Strengthening Immunization for the Urban Poor: Experiences and Lessons Learned from Five Country Studies

DRC, GHANA, HAITI, KENYA & KYRGYZSTAN

BACKGROUND
With support from Gavi, the Vaccine Alliance (Gavi) in 2017 and 2018, JSI Research & Training Institute, Inc. (JSI) reviewed the immunization status of the urban poor communities in metropolitan centers of five countries: the Democratic Republic of Congo (DRC), Ghana, Haiti, Kenya, and Kyrgyzstan. The findings from JSI’s analysis contributed to the identification of barriers to access and utilization of immunization services facing urban poor communities, and development of short- and long-term recommendations to address these barriers.

This document identifies cross-cutting conclusions from the analyses and synthesizes JSI’s experiences for countries and metropolitan areas to adapt to their specific contexts. These lessons learned are designed to guide stakeholders as they engage with key city planners, policymakers, and financial managers for planning and investment decisions on how to improve routine immunization service delivery to underserved communities in urban areas.

As each context is different, there is no one-size-fits-all solution. Each barrier and solution should be considered with local stakeholders and resource availability in mind — to help in prioritizing investment, exploring potential funding opportunities, and evaluating user or implementer perspectives.

DATA COLLECTION TOOLS AND APPROACHES
The five countries used a mixed-method approach for this analysis that considered available resources and context, prioritized gaps in data:

a) Quantitative: All countries conducted secondary analysis of existing immunization administrative data from national to health-facility levels, surveys such as Multiple Indicator Cluster Surveys (MICS), Demographic and Health Surveys (DHS), and immunization coverage estimates from the World Health Organization (WHO) and the United Nations International Children’s Fund (UNICEF). Primary quantitative data collection included a rapid Lot Quality Assurance (LQA) survey for a snapshot of key immunization service delivery indicators, and structured data collection forms to capture information about human resources, cold chain capacity, logistics, and other essential Expanded Program on Immunization (EPI) data.

b) Qualitative: Qualitative data collection included stakeholder mapping; key informant interviews (KIs) with EPI members, health authorities, and health facility staff; and focus group discussions (FGDs) with community members and caregivers.

MAP OF URBAN IMMUNIZATION SITUATIONAL ANALYSIS COUNTRIES
COMMON BARRIERS

- Population mobility and quasi-legal status of individuals and communities make it very hard to estimate denominators, so coverage rates may be inaccurate and numerator trend analysis is not conducted;
- Catchment areas are not well defined and are based on out-of-date population estimates;
- There is no planning for equity with a focus on identifying politically or economically marginalized communities;
- Vulnerable communities do not trust the system (health or otherwise), and often lack the knowledge, agency or resources to actually access and use services;
- Client-provider interactions are under-emphasized or poorly managed, in part due to over-burdened health facility staff without adequate training on how to address the needs of urban poor communities;
- Services are not designed with the convenience of communities in mind;
- Private sector facilities are not routinely monitored or sufficiently engaged for service quality or data collection;
- There is little communication or civil society involvement to mobilize communities or educate them about the benefits of immunization;
- Coordination mechanisms are weak among municipalities, ministries of health, and service providers.

COMMON SHORT-TERM (<1 YEAR)/ LOW RESOURCE SOLUTIONS

- Adjusting service times and letting communities know when services are offered;
- Providing appointments, vaccination cards, and triage systems to reduce waiting times and communicate return dates;
- Updating population numbers through a regular community survey / micro-census;
- Entering newborns and all children in registers and updating catchment areas (i.e. mapping areas);
- Developing micro-plans and redesigning services, with increased outreach;
- Engaging more community members or representatives, civil society and multisector committees to help increase awareness of rights, benefits and service provision, with appropriate messages delivered in multiple ways;
- Redeploying health staff on the basis of micro-censuses, and prioritizing issues for capacity building through supportive supervision / mentoring / on-the-job techniques;
- Instituting a locally appropriate system to identify missed populations and to reduce defaulters through SMS or in-person methods of follow-up with caregivers.

COMMON LONG-TERM (>1 YEAR) SYSTEM-BASED SOLUTIONS

- Adapting and funding long-term, equity-focused, multisectoral approaches to urban health;
- Establishing identification and tracing systems for children without immunization cards (e.g. with community registers, electronic facility registers, civil society partners who work with at-risk communities);
- Providing and funding in-service / supportive supervision training for health workers that help identify unreached communities;
- Improving micro-plans and interpersonal communications, and using data for action (including regular analysis of numerators and trends, community mobility patterns, and potential use of Data Quality Self-assessment (DQS);
- Mapping catchment areas (using GIS or other technology, where possible) and instituting regular rapid population or household surveys along with newborn registration;
- Sensitizing and empowering community groups to mobilize populations and increase awareness of the benefits and the EPI schedule, including follow-up, of vaccination services;
- Designing, implementing, and funding an urban communications and social engagement strategy that encourages stronger messaging, behavior change, and engagement of civil society to reach the underserved.

