Management Sciences for Health

Management Sciences for Health is a global health nonprofit. We make foundational changes to health systems to protect people from disease and improve their health. We do not replace or run parallel systems in a country—we collaborate with our partners, from Ministries of Health to civil society and the local private sector, to strengthen and complement existing health systems. For more information, visit www.msh.org.

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FACILITATING COVID-19 VACCINE INTRODUCTION AND DISTRIBUTION IN LMICS

Vaccine mockup from
Unsplash.com/D.Schludi

In a push to end the COVID-19 pandemic, the COVAX initiative,[1] led by Gavi, the Coalition for Epidemic Preparedness Innovations, and WHO, is accelerating the process for rapid and equitable access to vaccines in low- and middle-income countries (LMICs). With several clinical trials completed and others under way, the first supply of the COVID-19 vaccine was available at the end of 2020. While current introduction and availability have been limited to high-income countries, LMICs must be ready to undertake the challenges of a COVID-19 vaccination campaign to reach global recovery from the pandemic.[2]

Making decisions on COVID-19 vaccine options, introduction, deployment, and monitoring poses complex challenges to governments. Success depends on how key essential components are planned, implemented, monitored, and evaluated. Management Sciences for Health's (MSH) strong country and local relationships and on-the-ground experience ensure rapid support to governments for the immediate, coordinated actions needed for timely access to and adequate and equitable distribution of the COVID-19 vaccine.

MSH's Support for COVID-19 Vaccine Deployment, Implementation, and Monitoring

MSH's approach to support countries with national planning and deployment of COVID-19 vaccines is aligned with WHO's guidance.[3] MSH is equipped with in-country technical teams for immediate assistance in 10 key areas pivotal to successful introduction and distribution of COVID-19 vaccines.

MSH strengthens country health systems to meet the challenge of COVID-19 by:

- Tailoring assistance to be responsive to country's needs, based on a rapid situational analysis
- Leverage existing local structures and systems for quick response
- Design interventions on principles of pharmaceutical system strengthening to steer health system gains
- Apply and integrate proven tools, such as for pharmacovigilance and supply chain management

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[1] Gavi, https://www.gavi.org/vaccineswork/covax-explained

[2] The Centers for Disease Control and Prevention, www.cdc.gov/coronavirus/2019-ncov/vaccines/faq.html

[3] WHO, Guidance on developing a national deployment and vaccination plan for COVID-19 vaccines

MSH's Technical Areas of Assistance

1 Evidence-based policy, coordination, and planning

Support the country in assessing and planning based on vaccine efficacy, safety data, and costs and benefits.

- Conduct horizon scanning and market intelligence on vaccine pipeline
- Analyze options and develop scenarios
- Conduct rapid situational analysis of national preparedness
- Adapt vaccine allocation and distribution frameworks
- Conduct comparative technical analyses for decision making
- Establish/adapt institutional arrangements and develop a national deployment plan

2 Financing Strategy

Map financing sources, determine gaps, and develop a financing strategy.

- Assess costing and budget impact
- Analyze value for money and financial flows
- Mobilize resources and ensure sustainability
- Access global mechanisms for financing and pooled procurement

3 Provide regulatory support for vaccines and supplies

Work with regulatory authorities to accelerate introduction of vaccines and supplies and ensure quality

- Expedite registration
- Align laws and regulations
- Facilitate bilateral deals and imports

4 Manage procurement and supply chain

Determine strengths and gaps to help develop quick solutions for cold chain requirements and to preserve vaccine stability and shelf life

- Create vaccine procurement and supply chain strategy
- Create pricing strategy and risk sharing agreements
- Prioritize vaccine demand and quantification
- Strengthen cold chain
- Integrate distribution systems

5 Optimize service delivery model

Determine and deploy efficient service provision modalities for the vaccine

- Map client pathways
- Leverage existing services through integration
- Differentiate based on population and prioritization
- Identify resource requirements for delivery models and align them with available resources

6 Plan and manage health workforce

Optimize the health workforce to support vaccine accessibility

- Identify, map, and plan for human resources for health (HRH)
- Identify areas with HRH shortages and evaluate options to bridge the gap
- Promote task sharing and revise job descriptions to meet skills-mix needs
- Create solutions to address service delivery challenges

7 Leverage platforms for data collection and technovigilance

Adapt and enhance data management platforms to support deployment

- Adapt PV monitoring systems for vaccine safety
- Implement tracker systems to monitor immunization progress and certify vaccination status
- Enhance electronic logistics management information systems to manage vaccine distribution
- Support data analysis for quantification and immunization scenario planning

8 Monitor patient safety

Establish or adapt a national PV system to ensure patient safety, including:

- PV* regulations
- Safety awareness
- Enhanced spontaneous reporting systems to track adverse reactions to vaccines
- AEFI** causality analysis and decision making

9 Advocacy and social mobilization

- Implement communications strategies, advocacy materials, and local partnerships to engage communities and prevent the spread of misinformation
- Identify methodologies that perform best for the specific context
- Motivate vaccine demand, acceptance, and uptake

10 Monitoring and evaluation

Develop a vaccine introduction results framework and monitoring plan that will reflect the needs of the country.

PV* = pharmacovigilance
AEFI** = Adapted electronic adverse events following immunization