the study years*

**Total Health Budget in Rs. Crores**

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Health Budget</th>
<th>NHM (all routes): approved budget</th>
<th>UPSACS</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008-09</td>
<td>1,847</td>
<td>12</td>
<td>28%</td>
</tr>
<tr>
<td>2009-10</td>
<td>5,420</td>
<td>22</td>
<td>35%</td>
</tr>
<tr>
<td>2010-11</td>
<td>5,560</td>
<td>31</td>
<td>33%</td>
</tr>
<tr>
<td>2011-12</td>
<td>5,782</td>
<td>44</td>
<td>31%</td>
</tr>
<tr>
<td>2012-13</td>
<td>6,909</td>
<td>42</td>
<td>39%</td>
</tr>
<tr>
<td>2013-14</td>
<td>7,348</td>
<td>36</td>
<td>33%</td>
</tr>
<tr>
<td>2014-15</td>
<td>11,548</td>
<td>52</td>
<td>25%</td>
</tr>
</tbody>
</table>

**State Health Budget (excluding NHM)**

- 2008-09: 4,669
- 2009-10: 5,420
- 2010-11: 5,560
- 2011-12: 5,782
- 2012-13: 6,909
- 2013-14: 7,348
- 2014-15: 11,548
TREASURY ROUTE: Resource Allocation: Trends & Analysis

Allocation of Treasury Budget by Grants (in percentage)

- Relatively less focus on public health (Grant 36) and alternate systems of medicines (Grants 33 and 34)
- NHM subsumes lot of public health related allocations
TREASURY ROUTE: Resource Allocation: Trends & Analysis

Allocation of Treasury Budget by Levels of Care

- Primary care allocation: Rs 371 per capita
- One of the lowest in the country
- Far below several international estimates of the resources needed for adequate primary care package

• Primary health budget: (average of about 56%)
• Allocation to primary care increased to 62% in 2014-15 from 55% (2008-09)
TGHE: Trends & Analysis

Total Government Health Expenditure (TGHE)

- The TGHE in 2014-15 is Rs 11,965 crores, a nominal 220% increase in the six years.
- GSDP growth in the same time: 222%
- However, TGHE as a share of GSDP has remained stable between 1.08% to 1.29% of the GSDP; it was 1.23% in 2014-15

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</thead>
<tbody>
<tr>
<td>Govt Health Expenditure (excluding NHM)</td>
<td>3849</td>
<td>4547</td>
<td>4966</td>
<td>5382</td>
<td>6045</td>
<td>6604</td>
<td>8141</td>
</tr>
<tr>
<td>NHM (all routes)</td>
<td>1500</td>
<td>2201</td>
<td>2649</td>
<td>1988</td>
<td>3337</td>
<td>3119</td>
<td>3772</td>
</tr>
<tr>
<td>UP State AIDS Control Society</td>
<td>31</td>
<td>25</td>
<td>35</td>
<td>31</td>
<td>35</td>
<td>40</td>
<td>53</td>
</tr>
<tr>
<td>TGHE</td>
<td>5380</td>
<td>6773</td>
<td>7650</td>
<td>7400</td>
<td>9418</td>
<td>9763</td>
<td>11965</td>
</tr>
</tbody>
</table>

All figures are nominal in Rs crores
NHM’s significant share in THE
On an average, the share of NHM has ranged between 27 to 35 percent of TGHE, with the rest financed by the state.
TGHE: Trends & Analysis

