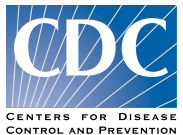
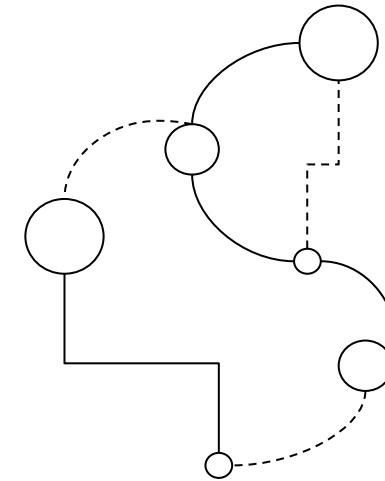




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***Last-Mile Delivery of Vaccines in Remote Areas:
A Randomized Controlled Trial in Rural Sierra Leone***

*Maarten Voors, Associate Professor,
Development Economics, Wageningen University, the Netherlands.*



The Problem

Situation overview

- *Vaccination rates in LMIC are low*
- *The high global demand for vaccines and limited supply have **benefited countries with payment capacity** and geopolitical importance*
- *Arce et al (Nature Medicine 2021): Covid-19 **vaccine acceptance** is higher in many LMIC (average 80%), compared to USA or Russia*
- *Focus on **last-mile delivery challenges***

Problem statement

- *In Sierra Leone: just 20% of the eligible population (7 million) is fully vaccinated.*
- *In rural areas, just 6%.*
- ***88% say they are willing to take a vaccine if available***
- *Vaccines **are available** in clinics*
- *It takes (on average) **3 hours** to get to a vaccination center each way, and it costs **6.5 USD** each trip*



The Solution

Actions

- *Partnership between Sierra Leone Ministry of Health, Concern Worldwide, the International Growth Centre (IGC), Yale and Wageningen University.*
- *150 communities in rural Sierra Leone,*
- *Cluster Randomized Trial, 1:2 ratio*

- *Primary outcome: vaccination rate among eligible population*
 - *measured using a respondent-level question on whether they took the vaccine (any type) and inspection of their vaccination card (if consented)*

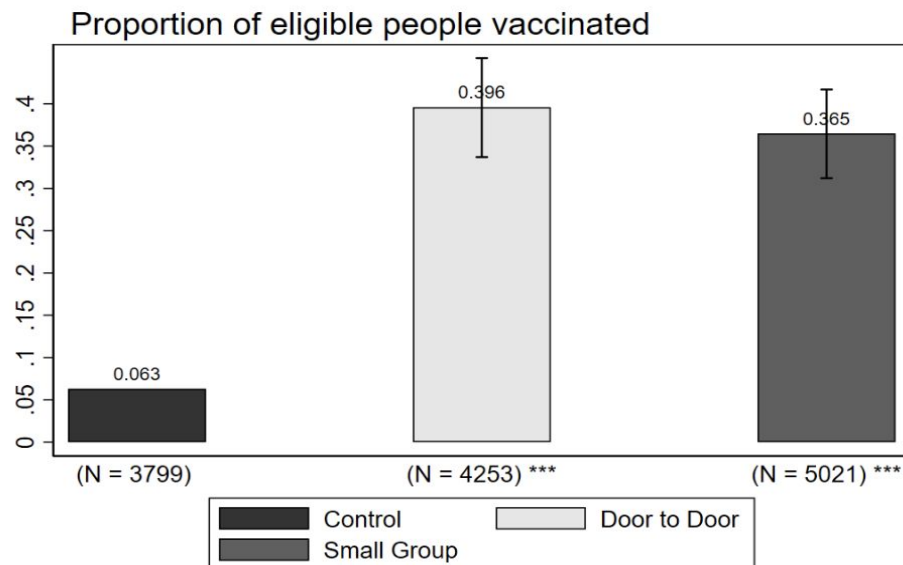
- 1 Control Group
- 2 Last Mile Delivery (LMD)
Mobile Vaccination Team Visits Village on motorbikes, prepares the community
- 3 LMD + Individual versus group outreach



Outcomes and Key Learnings

Outcomes and Impact

- **48-72 hour intervention produced a 27 percentage point increase in adult vaccination rates**
- Increase is beyond most existing studies
- Larger impact on men and elderly
- Increase in knowledge and attitudes



Key Learnings

- **A proof-of-concept:** we can get large numbers vaccinated - even in the most remote, rural areas - quickly and cost-effectively
- Extends beyond COVID-19.
 - Vaccination campaigns in "zero uptake" areas
 - More pandemics will happen, we now need to invest in **preparedness**.
- **Scale up** locally and in other nations with similar last-mile delivery challenges
- Further improve **cost-effectiveness**
 - Address mis-information
 - Performance-based incentives for providers
- Conduct **advocacy** in partnership with Unicef, GoSL
- Message to HICs and Pharmaceutical companies: **Hesitancy and last-mile delivery challenges are not a good excuse to withhold doses.**
- Message to LMICs: Invest in creative last-mile delivery infrastructure



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THANK YOU



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