**Position Paper 4: Interventions to Support Post-Lockdown Measures**

**April 22-23, 2020**

**Purpose of memo:** To inform decision of ending the current lockdown in Nigeria, while taking into account health impact, wage loss and food security impacts, and operational feasibility of implementing non pharmaceutical interventions (NPI)

**Summary of implementation approach for NPIs**: The synthesis of considerations below is based on a review of NPI implementation in other countries, with a focus on LMICs where possible. While the effect of these interventions on COVID-19 spread will take some time to be evident, the comparison provides options to consider while accounting for context and resource constraints:

* School closures: Nigeria has already postponed national and most local exams due to the closures. **Egypt1** has allowed major national exams such as the university entry under distancing rules. Nigeria could consider a similar approach with fewer students each session and prolong the exam season. Other measures to mitigate contact while keeping schools closed include TV and Radio based educational content as seen in **India**, delivering textbooks to most in-need pupils, as seen in **Argentina**.
* Banning of large public gatherings: Nigeria could enforce limits on gatherings as in **Ghana** and public transport crowding limits (e.g. to the 70% threshold) as seen in **South Africa.2** As seen in **India**, open-air markets may need policing and visible signage.
* Wearing of masks / face coverings: NCDC has already released guidelines on the use of both disposable triple layer masks as N95 masks for health professionals as well as more recent public guidelines which is based on WHO guidelines. Given shortage of masks, consider cloth-based face coverings and usage guidelines for the public as seen in the **U.S3.**
* Public information campaigns**:** Nigerian Government already has an information campaign which provides information and tackles disinformation. Penalising misinformation as done in **South Africa** may help. Other options include prioritising the hardest-to reach rural areas to raise awareness and targeting Internet Service Providers and popular internet blogs/websites.

**Summary of modeling: Preliminary** **SEIR modeling investigated the relative impact of 7 scenarios on projected symptomatic cases:**

1. “Upper bound” of cases: Lockdown remains till April 27, followed only by limited social distancing and information campaigns.
2. “Lower bound of cases”: Full national lockdown in place for several months.
3. School closings.
4. Ban on group gatherings (e.g., celebratory events, religious worship, meetings of people in workplaces and markets).
5. Wearing of face coverings.
6. Intensifying public information campaigns (e.g. campaigns to increase handwashing, respiratory hygiene, social distancing, etc.)
7. Combination of NPIs in scenarios 3-6

**All scenarios assume a theoretical maximum of implementation effectiveness, based on a set of benchmark countries. This level of implementation effectiveness would likely be challenging to achieve, especially social distancing within workplaces.** Prior evidence on impact of NPIs is based on levels of effectiveness generally observed within lockdown context, thus impact is likely to be lower if lockdown not in place. This caveat is particularly important for the scenario 7. The difference in projected symptomatic cases after one month in each of the following median scenarios as compared to “upper bound” and “lower bound” is as follows:

* School closings: Up to 85% lower compared to “upper bound”; ~390% higher than “lower bound”
* Ban on group gatherings: Up to 45% lower compared to “upper bound”; ~1700% higher than “lower bound”
* Wearing of face coverings: Up to 74% lower compared to “upper bound”; ~800% higher than “lower bound”
* Intensifying public information campaigns: Up to 61% lower compared to “upper bound”; ~1200% higher than “lower bound”
* Combination of all NPIs: Up to 97% lower compared to “upper bound”; 8% higher than “lower bound”
* “Lower bound” scenario (full lockdown) would result in up to 97% reduction in symptomatic cases than “upper bound”

Modeling based on public data estimates that ending the lockdown (and implementing alternate NPIs in parallel to reduce pandemic spread) could allow up to 11M-20M individuals who likely lost daily earnings during lockdown to return to work.

**Recommendation:**

* Given impact of asymptomatic transmission, a full range of NPIs are likely needed to interrupt community transmission.
* School closures, banning of gatherings, wearing of masks / face coverings, and increasing public information campaigns could limit spread of pandemic in the event that lockdown is ended. Consider implementing a bundle to achieve maximum impact.
* Nigeria will need to continue a differentiated and adaptive response to the pandemic by geography as the pandemic evolves. Focus on states with the largest numbers (Abuja, Kano, and Lagos), rapid growth (Kaduna and Kano), states with >10 active cases and consistently zero days to last case report.
* Other NPIs needing further consideration include extensive temperature checks in public spaces, isolation for vulnerable populations, and internal transit restrictions between geographical areas (states).
* Minimizing transmission at healthcare facilities will be a critical element of any removal of lockdown.

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***\* The Nigeria COVID-19 evidence synthesis group is chaired by Prof Ibrahim Abubakar, scientific and technical advisor to the PTF.***

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