Data Triangulation:

Use of Health

Facility Immunization

Reporting Tools

JSI

Ensuring and improving data quality is a priority for the immunization program (EPI). Immunization coverage data reporting, completeness and timeliness are included in country routine EPI workplans, supervision and monitoring. Immunization data analysis and use can be strengthened, utilizing the existing tools and building capacity at health facility and district levels.

Immunization reporting tools vary somewhat between countries, but the usual paper-based tools (that may also exist in electronic form) used at the health facility level include:

■ immunization register (or immunization section within a child health or DHIS register);

■ tally sheet (for recording numbers of doses given by antigen);

■ immunization/child home based record (HBR) (for parents to keep as a record of vaccinations received and dates; also referred to as immunization/child health card);

■ tickler file system and/or community register (i.e. name-based tracking at the facility and/or a tool used by a community health worker (CHW)/mobilizer to to track individual children and assist with finding defaulters;

■ stock ledger (vaccine quantities by antigen and vial, syringes and needles, card supply)

■ coverage wall chart (monthly summarized coverage by antigen and number of target population vaccinated)

The data from each tool provide us with important information (for individual child tracking as well as for numbers vaccinated and calculating percentage coverage and drop-outs). When used together and data entries are up-to-date across all forms and for all antigens, they provide a complete picture of the vaccination program for the target population and for each child's vaccination status.

Use of these tools should be part of the monitoring and feedback system: for data quality improvement; self-assessment and use by the facility staff; observed during supervision visits; and reviewed during quarterly meetings — with opportunities for facility and district staff to also share data and experiences.

Tickler File

Home-based Record
(Child Health Card)

Immunization Register

Tally Sheet by Antigen

Stock Ledger

Immunization reporting tools in use during a vaccination session at a health facility in Madagascar.

Harmonizing the Various EPI Tools and the Data Within Them

Example of a completed health facility immunization register (Tanzania).

1. **EPI register** — This reporting tool is used at the facility and outreach sessions to track which vaccines have been received and the dates administered for each child, with each child entered by name and a unique identifier (birthdate, phone number, number in register, village/address). **The # for the child in the register should also be written on the HBR so that the register and the HBR can be easily compared when the child comes back for vaccination and other services.**

The information in the card (name, birthdate/identification #, vaccines received) should correspond here in the register for health workers, mobilizers, and reporting.
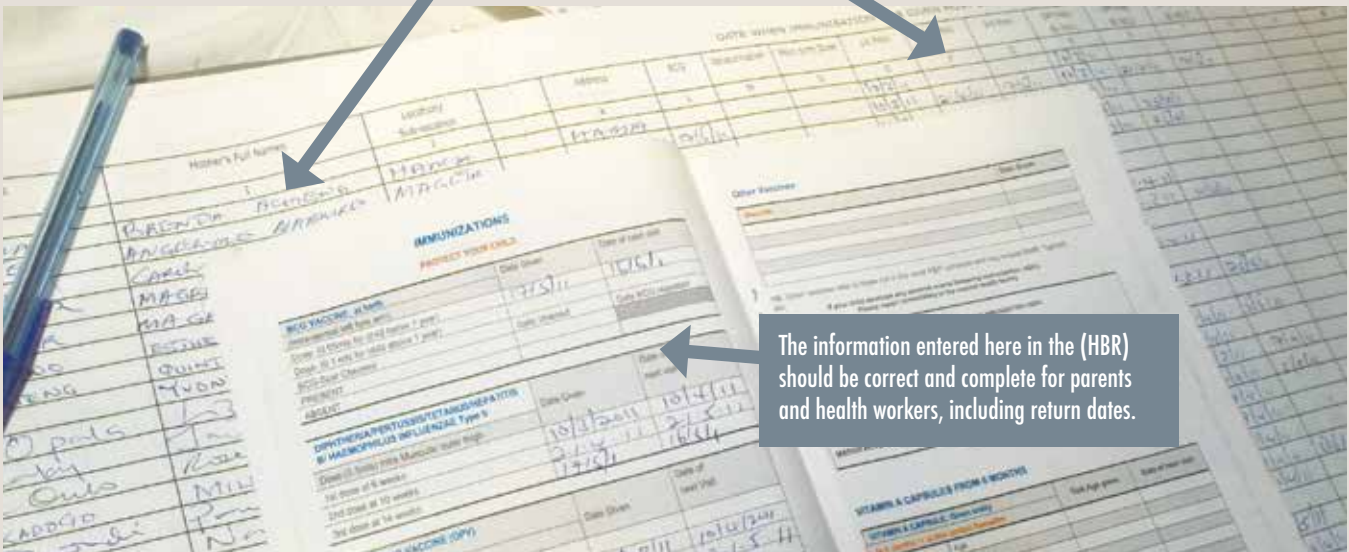
The information entered here in the (HBR) should be correct and complete for parents and health workers, including return dates.