TGHE Growth Rate – ERRATIC – poor planning and budgeting

Growth rate of TGHE, NHM, and State health expenditures

- State Health Expenditure (excluding NHM)
- NHM (all routes)
- TGHE

Years: 2009-10 to 2014-15
TGHE: Trends & Analysis

- TGHE per capita is inadequate
## TGHE: Trends & Analysis

### Health Expenditure by levels of care (Treasury route)

<table>
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<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>Primary</td>
<td>56%</td>
<td>56%</td>
<td>52%</td>
<td>55%</td>
<td>58%</td>
<td>56%</td>
<td>59%</td>
</tr>
<tr>
<td>Secondary</td>
<td>19%</td>
<td>17%</td>
<td>19%</td>
<td>20%</td>
<td>18%</td>
<td>18%</td>
<td>19%</td>
</tr>
<tr>
<td>Tertiary</td>
<td>6%</td>
<td>2%</td>
<td>2%</td>
<td>4%</td>
<td>2%</td>
<td>3%</td>
<td>2%</td>
</tr>
<tr>
<td>Medical Education</td>
<td>15%</td>
<td>17%</td>
<td>19%</td>
<td>19%</td>
<td>20%</td>
<td>22%</td>
<td>20%</td>
</tr>
<tr>
<td>Administration</td>
<td>4%</td>
<td>8%</td>
<td>8%</td>
<td>2%</td>
<td>1%</td>
<td>1%</td>
<td>1%</td>
</tr>
</tbody>
</table>
TGHE: Trends & Analysis

GOVERNMENT PRIMARY HEALTH EXPENDITURE (GPHE)

• Primary care as a share of TGHE has ranged between 58 percent and 62 percent during the study years
• Experiencing a gradual declining trend since 2012-13.
• NHM has made a strong positive impact on the total primary care expenditure in the state.

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</thead>
<tbody>
<tr>
<td>GPHE - Treasury*</td>
<td>2,318</td>
<td>2,856</td>
<td>2,861</td>
<td>3,392</td>
<td>4,455</td>
<td>3,954</td>
<td>4,996</td>
</tr>
<tr>
<td>GPHE - NHM through SHS**</td>
<td>1,024</td>
<td>1,397</td>
<td>1,799</td>
<td>1,034</td>
<td>1,410</td>
<td>1,746</td>
<td>2,078</td>
</tr>
<tr>
<td>Total GPHE</td>
<td>3,342</td>
<td>4,254</td>
<td>4,660</td>
<td>4,427</td>
<td>5,866</td>
<td>5,700</td>
<td>7,074</td>
</tr>
<tr>
<td>NHM as a share of GPHE</td>
<td>31%</td>
<td>33%</td>
<td>39%</td>
<td>23%</td>
<td>24%</td>
<td>31%</td>
<td>29%</td>
</tr>
<tr>
<td>GPHE as share of TGHE</td>
<td>62%</td>
<td>62%</td>
<td>61%</td>
<td>60%</td>
<td>62%</td>
<td>58%</td>
<td>59%</td>
</tr>
</tbody>
</table>

* including infrastructure & maintenance component of NHM and excluding state share of NHM reflected in the state budget books

** NHM expenditure through the State Health Society
Per capita primary care expenditures (in Rs)

Nominal Growth: 90%
Real Growth: 23%

<table>
<thead>
<tr>
<th>Year</th>
<th>Per capita - Nominal</th>
<th>Per capita - Real (2004-05 prices)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008-09</td>
<td>173</td>
<td>134</td>
</tr>
<tr>
<td>2009-10</td>
<td>217</td>
<td>152</td>
</tr>
<tr>
<td>2010-11</td>
<td>233</td>
<td>154</td>
</tr>
<tr>
<td>2011-12</td>
<td>217</td>
<td>133</td>
</tr>
<tr>
<td>2012-13</td>
<td>282</td>
<td>160</td>
</tr>
<tr>
<td>2013-14</td>
<td>269</td>
<td>145</td>
</tr>
<tr>
<td>2014-15</td>
<td>328</td>
<td>165</td>
</tr>
</tbody>
</table>
TGHE: Trends & Analysis

Expenditure by cost inputs

<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>Human Resource</td>
<td>60%</td>
<td>20%</td>
<td>65%</td>
<td>17%</td>
</tr>
<tr>
<td>Operating expenses</td>
<td>4%</td>
<td>12%</td>
<td>4%</td>
<td>4%</td>
</tr>
<tr>
<td>Capital projects</td>
<td>14%</td>
<td>9%</td>
<td>16%</td>
<td>16%</td>
</tr>
<tr>
<td>Drugs, Pharmaceuticals</td>
<td>5%</td>
<td>6%</td>
<td>4%</td>
<td>4%</td>
</tr>
<tr>
<td>Programs / implementation</td>
<td>17%</td>
<td>24%</td>
<td>18%</td>
<td>15%</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>

Legend:
- Human Resource
- Operating expenses
- Capital projects
- Drugs, Pharmaceuticals
- Programs / implementation
**TGHE: Trends & Analysis**

**EXPENDITURE ON DRUGS & PHARMACEUTICALS**

- NHM has made a significant contribution is access to medicines.
  
