USAID MEDICINES, TECHNOLOGIES, AND PHARMACEUTICAL SERVICES (MTaPS) PROGRAM

Background

• MSH and COVID-19 Vaccine Delivery Partnership (COVDP) Working Group are refining a costing model to estimate the price of global vaccine rollout.

• Components:
  – Findings from global surveys (Nov 2021 & May 2022)
  – Rolling out in-country costing studies (Malawi & Madagascar)
  – Assessing in-house data on vaccination program costs and outputs (ACCESS)
Background

- The USAID-funded ACCESS program supported the Ministry of Public Health in Madagascar to establish vaccinodromes in 15 regions.
- Vaccinodromes are specific COVID-19 vaccination sites in popular and **high-visibility** locations, i.e., hospitals, shopping centers, and markets.
- Vaccinodromes could be a highly effective means of **demand creation** to expand accessibility to and visibility of COVID-19 vaccines for target populations.

Objective

- The USAID-funded Medicines, Technologies, and Pharmaceutical Services (MTaPS) program will conduct a costing analysis from the donor’s perspective to **estimate the incremental financial delivery costs** needed to support countries in delivering COVID-19 vaccinations through vaccinodromes.
Costing the delivery of COVID-19 vaccinations through vaccinodromes in Madagascar

**Methodology**

- Delivery cost elements include labor, travel, supplies, and materials. Existing available health system resources (storage, existing staff, existing buildings, and vehicles) and vaccine costs are not considered for the purpose of this study.
- Because of the inherent temporary nature of vaccinodromes, capital costs for vaccinodromes are depreciated under a useful life of 1 year. Sensitivity analysis using WHO CHOICE benchmarks for useful life were conducted.
- Vaccination output is the number of doses delivered by the vaccinodromes throughout the program implementation period.

**Expected results and discussion**

- The analysis will result in an estimated cost per vaccine dose delivered through vaccinodromes in 15 regions in Madagascar.
- More data collection and analysis will be needed to compare to other vaccine delivery settings (health facility, mobile outreach, etc.).
Country Deep Dive: Study Objective

- **Primary objective:** Estimate the actual cost of delivering COVID-19 vaccines through various delivery strategies utilizing a survey data collection tool

- **Sub-objectives:**
  - The cost of delivering COVID-19 vaccines through various strategies (e.g., hospital-based, outreach, mass vaccination sites, campaigns) at different levels of delivery volume
  - The cost of reaching different target populations (e.g., health workers, elderly, vulnerable populations)
  - The cost of delivery of products with different cold chain requirements (e.g., regular 2-8 °C, -20 °C, ultra-cold chain of -60-80 °C)
  - The different resource requirements for certain delivery strategies (in terms of numbers of health workers, cold chain equipment, etc.)
Country Deep Dive: Study Methods

- ~20 facilities selected in both countries:
  - Urban and rural locations
  - High and low volume sites
  - Mix of delivery methods
  - Varying cold chain requirements
- On-the-ground teams will survey management bodies (facilities, government entities) on areas specific to vaccine rollout
- Study design tailored to the country-specific context in collaboration with the government
Country Deep Dive: Practical Challenges

- **Difficulties obtaining ethical approval/green light:**
  - Changing roles within MoH (MSH Madagascar)
  - Special task forces no longer operational (UNICEF/ThinkWell)
  - Sensitivities surround human research (MSH Malawi)
  - Political sensitivities around misuse of funding (UNICEF/ThinkWell)
  - High visibility of COVID-19 work – multiple approvals required
    - Approval process unclear
  - Local ministry/government involvement in activity
    - Selecting sites in conjunction with MoH (MSH Madagascar)
    - EPI involvement in Malawi (MSH Malawi)
    - Presidential task forces (UNICEF/ThinkWell) – potentials for audit

- **Difficulties coordinating with partners**
  - Cote D’Ivoire, Bangladesh, DRC (UNICEF/ThinkWell)

- **Methodological challenges**
  - Precision when gathering data regarding certain aspects of the tool (i.e. staff time)
Country Deep Dive: Practical Challenges (cont.)

• Prioritization of COVID-19 vaccination
  – Low vaccination rates in target countries
  – Countries have limited resources for COVID-19 activities (budget constraints, limited HR)
  – Other diseases and public health challenges

• Logistical challenges
  – Lack of target population data
    • Availability of data at facility level
  – Unexpected costs (fuel costs, extra IRB sessions in Malawi)
  – Managing studies remotely
Lessons Learned

• Importance of in-country technical expertise (MSH staff on the ground)
  – Local understanding of vaccination context, facilities, IRB process
  – Local relationships with government/approval entities

• Including local ministry officials in an advisory/data collection role
  – EPI team involved in data collection in Malawi
  – Legwork ahead of time to coordinate as much as possible without MoH

• Ensure availability of data/efficiency of data collection
  – Targeting personnel best placed to complete data collection tool (i.e. EPI personnel) and minimizing the burden on facilities

• To incorporate any lessons in future emergency planning i.e. Ebola or conflict
Thank you

Questions?