LIMITATIONS AND OPPORTUNITIES FOR FUTURE DIAGNOSES IN OTHER CONTEXTS

This analysis was time-limited (i.e. approximately six months) and focused on a rapid situational analysis. Further investment in more in-depth implementation in each of the five countries could incorporate the use of innovative tools and additional resources such as the WHO Reaching Every District guide for Africa, more extensive geographic, social and stakeholder mapping and local GIS information. Adding such tools may support the analysis of 1) the state and quality of facilities and outreach services, 2) the distribution of human resources, 3) cold chain resources, and 4) population movements. Other potential resources include WHO’s Health Equity Assessment Toolkit (HEAT) or UNICEF’s Equitable Strategies to Save Lives (EQUIST), indices from other sectors such as urban health, water, sanitation, and hygiene (WASH), nutrition and education. Finally, additional analysis could adapt UNICEF’s bottleneck analysis and incorporate WHO’s Guide to Tailoring Immunization Programs (TIPs).

Available population and coverage data often are not disaggregated to individual slum or community levels, and there is high mobility among communities. It is therefore difficult to assess immunization coverage, drop-out, and denominators in every context. To account for this, urban immunization initiatives could conduct rapid household surveys before and after any intervention to assess achievements and impact.

WHO ARE THE UNREACHED?

The unreached or underserved populations and communities are often a) transient or mobile and therefore difficult to track, and/or b) static, and may face discrimination due to ethnicity, gender, language, poverty level, disability, or lack of education. Such populations include groups who are ethnically different from surrounding areas, often poorer, and possibly not registered because of their quasi-legal status. They may access private or informal sector services that may not provide vaccination. Children cared for by grandparents or other caregivers may not have knowledge of or entitlement to those services.

IDENTIFYING BARRIERS TO ACCESS AND UTILIZATION OF VACCINATION SERVICES; SHORT- AND LONG-TERM SOLUTIONS

Figure 1 provides a synthesis of the main identified barriers to access and utilization of immunization services, short-term solutions (i.e., < one year, with minimal resources) and long-term solutions (i.e., > one year, with substantial systems support). This diagram can be used as a model or “menu approach” for program managers, metropolitan services, health planners, policymakers and budget officials when prioritizing and investing in the needs of underserved urban communities. These barriers have been classified along six technical areas, in alignment with WHO’s six health systems building blocks. Recommended solutions came from collaboration with in-country stakeholders working in each context. As
each context is different, there is no one-size-fits-all solution. Each barrier and solution should be considered with local stakeholders and resource availability in mind—to help in prioritizing investment, exploring potential funding opportunities, and evaluating user or implementer perspectives.

To maximize the implementation of proposed strategies, one crucial step is to link the solution with ongoing urban health plans and budget making processes. This linkage requires a communications strategy and advocacy to those who make decisions and are in power through the use of careful messages and champions.

**PARTNERSHIPS AND MULTI-SECTOR COLLABORATION**

The service access and use barriers facing urban poor communities can be more complex than in rural settings, with social rather than geographic barriers. To address this complexity and increase sustainability, partnerships are key (through local multiple stakeholder buy-in), leveraging technical and financial resources and enhancing chances of multisector linkages. Crucial partners to support diagnostic and implementation work for urban immunization include local community-based organizations (for health and other sectors), civil society partners (e.g. professional associations such as the Rotary, Lions, and others), and locally respected cultural or religious institutions. National academic institutes bring technical rigor, are linked to national priorities, and support capacity building and publication of results. Additional partners include national think tanks and often politically well-connected pediatric / medical associations. Partnership with WHO brings norms and standards and links to different levels of technical support, while affiliation with UNICEF adds links to multisector approaches for children, child rights, and EPI supplies. Also important are coalitions of private providers, such as existing national level coordinating bodies such as the Interagency Coordination Committee (ICC) for immunization, the National Immunization Technical Advisory Group, and/or a broader health coordination committee. There are also multiple partnership opportunities through local municipality coordination bodies, respected authorities, and committees.

**KEY LESSONS LEARNED FOR ACTION**

1. **Adapt diverse but easy-to-use tools for a situational analysis:** Many quantitative and qualitative tools are available for consideration. Going beyond immunization, it will be valuable to use tools that help with synthesizing and prioritizing needs and solutions and that highlight ways to address stakeholder power dynamics (such as a fishbone tool as part of root cause analysis: refer to “tool 1f” in the WHO Reaching Every District Guide for Africa, page 86) and to assess facility and the distribution of human resources. It is essential to conduct data collection at the start and end (or mid-way, if applicable) of interventions to measure impact and/or effectiveness.

2. **Link and prioritize barriers with multisector solutions:** Barriers to access and utilization of immunization services are often the same for other services within the urban context. It is therefore important to ensure multisector engagement with service planning and budgeting (such as for primary health care; water, sanitation, and hygiene; education, social welfare, and nutrition) and to integrate with approaches that aim toward broader development goals.