2. **The home-based record (vaccination card)**— enables the mother/parent/caregiver to know which vaccine(s) the child has received on what dates and when to come back for the next vaccination (return date). As noted in the picture, the HBR should be compared with the register to ensure that the data are the same. (Note: If the family is pastoral/migratory or urban and the child is therefore taken to multiple facilities, the HBR is even more important for tracking, so that the registers in each facility can be updated accordingly and to avoid the child being over-vaccinated or missing vaccinations.) Healthcare workers should be trained to encourage the mother/parent/caregiver to keep the HBR safe from damage and bring the document with her to each and every visit to a health facility.

Tickler file system at health facility for tracking infants by month and village for their vaccinations (Madagascar).

3. **Tickler file** — This filing system uses one card per child and is kept at the facility. Each child card is numbered to correspond with the child's number in the immunization register. After the child is vaccinated, his/her vaccination(s) received are written on the card, and **the card is put into the filing system according to the month when s/he is due back for the next vaccination**. The same information should be entered on the child's HBR. This tickler file system helps to track by month each child as to when s/he should be vaccinated with the next antigen(s). It is used by health workers/vaccination staff to track individual children and plan follow-up activities to recuperate and vaccinate children who have "dropped out" (not come back for their next vaccines in the series the month it is due).

Community vaccination list, known as "My Village, My Home". (Completed and kept by the Anganwadi community worker with the Auxiliary Nurse Midwife in Jharkhand, India.)

4. **Community register or child vaccination list by name**
— This system can be used with CHW/mobilizer (or village health workers, health education volunteers, etc) for tracking individual children and their vaccination status and due dates in a village or particular catchment area (e.g. 100 households, 50 children, other). It serves a similar purpose as the tickler file system at the facility; however the community register is kept by the mobilizer and used for tracking his/her catchment population in the village/community. This register can also be used to track which antigens each child in the catchment population has received and when each child is due for the next vaccinations in his/her series.

Pre-printed immunization tally sheet by antigen and age group, used in health facility and for outreach services (Zanzibar).

5. **Tally sheet (by vaccination session)** — gives us the number of children vaccinated by session, by antigen, and by age group, which feeds into the monthly report. It can also be used to track the number of vials received, used, remaining and wasted. This document is useful for summarizing the data for the monthly report. These tally sheets can also be adapted and used for outreach sessions (as shown).

6. **Coverage wall charts** — These charts are to be updated monthly and graphed by month (X axis) and target population (Y axis) by antigen. They are used to show numbers and percentages of target populations vaccinated and to compare coverage for different antigens over time. They help the health worker to visually see if s/he is meeting the monthly target and if/when drop-out is occurring. These can be pre-printed charts for display on the walls or they can be photocopied and handwritten to be kept in folders for the health worker to update and reference monthly. It is useful for these to be kept for at least three years to be able to compare trends.
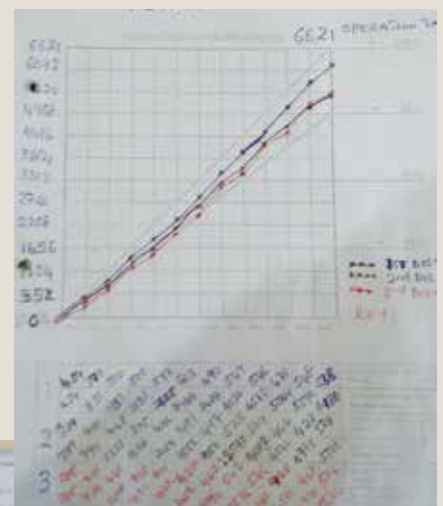
Monthly and cumulative coverage wall charts by antigen and doses (Zanzibar).