  *Approximately 28 percent of the expenditure*

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</thead>
<tbody>
<tr>
<td>Through treasury</td>
<td>236.15</td>
<td>243.22</td>
<td>289.8</td>
<td>325.77</td>
<td>394.24</td>
<td>417.44</td>
<td>457.98</td>
</tr>
<tr>
<td>Through NHM</td>
<td>99.03</td>
<td>135.18</td>
<td>173.98</td>
<td>100.07</td>
<td>136.44</td>
<td>168.85</td>
<td>176.64</td>
</tr>
<tr>
<td>Total</td>
<td>335.18</td>
<td>378.4</td>
<td>463.78</td>
<td>425.84</td>
<td>530.68</td>
<td>586.29</td>
<td>634.62</td>
</tr>
<tr>
<td>Total Per capita</td>
<td>17.38</td>
<td>19.28</td>
<td>23.21</td>
<td>20.89</td>
<td>25.53</td>
<td>27.67</td>
<td>29.4</td>
</tr>
<tr>
<td>Proportion of TGHE</td>
<td>6.2%</td>
<td>5.6%</td>
<td>6.1%</td>
<td>5.8%</td>
<td>5.6%</td>
<td>6%</td>
<td>5.3%</td>
</tr>
<tr>
<td>NHM's share in total drugs exp.</td>
<td>30%</td>
<td>36%</td>
<td>38%</td>
<td>23%</td>
<td>26%</td>
<td>29%</td>
<td>28%</td>
</tr>
</tbody>
</table>

- The inadequacy of government provision of drugs may be an important cause of low access and utilization of public services especially for the poor.
Who manages funds is relevant for studying utilization

- Every third government health Rupee is managed by the State Health Society
- It is vital to ensure the processes & systems are streamlined to improve utilization of funds through the SHS.

<table>
<thead>
<tr>
<th>Sources</th>
<th>Financing Agents</th>
<th>Total</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>State</td>
<td>NHM</td>
<td>UPSACS</td>
</tr>
<tr>
<td>State</td>
<td>6,604</td>
<td>1,047</td>
<td>7,651</td>
</tr>
<tr>
<td>Center</td>
<td>2,072</td>
<td>40</td>
<td>2,112</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>6,604</strong></td>
<td><strong>3,119</strong></td>
<td><strong>40</strong></td>
</tr>
<tr>
<td>Percent</td>
<td>67 %</td>
<td>32 %</td>
<td>0.4 %</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sources</th>
<th>Financing Agents</th>
<th>Total</th>
<th>Percent</th>
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<tbody>
<tr>
<td></td>
<td>State</td>
<td>NHM</td>
<td>UPSACS</td>
</tr>
<tr>
<td>State</td>
<td>8,141</td>
<td>1,496</td>
<td>0</td>
</tr>
<tr>
<td>Center</td>
<td>2,275</td>
<td>53</td>
<td>2,328</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>8,141</strong></td>
<td><strong>3,772</strong></td>
<td><strong>53</strong></td>
</tr>
<tr>
<td>Percent</td>
<td>68 %</td>
<td>32 %</td>
<td>0.4 %</td>
</tr>
</tbody>
</table>
Budget Execution & Utilization

• Increase in budget allocations for health
• But suffers from persistent underutilization of budgets over time.

