Mixed Presentation Study on Pentavalent 1- and 10- Dose Vials in Kenya

Background
- In Kenya’s routine immunization system, pentavalent liquid (DTP-HepB-Hib) vaccine is currently available in 10-dose vials.
- Gavi, the Vaccine Alliance, has partnered with JSI to evaluate the feasibility and impact of using a mix of different vaccine presentation sizes (1 and 10 doses) of pentavalent at various levels of the immunization program in Kenya.

Study Objectives
- To evaluate the feasibility and impact of using two Penta presentations in Kenya on:
  - Immunization coverage
  - Vaccine wastage
  - Vaccine handling
  - Vaccine quality & safety
  - Vaccine cost

Methodology
- Sampling
  - 24 health facilities were purposefully selected from 4 counties.
  - The facilities were selected due to high population densities, vaccination delivery strategies, dropout rates and vaccine wastage.
- Data collection
  - 6 months of retrospective data were collected on existing EPI performance indicators for baseline.
  - Single dose presentation was introduced in November 2014 and data collection on performance indicators is ongoing.

Activities
- JSI collected retrospective data from selected health facilities to understand the current situation and potential causes of low coverage and wastage prior to the introduction of the mixed presentation.
- Following training of health workers, the operational field study will continue for six months.
- Supervision and data collection will be conducted throughout this period.
- In-depth interviews in non-intervention health facilities and post-study in intervention health facilities will also be conducted to better understand benefits and challenges of the mixed presentation.

Selection of Study Area
- Benchmark data: July 2014 - Nov 2014
- Results and recommendations: June 2015

Preliminary Findings (March 2015)
- Open vial wastage (10-dose) went down as expected from an average of 14% to 7% during the first three months of the study.
- Increase in Penta vaccines administered monthly.
- Poor data quality as a result of missing records at the health facility level during baseline; improved during the study.
- Outreach is happening very infrequently.