3. **Partnership, advocacy, and communication:** Fostering and establishing partnerships are key to strengthening political will, especially through community engagement. It is crucial to identify a communication and advocacy strategy using locally appropriate media outlets and champions to ensure that messages get to the right people at the right time in the right format.

4. **Apply a menu approach in selecting strategies and developing costed action plans:** The menu of options outlined in Figure 1 is based on JSI’s five-country analysis and could be used at multiple levels when prioritizing and making investment decisions for implementing both short-term (those requiring few or no additional resources or “quick wins”) and longer-term strategies (those requiring government, municipality, Gavi Health System Strengthening, World Bank or multi-partner investments or those taking place over more than one year). Solutions need to be linked to costed plans of action (with municipal, local government, and community resources) and to inform and engage decision-makers in the process and measurement of goals, achievements, and trade-offs.
**FIGURE 1: SUMMARY OF BARRIERS TO ACCESS AND UTILIZATION OF IMMUNIZATION SERVICES AMONG THE URBAN POOR, SHORT AND LONG TERM SOLUTIONS**

<table>
<thead>
<tr>
<th>Governance, planning, management, &amp; leadership</th>
<th>Resources ($ &amp; HR)</th>
<th>Service delivery &amp; quality</th>
<th>Logistics &amp; supply chain</th>
<th>Community partnership &amp; communications</th>
<th>HMIS &amp; data use</th>
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<tbody>
<tr>
<td>![Calendar Icon]</td>
<td>![Money Bag Icon]</td>
<td>![Gears Icon]</td>
<td>![Box Icon]</td>
<td>![Communication Icon]</td>
<td>![Graph Icon]</td>
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### BARRIERS

- Insecurity
- Catchment areas out of date
- No planning for equity
- Reluctance to open vials
- Quasi-legal status of mobile pops
- Weak and unclear coordination
- Difficulty for staff in understanding & communicating about vaccines
- Inconvenient opening times
- Poor provider attitudes
- Limited regulation and monitoring of private sector quality
- Long waiting time
- Poor cold chain reliability
- Unreliable vaccine supply
- Multiple stockouts
- Poor cold chain reliability
- Low trust; problematic beliefs & rumors
- Lack of awareness of benefits, rights, vaccines, times
- Weak civil society
- Stigma & discrimination
- Fear of AEs
- Unreliable denominator estimates
- No disaggregated or analysis of data
- No tracking of migrants or defaulters
- No hand-held records

### SHORT-TERM SOLUTIONS

- Review catchment & target populations
- Update and tailor micro-plans
- Increase sites or outreach
- Engage multi-sector & community committees
- Support local leaders
- Deploy & redistribute HCWs
- Mentor HCWs’ on-the-job learning by doing & supportive supervision
- Interpersonal communication, identify vulnerable populations
- Establish fast line / triage
- Extend opening hours for convenience of caregivers
- New signs with opening times
- Mobile technology to monitor vaccine stocks
- Timely resupply to facilities
- Satellite depots
- Connection with communities on needs / beliefs
- SMS, TV, radio, local leaders, & NGOs for reminders & defaulter tracing
- Engagement of civil society, esp. among vulnerable communities
- Map new settlements
- Train on use of forms
- Conduct defaulter tracing with SMS reminders, and funds for HCW air time
- Enter all children on permanent register
- Designate HF space for data & maps
- Make tools available

### LONG-TERM SOLUTIONS

- Adapt & fund pro-equity, integration, multi-program approaches (eg. RED / REC)
- Develop partnerships with private sector
- Recruit locally based HCWs
- In-service training / supportive supervision mentoring for HCWs to a) identify vulnerable communities, b) use data, c) educate caregivers on schedules
- Establish tracing systems for drop-outs / without cards
- Use and adapt guides & tools, including those for tailored budget and financial management
- Develop annual & reg. update micro-plans for each health area
- Map health areas, define population, use GIS where possible
- Use supportive supervision to identify high risk communities & strategies & budgets to reach them regularly with vaccines & improve communication
- Additional structures to provide services
- Consideration of daily services
- Outreach by NGOs
- Engagement with private providers to enforce quality control & better reporting
- Use of LMIS & vaccine stockout tools
- Purchase of new cold chain and allocation of staff for maintenance
- Encouragement of policy and guidelines to open vials, no matter how many children present
- Sensitization & engagement with community groups (women, youth, religious leaders) to help with social analysis
- Collaboration with other NGOs, CBOs, and other sectors
- Urban comm /social behavior change strategy incl. materials, social media & interpersonal communication to counter rumors & reduce hesitancy and how and when communities should engage with MoH and health centers
- Outline of vaccines, schedules, need for follow up
- Micro-census & more frequent house-to-house registration
- Health catchment mapping with GIS
- Production & distribution of accurate & up-to-date records for every child that caregivers can use and understand
- Newborn registration & tracking using database & SMS reminders
- Introduce electronic registries to support defaulter tracing & identify missing
- Redefine catchment areas & urban poor with better use of GIS & regular updating registries and population numbers
- Improve quality data reviews at health facility levels at regular meetings and supportive supervision
- Consider use of DOS tool