TREASURY ROUTE

• Utilization: between 82% % 90% between 2008-09 and 2013-14.
• Decline in utilization in 2014-15 (based on RE figures)

NHM

• NHM, through the society route presents a more complex picture.
• Utilization against budget, rates have improved
• When measured against the total funds available, the picture is much less positive.
  o 2013-14: 47%
  o 2014-15: 61%
## Budget Execution & Utilization

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>State health budget utilization rate</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>State health budget (excl. NHM)</td>
<td>4,669</td>
<td>5,420</td>
<td>5,560</td>
<td>5,782</td>
<td>6,909</td>
<td>7,348</td>
<td>11,548</td>
</tr>
<tr>
<td>2</td>
<td>State health expenditure</td>
<td>3,849</td>
<td>4,547</td>
<td>4,966</td>
<td>5,382</td>
<td>6,045</td>
<td>6,604</td>
<td>8,141</td>
</tr>
<tr>
<td>3</td>
<td>State Health Expenditure against budget (2/1)</td>
<td>82%</td>
<td>84%</td>
<td>89%</td>
<td>93%</td>
<td>88%</td>
<td>90%</td>
<td>70%</td>
</tr>
<tr>
<td></td>
<td>NHM utilization rate</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>NHM approved budget</td>
<td>1,847</td>
<td>2,900</td>
<td>2,793</td>
<td>2,595</td>
<td>4,352</td>
<td>3,708</td>
<td>3,832</td>
</tr>
<tr>
<td>5</td>
<td>Total Funds available under NHM</td>
<td>2,443</td>
<td>3,262</td>
<td>3,391</td>
<td>3,338</td>
<td>4,272</td>
<td>6,594</td>
<td>6,179</td>
</tr>
<tr>
<td>6</td>
<td>Total expenditure under NHM</td>
<td>1,500</td>
<td>2,201</td>
<td>2,649</td>
<td>1,988</td>
<td>3,337</td>
<td>3,119</td>
<td>3,772</td>
</tr>
<tr>
<td>8</td>
<td>Utilization against approved budget (6/4)</td>
<td>81%</td>
<td>76%</td>
<td>95%</td>
<td>77%</td>
<td>77%</td>
<td>84%</td>
<td>98%</td>
</tr>
<tr>
<td>9</td>
<td>Utilization against funds available (6/5)</td>
<td>61%</td>
<td>67%</td>
<td>78%</td>
<td>60%</td>
<td>78%</td>
<td>47%</td>
<td>61%</td>
</tr>
</tbody>
</table>

1. All figures are in Rs. Crores
2. All NHM figures are audited
3. Treasury 2014-15 figures are unaudited and sources from *Koshvani*
Reasons for Low Utilization: Overall

• Much of the underutilization of budgets in UP occurs in the NHM.

• This reflects both weak capacities at local level to plan and utilize more flexible funds.

• Limited capacity and leadership at the various levels

• They were not able to truly optimize the benefits from NHM’s flexible approach and financing.

• Further compromised by a major episode of mismanagement of finances which led to a much more risk averse approach in its aftermath.

• This discouraged local innovation or solutions for local problems.
Improving the utilization of resources allocated under the Mission Flexi Pool would have a significant impact on the overall utilization of resources under NHM.
Reasons for Low Utilization: Overall

WHERE ARE THE FUNDS UNSPENT

• NHM budget lines requiring greater local planning and innovation are the most under spent.

• Example, the budget heads under Mission Flexi Pool.

• Some of the areas of underutilization, as shown from analysis of the FMRs, include:
  o Selection and training of ASHAs
  o Procurement and replenishment of ASHA drug kits
  o ASHA incentives;
  o Untied funds, Annual maintenance grants, Corpus funds
  o Construction of civil works/infrastructure;
  o IEC, BCC component
  o Procurement of equipment and drugs
Reasons for Low Utilization: Overall

- Reasons for underutilization related to 3 areas of weaknesses – policy related; operational issues and low capacity.

- **OPERATIONAL ISSUES**
  - NHM planning calendar and approval timelines
  - Timeliness of fund releases
  - Time taken for release of funds at different levels
  - Procurement systems and timelines
  - Risk averse strategy, a risk in itself: expenditure guidelines
  - Vacancies
  - Low managerial capacity

- **POLICY ISSUES**
  - Power dynamics at the local level
  - Less priority to disease control programs
Reasons for Low Utilization: Overall

APPROVAL TIMELINES – DELAYING FUND RELEASES

- GoI approvals for the plan for 2015-16 were made after almost one-third (38%) of the plan period had elapsed.

