## EVALUATION OF THE DEMAND SIDE DRIVERS OF URBAN IMMUNISATION IN UGANDA: A CASE STUDY OF KAMPALA CITY

An evaluation by the Infectious Disease Research Collaboration (IDRC), Uganda

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## **Executive summary**

**Introduction:** With increasing urbanization, immunisation programs need to adapt to urban environments to reach every child. Urban areas in Uganda have poor vaccination coverage, inequities in coverage, and they often experience vaccine preventable disease outbreaks. Yet there is limited evidence about the drivers of immunisation service delivery in urban settings, and how these drivers may differ from rural settings in Uganda. The Infectious Diseases Research Collaboration (IDRC) evaluated the drivers of urban immunisation between June and December 2019 to assess the current immunisation strategy and propose a new approach. Specifically, the evaluation was designed to determine the

effectiveness of the current the Uganda Expanded Programme on Immunisation (EPI) immunisation service delivery model in Kampala city, the drivers of immunisation coverage, and the extent to which the EPI is adapting to these drivers.

**Methods:** The evaluation employed a parallel convergence mixed methods design. We conducted secondary data analysis, document reviews and partner mapping, 20 Key Informant Interviews (KIIs), 7 Focus Group Discussion (FGDs), 6 In-Depth Interviews (IDIs) and 8 meeting observations. Fact checking interviews were conducted at national and global levels to validate findings. Study participants included EPI focal persons and health workers at different levels and community members. A household survey to quantify the drivers of the coverage in Kampala city was conducted among 590 caregivers of children aged 12 - 23 months. Quantitative data were analysed using a logistic regression model. The primary outcome variable was vaccination status (i.e. full immunisation). The transcripts from IDIs, KIIs and FGDs were imported and managed using Nvivo software. Analysis was primarily deductive (with flexibility to allow new themes to emerge) using a coding framework informed by the Social Ecological Model (SEM). Results are presented according to a conceptual framework that outlines the demand and supply side drivers of immunisation services.



A research assistant prepares to interview a respondent in the field.

## Findings:

- Access to immunisation was found to be high (DPTI coverage was 96%).
- The dropout rate from DPT1 to DPT3 was 17.3% suggesting a decrease in utilization over time.

Figure 1: Immunisation coverage in Kampala city (source: Gavi evaluation household survey, 2019).



• Full immunisation coverage (i.e. those who received all vaccines in the current immunisation schedule regardless of timeliness) was 41.4%, and was lowest among children of caregivers of low socioeconomic status.

• Partially immunised children were uniformly distributed between formal and informal settlements.

• Of the fully vaccinated children, only 26.6% received all vaccines on time.

- Almost half (47.8%) of the children received immunisation from a mix of public and private health facilities.
- Appreciation of the benefits of immunisation encouraged caregivers to fully vaccinate their children.
- The main barriers to vaccination reported by caregivers were: lack of information and misconceptions on immunisation, frequent vaccine stock outs at health facilities, child not living with the mother, delays at health facilities, competing priorities of caregivers and perceived marginalization of refugees. A key health system barrier reported by key informants was lack of a follow up system for immunisation to identify and trace defaulters.
- The evaluation found that the EPI model has not sufficiently adapted to the challenges of immunisation in an urban setting. The main adaptation mechanism is engagement of the private sector in immunisation services delivery as a way of increasing access and minimizing delays at public health facilities. However, it needs to be strengthened to be optimal.

**Conclusion:** The EPI model to deliver immunisation services in Uganda is the same, despite the contextual differences between rural and urban settings. Our findings show that this model has suboptimal effectiveness in Kampala city as reflected by high dropout rates, low full immunisation coverage rates, and poor timeliness of immunisation. This evaluation highlights key demand side barriers to immunisation in Kampala city – many of which are not reflected in adaptation by the EPI.

**Recommendations:** In the near term (<1 year), the Ministry of Health/UNEPI should 1) develop an urban immunisation strategy, 2) develop a targeted social mobilization strategy for Kampala city, and 3) enforce existing immunisation service delivery policies and guidelines that govern patient-provider interactions. Engaging the private sector is a promising strategy to adapt the EPI model to challenges in the urban context, so the MOH/UNEPI, KCCA, and partners should 4) continue to strengthen private sector engagement and 5) improve distribution of vaccines and supplies. In the longer term (>1 year), the MOH/UNEPI should update the education curriculum on immunisation, and 7) introduce electronic registries. Finally, this evaluation raised some issues for further study including: 8) the MOH/UNEPI should evaluate why some divisions perform better than others, and 9) this evaluation should be complemented with a more detailed study of the supply side drivers of immunisation coverage in Kampala city.