Making a difference in Universal Health Coverage and the SDGs with Big Data

WHO meeting on Ethics, Big Data and AI: Miami, 12-13 October 2017

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The Conundrum of UHC and tracking progress toward SDGs

• **Africa and the SDG dilemma:** the baseline, access measurements and data; lessons from the past

• **Equity:** finding and reaching the extreme poor with essential services for universal health coverage and attain SDGs

• **Results:** tracking progress in a complex environment

• **Means:** Leveraging technological opportunities

• **Use:** what next?
## Ghana Country Poverty Brief

### COUNTRY POVERTY BRIEF

**SUB-SAHARAN AFRICA**

**GHANA**

October 2017

<table>
<thead>
<tr>
<th>POVERTY</th>
<th>Rate (Number of Poor)</th>
<th>Period</th>
</tr>
</thead>
<tbody>
<tr>
<td>National Poverty Line</td>
<td>24.2% (6.2 million)</td>
<td>2012</td>
</tr>
<tr>
<td>International Poverty Line</td>
<td>13.6% (3.5 million)</td>
<td>2012</td>
</tr>
<tr>
<td>2.0 in Local Currency Unit or US$1.90 (2011 PPP) per day per capita</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lower Middle Income Class (IC) Poverty Line</td>
<td>34.9% (9.0 million)</td>
<td>2012</td>
</tr>
<tr>
<td>3.3 in Local Currency Unit or US$3.20 (2011 PPP) per day per capita</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Upper Middle Income Class (IC) Poverty Line</td>
<td>63.2% (16.3 million)</td>
<td>2012</td>
</tr>
<tr>
<td>5.7 in Local Currency Unit or US$5.50 (2011 PPP) per day per capita</td>
<td></td>
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</table>

### SHARED PROSPERITY

Income or Consumption growth of the bottom 40 percent | N/A | N/A |
## Ghana Poverty Country Brief

### Shared Prosperity

<table>
<thead>
<tr>
<th></th>
<th>N/A</th>
<th>N/A</th>
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</thead>
<tbody>
<tr>
<td>Income or Consumption growth of the bottom 40 percent</td>
<td>N/A</td>
<td></td>
</tr>
</tbody>
</table>

### Inequality

<table>
<thead>
<tr>
<th></th>
<th>0.42</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gini Coefficient</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shared Prosperity Premium</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Difference between the income or consumption growth of the bottom 40 percent and that of the average</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### GDP Growth

<table>
<thead>
<tr>
<th></th>
<th>N/A</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annualized GDP per capita growth</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Sources: WDI, SSATSD using GLSS-VI/SSAPOV/GMD. National poverty lines are provided by national statistical offices.

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**PROGRESS ON POVERTY AND EQUITY**
Ghana’s strategy for UHC

- The NHIS was established by an Act of Parliament in 2003 (Act 650).

- Initiative by Government to secure financial risk protection against the cost of healthcare services for all residents in Ghana.

- Act was revised in 2012 – NHIS Act 850
i. **Breadth**  
(Population Coverage)

ii. **Depth**  
(Benefit Package)

iii. **Height**  
(Proportion of Costs covered)
Distribution of Active Membership

Active membership as at December 2016 - 11.4 Million
DHS, Big Data and Reaching the poor – who are we looking for
The African Health Markets for Equity (AHME) partnership is a $60 million investment by the Bill and Melinda Gates Foundation and the UK’s Department for International Development to increase coverage of priority health interventions amongst the poor.

The Health in Africa Initiative of the World Bank Group engaged with the process aimed at demonstrating the effective use of a technology based e-version of the Proxy Means Test Tool in identifying and targeting the poor.

The PMT was already being implemented manually by the Ministry of Gender, Children and Social Protection on behalf of government for its cash transfer program but used a community targeting approach.
Targeting Process

Enumerators

Mobile Networks

Web Service, Scoring Engine, Web Portal

Dashboards

WhatsApp Groups

Operations Room

Technical Support, Performance Tracking, Enumerator Support, Quality Control and Assurance Monitoring and Evaluation
Registration into NHIS Process

Enumerators

CHITS Issued

Registration Centre

Data, Photo and Biometrics Captured,
NHIS Card printed and delivered to Client

Web Service, Scoring Engine, Web Portal

Operations Room

Dashboards

Technical Support,
Performance Tracking,
Enumerator Support,
Quality Control and Assurance,
Monitoring and Evaluation

NHIS

MINISTRY OF GENDER, CHILDREN & SOCIAL PROTECTION

WORLD BANK GROUP

Health, Nutrition & Population

MARIE STOPES GHANA

Children by choice, not chance

PHARMACCESS GROUP
Field Data Collection: House-to-house Enumeration

Enumerators visited each household and interviewed the Head of Household.

Photographs of available Household members as well as the Household Dwelling were captured and synced to the Web Service.
A WhatsApp group was setup for each Team of Enumerators. This enabled the Operations Centre to communicate with the enumerators in real-time and provide support to the Enumeration Supervisors.

This was also useful for complementing the training the enumerators has received and for troubleshooting and debugging the App during the initial roll-out.
The Enumerator Activity Tracker gives us an overview of each enumerator’s performance and the functionality to detect abnormal activity and data and thereby, prevent ‘gaming’. Further, we also have the ability to view the location of the enumerators on a Map.

On one occasion in the Upper East Region, the Operations Centre was able to alert some of the enumerators that they had strayed into Burkina Faso!
Dashboard for Tracking Progress and Monitoring Performance
Dashboard for Tracking Progress and Monitoring Performance

Dashboard provides the necessary indicators to visually observe the progress of the Targeting Exercise.

This provided useful insights to the challenges that teams were facing and enabled the Operations Centre to react pro-actively to ensure that project goals would be met.
The Household Data Viewer enables our Quality Control team to view and further Quality Assure that household data coming from the enumerators.

This enabled us to continuously train the enumerators to ensure that data quality was maintained throughout the enumeration exercise.
The Data Terrain
Targeting and Identification in Numbers

<table>
<thead>
<tr>
<th>Regions</th>
<th>Districts</th>
<th>Communities</th>
<th>Enumerations Days</th>
<th>Enumerators deployed at Peak</th>
<th>Households Enumerated</th>
<th>Individuals Enumerated</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>12</td>
<td>312</td>
<td>221</td>
<td>164</td>
<td>125,683</td>
<td>667,169</td>
</tr>
</tbody>
</table>
Registration into NHIS Experience in Pictures
Registration into NHIS Results

27,711 Households Qualified
179,972 Individuals Qualified
150,858 Total Registrations
416,166 Paying Members Registered for the first time
Identified poor – facilities overlap
Key Results / Lessons Learnt

1. Enumeration errors due to inconsistent data was eliminated as a result of the Electronic Data Collection.

2. The time between enumeration and qualified households receiving benefits was reduced as a consequence of the electronic data collection, combined with the real-time data transmission and scoring.

3. Collecting GPS data on the location of each household, makes it easier for ensuring that an area has been adequately covered, locating households on subsequent visits and also for supporting other social intervention programs.

4. Real-time communication (via WhatsApp Group) improved enumerator output, both in terms of Data Quantity and Quality.

5. Real-time monitoring is important for preventing ‘gaming’ and pro-actively addressing enumeration challenges to ensure that project goals are achieved.

6. It is important to continuously monitor and update Enumerator training to address local issues.
LIGHTS OUT
THANK YOU