Completed cumulative coverage wall chart for pentavalent vaccine, archived from previous three years (Zanzibar).

7. **Stock inventory ledgers (vaccines, syringes, HBR (card) stocks, etc.)** — These are the stock management forms for tracking which vials (and diluent, as applicable), lot number, and number of vials and doses of vaccines that have been received and used. They track similar information for the number of syringes. It is useful to also keep a stock ledger of the HBR quantities, to know the number of HBRs received and distributed. These tools are important for forecasting vaccine, syringe, and HBR needs and for avoiding stock-outs.
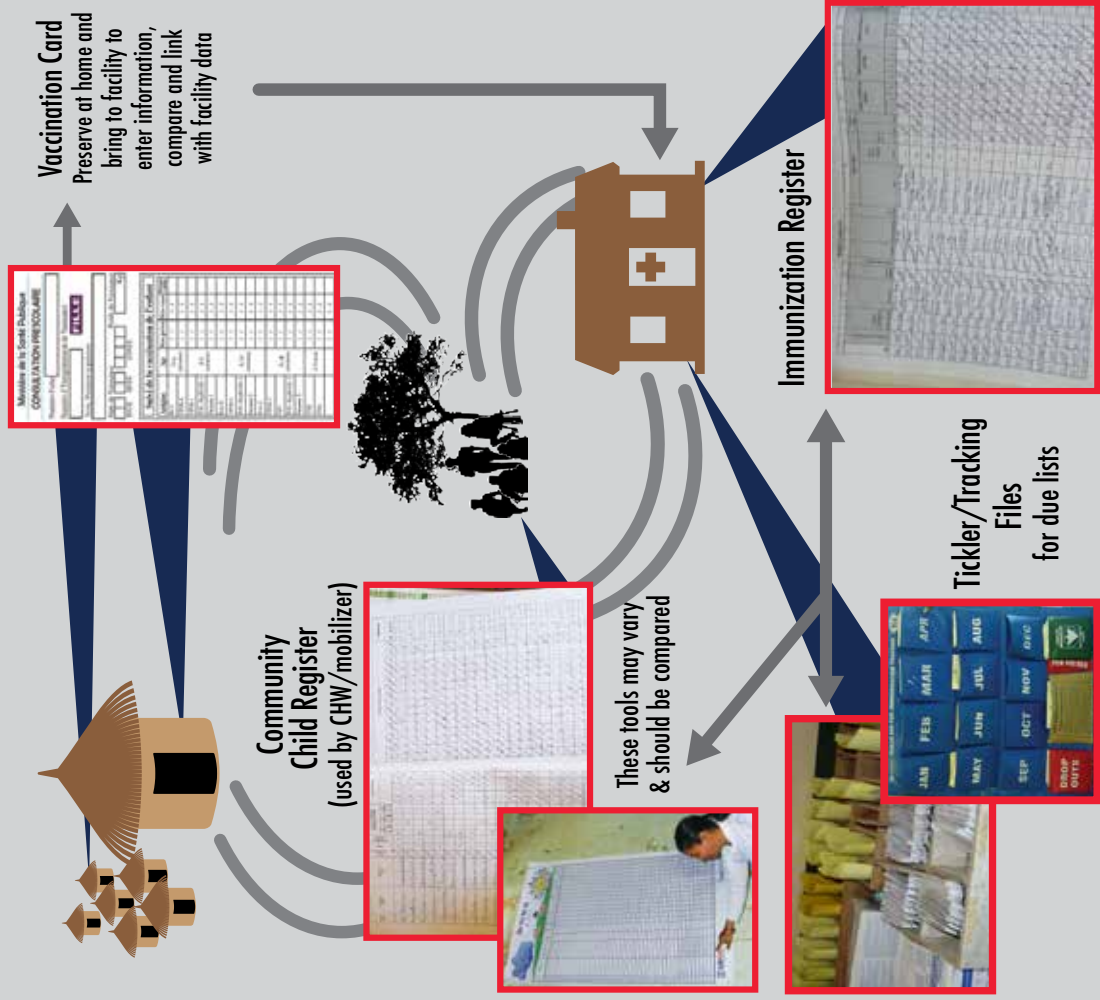
8. **EPI Monthly Report** — This is a key tool for reporting to district level and for monitoring the monthly coverage of the vaccination post/facility for all of the antigens provided by age group of the children (0-11 months, 12-23 months and 24-59 months) and for women (i.e. tetanus, HPV). It also provides information on: vaccine vial/dose and syringe tracking (e.g. # of doses/vials used), # of vaccination sessions planned and held, vaccine-preventable disease reporting, and timeliness and completeness of reporting. It is to be completed at the end of the month by the vaccination post. The data should summarize what is on the tally sheets, be graphed on a wall chart by antigen, and note if there are any problems with low stocks of vaccines and supplies (including for HBRs).

