District d**a**ta use guide

Introduction

This data use guide is intended to help health workers at the facility and district levels understand the data that they generate, spot errors and inconsistencies in the data, and take appropriate steps to correct them. Another key outcome of the data use guide is to help health workers use the data that they generate to make decisions about how they deliver immunization services.

Purpose

This guide is intended to be a quick reference sheet to help analyze facility forms and assess whether the information entered in them is as accurate as possible. This guide provides areas of discussion that can be pointed out to the facility staff to assist them to record data correctly and make decisions that will improve their immunization coverage and reporting.

Selected focus areas (indicator definitions)

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| S/n | Data element | Definition |
| 1 | Attendance child health total | Sum of all child health attendances. This data illustrate the overall use of the health facility by the community. |
| 2 | Number of children from outside of catchment | All children who visit the child health services with residential addresses outside the catchment area for the facility, regardless of the reason for the visit. |
| 3 | Z-scores | The criteria used to define whether or not a child’s weight is within expected limits. The Z-scores of all the children weighed should be indicated on the report. |
| 4 | BCG doses consistently more than OPV 0 | BCG and OPV 0 doses ideally should be equal, since they are both supposed to be given as soon as possible after birth. |
| 5 | Figures of antigens administered at the same time not matching | All 1st-, 2nd-, and 3rd -dose antigens are supposed to be equal in number. If 10 children received OPV 1, then 10 children are supposed to receive PCV 1, Penta 1, and RV 1, unless there is a stockout. |
| 6 | Number of 3rd dose antigens consistently higher than 1st and 2nd dose antigens | This indicates reverse dropout, which in reality is supposed to be very rare or non-existent. More children are supposed to be recorded at the initial doses than at the later doses. The main reason for reverse dropout is that 1st and 2nd doses are mistakenly recorded as 3rd doses. |
| 7 | Number of children less than 1 year old immunized with measles 1st dose equal to number of fully immunized children. | If a child received measles at the age of 9 months, there is need to verify if they received all their other vaccines on time before recording them as fully immunized. This information can be obtained from the under-five card |

Note: BCG, bacille Calmette-Guérin vaccine; OPV, oral polio vaccine; PCV, Pneumococcal Conjugate vaccine; Penta, pentavalent vaccine; RV, rotavirus vaccine.

Key areas to address and ask questions about for immunization service delivery

Use the table below to walk through commonly shared challenges in key categories of immunization service delivery. Use the data to walk through the table to identify any hotspot areas. Use the questions with the data to better understand the potential causes for the hotspot areas.

For each area where the current situation is not in line with the desired situation, use the DECIDE model to help establish potential causes of the problem and a possible solution.[[1]](#endnote-1) This decision-making model was developed for health care workers and health care managers to make higher-quality decisions.

D–Define the problem. What is the issue and what are the possible reasons for its occurrence?

E–Establish the criteria. What are the alternative situations to the current situation?

C–Consider all the alternatives. Which alternatives will most likely contribute to your goal?

I–Identify the best alternative. Which of the alternatives are most doable?

D–Develop and implement a plan of action.

E–Evaluate and monitor the solution and feedback when necessary. Check if your selected alternative contributed to solving the problem identified

**Table 1: Use the table below to walk through the facility’s data during the supportive supervision visit. The table captures common challenges or “hotspot areas,” along with questions to ask as a way to better understand the data.**

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| Category | Hotspot areas | Questions to ask |
| Attendance of children less than 5 years old | Attendance not equal to number of children weighed | Were some children not weighed? |
| Number of children from outside of catchment consistently the same across months | Are children from outside the catchment area included in the immunization counts?  Do facility staff know why children from other catchment areas are coming to the facility?  How does the facility record children who have permanently moved? |
| Growth monitoring | Z-scores not completely entered | Does the facility understand how to fill in all the Z-scores? |
| Immunization | BCG doses consistently more than OPV 0 | Is the facility stocked out of OPV?  Are levels of OPV 4 given enough to cover for OPV 0? Do facilities have follow up mechanisms for children who need to be given OPV 4?  Are facilities informing mothers to come for OPV 0 within 13 days after birth even if BCG was given at birth? |
| Figures of antigens administered at the same time not matching | Are all antigens correctly tallied?  Were there any stockouts that affected these numbers? |
| Number of 3rd dose antigens consistently higher than 1st and 2nd dose antigens | Are all antigens correctly tallied?  Are unrecorded doses being attributed as 3rd doses because the facility staff do not know whether the dose was 1st or 2nd dose?  Why are more children being vaccinated at 3rd dose compared to 1st and 2nd doses? Are the facilities conducting special activities for mothers to bring their children for 3rd dose? |
| Number of children less than 1 year old immunized with measles 1st dose equal to number of fully immunized children. | Is the counting of fully immunized calculated based on verification of all antigens given to a child or just on measles?  Is fully immunized counted at Penta 3 or at measles at less than 1 year of age? |

Note: BCG, bacille Calmette-Guérin vaccine; OPV, oral polio vaccine; Penta, pentavalent vaccine; RV, rotavirus vaccine.

1. Guo KL. DECIDE: a decision-making model for more effective decision making by health care managers. *The Health Care Manager*. 2008;27(2):118–127. Available at <https://journals.lww.com/healthcaremanagerjournal/Abstract/2008/04000/DECIDE__A_Decision_Making_Model_for_More_Effective.5.aspx>. [↑](#endnote-ref-1)