Supply Chain Challenges for COVID-19 Response in Africa

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More Testing to Control COVID-19

- In the absence of vaccine and specific treatment, immediate identification and isolation of cases, tracing and quarantining of contacts (contain or slow progression of pandemic)
- Wide spread but informed testing strategy specially at the early phase of the pandemic is key
- Calculating testing numbers per million population is a proxy indicator for testing program but without considering positivity rate, it may be misleading (testing is not a vaccine)
COVID-19 Testing Capacity in Africa

Equipment Footprint Analysis (Manual RT-PCR, GeneXpert, Automated PCR platforms)

45 Million tests

Harmonizing with HIV and TB Programs
35 million COVID tests

Private sector, veterinary, research and academic institutions

Antigen or antibody based tests not considered

20 Million tests

Continental testing capacity = 55 million tests
Projected COVID-19 Testing Numbers

- There are no reliable modeling tools and some modeling exercises generated outrageous numbers.
- WHO estimate for Africa indicated 29-44 million people could be infected in the first year of the pandemic (average of 36.5 million).
- Current containment and mitigation policies could reduce the rate by 40% (infection rate may come down to 21.9 million).
- Based on the testing strategy currently recommended, all suspected cases did not need to be tested specially at a later stage of the pandemic (testing could get only 60% of expected infections = 13.1 million).
- To identify 13.1 million cases, testing has to be done on 87 million suspected cases (taking maximum of 15% positivity rate).

- Total projected tests in Africa per annum = 87 million.
Progress on COVID-19 Testing in Africa

- 1.62 million tests
- Positivity rate 5.7%
- 45% increase in two weeks
Supply Chain Challenges

1. Access for COVID-19 diagnostics is very difficult

88 countries have put temporary export restriction on COVID-19 related products Including diagnostics
Supply Chain Challenges----

2. Supply of incomplete materials

- Laboratories in Africa are now reliant on partner support or donations (example Ethiopian PM-Jack Ma initiative provided support for 1.5 million tests, Africa CDC distributed 300,000 tests, WHO and others have provided tests)

- Test kits provided by partners or from donations usually may not be complete to allow testing (detection, extraction kits, swabs, VTMs and other necessary supplies)

- Other supplies for PCR laboratories (plates, tubes, pipette tips, PPEs etc are not considered)
Supply Chain Challenges-----

3. Lack of forecasting and quantification at country level

• Testing projections have to be done systematically at country level and all necessary supplies have to be quantified

• These quantities can be used for pool procurement at regional or continental level

• Can also be used to present to partners or donors or Finance Ministers for funding
Supply Chain Challenges-----

4. Quality of products

• There are many products that may not have been validated properly

• Conducting systematic evaluation is challenging because of lack of time or urgency to use the items

• Lack of sufficient capacity to evaluate technologies quickly
Supply Chain Challenges

5. Distribution

<table>
<thead>
<tr>
<th>Time to Deliver</th>
<th>Percentage</th>
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</thead>
<tbody>
<tr>
<td>Delivered in 3 days or less</td>
<td>48%</td>
</tr>
<tr>
<td>Delivered between 4-10 days</td>
<td>30%</td>
</tr>
<tr>
<td>Delivered above 10 days</td>
<td>22%</td>
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Time to Deliver items to Member States (n=29)
Recommendations

- Projection of testing number per country
- Make quantification of all necessary supplies
- Pooled procurement supported by technology (e.g. Procurement platform being built at AU)
- Engagement of Member States to allow movement of cargo
- Bundling for items for procurement
THANK YOU