- Whereas the delay in 2014-15 (56%) could be attributed to the General Elections in the country, last four years’ data call for strategies to into the sluggish pace of planning and approval timelines.

<table>
<thead>
<tr>
<th>Year</th>
<th>Date of issue of RoP by the GoI</th>
<th>Days elapsed of the plan period</th>
<th>Time elapsed</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012-13</td>
<td>01 June 2012</td>
<td>61</td>
<td>17%</td>
</tr>
<tr>
<td>2013-14</td>
<td>04 June 2013</td>
<td>64</td>
<td>18%</td>
</tr>
<tr>
<td>2014-15</td>
<td>21 October 2014</td>
<td>203</td>
<td>56%</td>
</tr>
<tr>
<td>2015-16</td>
<td>17 August 2015</td>
<td>138</td>
<td>38%</td>
</tr>
</tbody>
</table>

- Ripple effect on the budget approvals and transfers by the state to the districts which takes another 30 days on an average.
## Reasons for Low Utilization: Overall

Based on data from all 75 districts for last 3 years:

- Almost 50 percent of the total funds released were in Q4

- Mission Flexi Pool: not a priority – up to 73% funds released only in Q4

<table>
<thead>
<tr>
<th>Programs</th>
<th>2012-13</th>
<th></th>
<th></th>
<th>2013-14</th>
<th></th>
<th></th>
<th>2014-15</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Q1</td>
<td>Q2</td>
<td>Q3</td>
<td>Q4</td>
<td>Q1</td>
<td>Q2</td>
<td>Q3</td>
<td>Q4</td>
</tr>
<tr>
<td>Total transfers to districts</td>
<td>16%</td>
<td>24%</td>
<td>34%</td>
<td>26%</td>
<td>2%</td>
<td>39%</td>
<td>9%</td>
<td>50%</td>
</tr>
<tr>
<td>RCH Flexipool</td>
<td>23%</td>
<td>24%</td>
<td>45%</td>
<td>7%</td>
<td>0%</td>
<td>46%</td>
<td>4%</td>
<td>50%</td>
</tr>
<tr>
<td>NRHM Flexipool</td>
<td>4%</td>
<td>29%</td>
<td>24%</td>
<td>42%</td>
<td>0%</td>
<td>15%</td>
<td>12%</td>
<td>73%</td>
</tr>
<tr>
<td>Routine immunisation / pulse polio</td>
<td>31%</td>
<td>8%</td>
<td>12%</td>
<td>49%</td>
<td>10%</td>
<td>38%</td>
<td>10%</td>
<td>42%</td>
</tr>
<tr>
<td>Disease control programs &amp; Others</td>
<td>7%</td>
<td>28%</td>
<td>60%</td>
<td>5%</td>
<td>0%</td>
<td>35%</td>
<td>47%</td>
<td>18%</td>
</tr>
</tbody>
</table>

Based on data from all 75 districts for last 3 years:

- Almost 50 percent of the total funds released were in Q4

- Mission Flexi Pool: not a priority – up to 73% funds released only in Q4
Reasons for Low Utilization: Overall

TIME TAKEN FOR TRANSFER / RELEASE OF FUNDS

- Delays in JSY payments: One month at the district level, almost 2 months at the block level
- Non-procurement of ASHA drug kits
- Delays in payments of ASHAs – lack of capacity
Reasons for Low Utilization: Overall

PROCUREMENT SYSTEMS AND TIMELINES

• Budget lines related to procurement of medicines, ASHA kits, civil works and also equipment reflect large unspent funds.

• Lack of procurement capacity

• Procurement baseline study undertaken in 2014 under the Uttar Pradesh Health Systems Development Project identified the procurement cycle time of medicines to be 149 days and equipment tender as 205 days.