Vaccine stock ledger at health facility (Zimbabwe).

Pre-printed Health Facility Monthly Activity Report, immunization section (Tanzania).

These tools and formats will vary somewhat between countries and possibly within countries (for example, states/provinces may have different formats in a decentralized system). Although parts of the content are similar, each tool provides some distinct information that assists with name-based and/or number-based reporting and data summarizing. The graphic on the next page provides a visual representation of how these tools inter-relate and complement one another.

Number-Based
(for tallying/reporting; no unique identifiers)

Tally Sheet

Monthly Report

Coverage Wall Chart
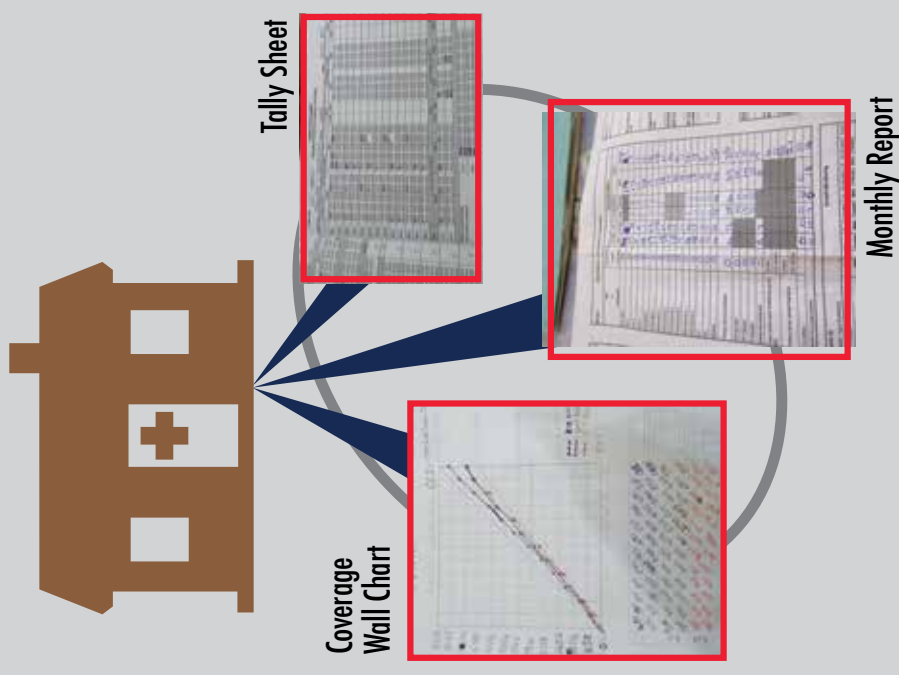
These tools provide consolidated and summary reporting at Health Facility but cannot trace back to individual children or communities to reduce drop-out or missed opportunities

Name-Based
(unique identifier for each child)

Vaccination Card
Preserve at home and bring to facility to enter information, compare and link with facility data

Immunization Register

Community Child Register
(used by CHW/mobilizer)

These tools may vary & should be compared

Tickler/Tracking Files
for due lists

graphic created by JSI