Reducing the global burden of disease – Rising to the challenge

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Analysis of medicines expenditure in Ukraine: Implications for rational selection

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E9 Short oral presentations, Part 2a (Practice & Education)
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Background

• Following the maidan revolution, Ukraine experienced spiraling economic crisis, rising medicine prices

• Lack of harmonization in medicines selection and procurement due to multiple medicines lists contribute to inefficiencies
Purpose

• To highlight patterns of medicines selection and spending in Ukraine’s public hospital sector

• To emphasize the need for proper selection of medicines and the rationale for a harmonized Essential Medicines List (EML)
Scope of data*

- Data covered 3 levels of the Ukrainian hospital tender purchasing system:
  - Ministry of Health Central Tenders
  - Regional Health Authorities Tenders (all oblasts)
  - Hospital level tenders

- All data is non-extrapolated and received directly from the source, covering approximately 95% of the Ukrainian hospital sector:
  - 547 hospitals
  - 54 regional administrative bodies

- Data from donors, technical partners and international procurement agencies are not part of this analysis

* Sourced from System Marketing Discoveries, Ukraine
Highlights of data analysis
4,285 medicines procured in 2013 with total spending of 2,870,000,000 uah (362 million USD)

9 out of all procured medicines account for 20% of total spending and 48 of them account for 50%.

The remaining 4,237 medicines
### 2013: Top 9 out of total 4,285 medicines procured nationwide

<table>
<thead>
<tr>
<th>INN*</th>
<th>UAH (million)</th>
<th>(%) total UAH</th>
<th>Units</th>
<th>% total units</th>
</tr>
</thead>
<tbody>
<tr>
<td>dTP, polio, HiB vaccine</td>
<td>139</td>
<td>4.84%</td>
<td>892,406</td>
<td>2.25%</td>
</tr>
<tr>
<td>lopinavir and ritonavir</td>
<td>124</td>
<td>4.34%</td>
<td>268,319</td>
<td>0.68%</td>
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<tr>
<td>dTP vaccine</td>
<td>72</td>
<td>2.51%</td>
<td>672,995</td>
<td>1.70%</td>
</tr>
<tr>
<td>Rituximab</td>
<td>51</td>
<td>1.79%</td>
<td>6,555</td>
<td>0.02%</td>
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<tr>
<td>Imatinab</td>
<td>45</td>
<td>1.59%</td>
<td>17,441</td>
<td>0.04%</td>
</tr>
<tr>
<td>human insulin semisynthetic</td>
<td>43</td>
<td>1.50%</td>
<td>373,811</td>
<td>0.94%</td>
</tr>
<tr>
<td>Insulin glargine</td>
<td>38</td>
<td>1.34%</td>
<td>44,111</td>
<td>0.11%</td>
</tr>
<tr>
<td>Tenecteplase</td>
<td>37</td>
<td>1.31%</td>
<td>2,679</td>
<td>0.01%</td>
</tr>
<tr>
<td>human coagulation factor VIII</td>
<td>36</td>
<td>1.26%</td>
<td>23,331</td>
<td>0.06%</td>
</tr>
</tbody>
</table>

Grand total: 2.87 billion UAH (US$ 362 million)

*Trade names not listed in this presentation per FIP guidelines*
4,630 medicines procured in 2014 with total spending of 3,130,000,000 uah (337 million USD).

7 out of all procured medicines account for 20% of total spending and 42 of them account for 50%.

The remaining 4,588 medicines...
<table>
<thead>
<tr>
<th>INN*</th>
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<th>% total UAH</th>
<th>Units</th>
<th>% total units</th>
</tr>
</thead>
<tbody>
<tr>
<td>peritoneal dialysis solution</td>
<td>193</td>
<td>6.17%</td>
<td>1,296,761</td>
<td>2.89%</td>
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<tr>
<td>dTP, polio, HiB vaccine</td>
<td>118</td>
<td>3.77%</td>
<td>471,800</td>
<td>1.05%</td>
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<tr>
<td>lopinavir and ritonavir</td>
<td>106</td>
<td>3.39%</td>
<td>182,775</td>
<td>0.41%</td>
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<tr>
<td>Micafungine</td>
<td>63</td>
<td>2.01%</td>
<td>8,391</td>
<td>0.02%</td>
</tr>
<tr>
<td>Insulin glargine</td>
<td>56</td>
<td>1.80%</td>
<td>59,813</td>
<td>0.13%</td>
</tr>
<tr>
<td>Imatinib</td>
<td>49</td>
<td>1.58%</td>
<td>2,823</td>
<td>0.01%</td>
</tr>
<tr>
<td>human insulin semisynthetic</td>
<td>46</td>
<td>1.49%</td>
<td>407,595</td>
<td>0.91%</td>
</tr>
</tbody>
</table>

Grand total 3.13 billion UAH (US $337 million)

*Trade names not listed in this presentation per FIP guidelines
10 ATC categories account for 52% of expenditures
(UAH 10.4 billion; USD 853 million – 2013-2015 data)
Imported products account for a large proportion among top ATC categories by public spending

- A10C Human insulins and analogues: 67.3%
- K06B Peritoneal dialysis solutions: 100.0%
- J05C HIV antivirals: 99.5%
- J07B Combinations of vaccines: 100.0%
- B02D Blood coagulation: 86.8%
- J04A Antitubercular products: 66.4%
- J01K Aminoglycosides: 94.8%
Why did insulins, both fast-acting and intermediate acting consume 16.1% (USD 135 million) of total UAH 10.4 billion (853 million USD) in Ukraine’s hospital sector for medicines?

What are the cost drivers?
Just 7 of 40 products account for 52% total insulins expenditure dominated by analogue insulin pens*

*Trade names not listed in this presentation per FIP guidelines; 2013-2015 cumulative data
Of 11 product forms, insulin cartridges and pens account for 65% of total spending on insulins*

* 2013-2015 cumulative data
Analogue insulins v/s human insulins

• WHO, Cochrane, and European Association for Study of Diabetes has found no evidence of significant clinical benefit of analogue insulins over human insulins

• In 2010, Germany stopped reimbursing insulin analogues on economic grounds alone due to significant budgetary impact

• The U.K. was concerned that its National Health Service could be “bankrupted” because spending on diabetes medicines had reached 10% of its total pharmaceutical budget

http://www.who.int/selection_medicines/committees/expert/18/applications/Insulin_review.pdf
The need for rational selection of medicines: Improving governance and increasing transparency

USAID/SIAPS technical assistance resulted in Ministry of Health approved decree:

- Process for competitive selection of members for EML committee (12 selected out of 31 candidates)

- Selection methodology of medicines for the National EML (Ministry of Justice approval pending)

First phase training on Health Technology Assessment methodologies provided (second phase in September-2016)

EML = Essential Medicines List
Concluding remarks:

• Ukraine has the opportunity to rationalize limited public funds and choose only safe and effective medicines that offer the best value for money

• There is need for a robust national medicines policy that includes multifaceted measures, particularly on pricing and promotion of generic policies

• Political will to address corruption and regulations to promote good governance is essential to improve efficiencies