• The report further specifically highlights that lack of market information resulted in 37 percent of the delays followed by lack of technical capacity which accounted for 22 percent of the delays in procurement.
Reasons for Low Utilization: Overall

EXPENDITURE GUIDELINES – Risk aversion strategy becomes a risk in itself

• UP has a practice of sending expenditure guidelines to districts along with each tranche of fund transferred.

• This is despite the district plan and the budget being approved by the state after GoI approval.

• Districts reported delays in receiving expenditure guidelines.

• This results in delayed expenditure even if the funds have reached the districts.
Reasons for Low Utilization: Overall

Under utilization on account of vacancies

- Large vacancies
- Inability to recruit

<table>
<thead>
<tr>
<th>Districts</th>
<th>HRH status selected (as of 31 October 2012)</th>
<th>Staff Nurse</th>
<th>ANM</th>
<th>Additional ANM</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Numbers</td>
<td>Vacancies</td>
<td>Numbers</td>
<td>Vacancies</td>
</tr>
<tr>
<td>Bareilly</td>
<td>In position</td>
<td>25</td>
<td>22%</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>Sanctioned</td>
<td>32</td>
<td></td>
<td>118</td>
</tr>
<tr>
<td>Jaunpur</td>
<td>In position</td>
<td>9</td>
<td>75%</td>
<td>22</td>
</tr>
<tr>
<td></td>
<td>Sanctioned</td>
<td>36</td>
<td></td>
<td>115</td>
</tr>
<tr>
<td>Shahjahanpur</td>
<td>In position</td>
<td>20</td>
<td>47%</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>Sanctioned</td>
<td>38</td>
<td></td>
<td>74</td>
</tr>
</tbody>
</table>

Reasons for Low Utilization: Overall

LOW MONITORING AND SUPERVISION CAPACITY

• Sub-optimal supervision
• Delays ranging from recruitment of personnel, procurement of drugs or payment to ASHAs become the norm.
• Lack of capacity is further pronounced at the sub-block level.
• The GoI in its 7th CRM report corroborates this finding.
• Therefore we see very low utilization rates on untied funds at the lower level of facilities across districts.
• Limited evidence of proactive follow ups and monitoring of utilization of RKS and VHSNC funds
Reasons for Low Utilization: Overall

LOW TECHNICAL CAPACITY

• Lack of capacity / skills in budgeting and financial planning

• Lack of clarity or poor understanding of the guidelines for spending untied grants.

• Grants to VHSNCS and RKS are often left unspent because of lack of clarity on how and when to spend the funds.

• This is probably also a result of weak monitoring and oversight on this component of the program.

• Reluctance to spend untied grants was exacerbated especially after the corruption scandal.
Reasons for Low Utilization: Overall

Power dynamics at local level impeding innovation & implementation

- Inter-sectoral coordination, especially engagement of the village panchayats often does not support effective implementation reflecting social/power dynamics of the village.

- In NHM, involvement of local bodies is central to the community processes.

- VHSNCs are unable to make spending decisions due to lack of cooperation from panchayat pradhans and conflict between them and the ANMs.

- Whatever little funds are spent, spending decisions are not taken in the VHSNC meetings – ANMs decide on their own.

- Objective of community ownership defeated.
Reasons for Low Utilization: Overall

Priorities not given to certain disease control programs

• Funds utilization of the disease control programs component of NHM was much lower as compared to other components.

• Probably due to lack of priority, their administration, planning, implementation is weak, which contributes to the low utilization.

• Allocations for these programs as a share of the total allocation is relatively small.
Resource Productivity

• To document various measures of input-output ratios for government service delivery as indicators of both the average level of productivity and also variations of effectiveness of resource use under similar conditions.

• To get a picture of how effectively primary care funds are being translated into services.

• Exploratory study which looked at all of the 117 blocks in the selected 8 districts of UP for the year 2013-14.
Resource Productivity

• We collected information on:
  o 6 types of health system human resources total spending
  o Non-human-resource spending, and
  o 5 co-variates outside of the health system that could impact health system productivity.

• We also collected information on a set of 6 health system (primary care) outputs to represent the services provided to the population at the consumer side of the health system.

