THE CENTER FOR POLICY IMPACT IN GLOBAL HEALTH

Reaching herd immunity through COVID-19 vaccination: a policy research program

Country readiness assessment

The Center for Policy Impact in Global Health at the Duke Global Health Institute is conducting a study to assess country-level capacity for delivery of COVID-19 vaccines in low- and middle-income countries.

Why this study is needed: In order to achieve herd immunity for COVID-19, the world would first need to develop a successful vaccine, and then countries would need to ensure that these vaccines are successfully delivered to their populations. While ongoing efforts to develop a vaccine currently dominate the global agenda, little is being done to address country-level capacity to cope with the financing and logistic challenges needed to deliver on this unprecedented effort.

This study is therefore important for three reasons. First, developing a successful vaccine is necessary but *not* sufficient for achieving herd immunity. Once the problem of lack of an effective vaccine is solved, the rate limiting step to achieving herd immunity will be country health systems capacity. Second, health systems strengthening and capacity building require significant investments of time and money. Even in situations where money is available, the lead time required for implementing systems strengthening before results can be seen is substantial. This can severely limit the success of a large-scale health intervention such as COVID-19 vaccination scale-up. Third, there is remarkable variation in the vaccination delivery capacity of different countries, so solutions for one country may not be applicable to others.

Study approach and outcomes: Our study will use a mixed-methods approach to identify potential health systems challenges to COVID-19 vaccination scale-up. It will have three objectives:

1. To estimate a global price tag for the delivery of a successful COVID-19 vaccine to the target populations in low- and middle-income countries (LMICs).
2. To understand and quantify the major health systems barriers that LMICs will face in scaling-up access to a COVID-19 vaccine
3. To explore potential solutions to achieving effective scale-up of COVID-19 vaccination through scenario planning and bottleneck analysis in four LMICs

To achieve these goals, we will organize our work to enable the generation of insights and evidence that would be useful for policy makers at the country-level. Therefore, in addition to broad general analysis (e.g., estimation of the global price tag), we will conduct in-depth analysis in four selected countries.

Study contacts

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