• Included a composite output score, which is a logged sum of quantities for all 6-output variables.
Resource Productivity

• A composite measure representing all government health care activity at the block level was compared with amounts of financial and HR inputs standardized for population.

• Output-input ratios produced essentially represent how much activity is being produced for a given level of inputs on average and how much variation there is in these measures per capita across blocks.

• It is an assessment of resource productivity not of program performance.

• These ratios are a relatively crude measure of productivity.

• HMIS data reported by health facilities often seen as unreliable.
Resource Productivity - Results

- Within the 117 blocks, the average health workers per capita was very low, with less than .05 health professionals per 1000 population for all cadres except for ASHAs and ANMs.

- On an average, the 117 blocks spent almost Rs 93 on primary health care - 37 rupees per capita from Treasury, and 46 rupees per capita from NHM, but there was significant variation across blocks.

- The population was predominantly agricultural, and 25 percent are in scheduled (lower) castes.

- On average, these low inputs were also associated with very low outputs in the sample.
How does HR affect the level of output?

• No individual category of human resources shows a significant relationship to outputs.

• But as a group, HR showed strong associations with higher productivity.

• May be some categories of human resources are substitutes for each other.

• We combined all types of human resources into one variable, and we found that human resources as a total was a significant predictor of the output composite, ante-natal care visits, and institutional deliveries.
Resource Productivity - Results

How does HR affect the level of output?

• This means that, on the whole, additional human resources were associated with some but not all types of health system outputs.

• Increasing health systems outputs will require an examination into how different types of human resources work together to increase output.

• In other words, increasing productivity likely requires a better understanding of the relationship between the inputs.
Resource Productivity - Results

How does HR affect the level of output?

- We also looked at how ASHA’s productivity differed from other types of HR.
- ASHAs alone are not associated with any of the outputs while the group of other HR remains associated with the same outputs as before.
- May be ASHAs act as substitutes for other HR, especially other community level HR.
- We ran regressions with ASHAs and ANMs combined into a “community level” human resources category as compared to all other types of HR.
- In this case, the community level HR variables were still not associated with any output variables.
- This suggests that adding and removing community level HR alone do not have a strong enough effect to change the productivity of the health system in any way we can detect.
Resource Productivity - Results

Non HR spending:

• Our analysis found that non-human-resource spending from NHM and Treasury were consistently associated with better health system productivity.

• This suggests that increasing the utilization rates of these streams of funding may be a reasonable way to increase health system productivity.
Resource Productivity - Results

Non health system factors:

- Distance to facility and percent scheduled castes were the most consistently significant non-health system factors.

- Increases in distance to facility and percent scheduled castes are associated with decreases in health system productivity.

- This could reflect physical and social/financial access barriers.

- It is also possible that these areas are rural and/or remote which are plagued with high absenteeism and other shortages.
Resource Productivity - Results

Non health system factors:

• The first 3 outputs (output composite, women who received ANC visits, and institutional deliveries) behaved differently than the last 4 outputs (IUD insertions, fully immunized children at 9-11 months, vitamin A doses & outpatient visits).

• The first 3 outputs tended to respond to changes in the inputs we included in our models while the last 4 outputs did not.

• This could mean that the last 4 outputs do not change in association with these inputs or it could mean that we were simply not able to detect these changes with the data available.

• Is something different about these 2 groups of outputs that makes them behave differently?
Policy Implications

- Need to streamline the planning process, augment the capacity to plan.
- Need to improve the budget credibility by strengthening the budgeting process.
- There is a need to improve systems which collates all available financial data, allows for tracking of information and utilization against funds and more importantly a system for mid course correction based on this analysis. While some systems for former exist, the manner in which they are implemented does not yield the expected results.
Policy Implications

- Need for proactive monitoring and accountability specially related to utilization of untied grants and grants to VHSNCs, need for more effective coordination mechanisms with the panchayats.

- Need for strengthening the quality and reliability of HMIS data.

- How budgets are formed and allocated; how they flow through different levels of administration; and how they are executed/implemented has implications for health financing, revenue pooling and purchasing and service delivery.

- An open and orderly public financial management (PFM) system encourages better health financing mechanism and enables results.
Thank you