

Data improvement requirements for all types of Gavi support

This document provides guidance to countries to meet the data improvement requirements for all types of Gavi support. The requirements are consistent with principles of good data improvement practice supported by Alliance partners, including encouraging country programmes to align immunisation coverage data improvement related activities within the larger health sector context. They also promote a “culture of data use” wherein there exists appropriate ownership, use, and feedback of data that allow for timely and well-informed actions to optimise the performance and impact of the programme while increasing accountability and strengthening health systems.



Country programmes are encouraged to take those requirements into consideration for their annual and multiyear programme planning. They should also be considered during technical assistance planning and for funding requests if additional funds or assistance for activities are required. Ideally, if additional external funding is necessary, countries will include a graduated budgeting scheme that promotes eventual transition to national financing.

The following are the four data improvement requirements for all types of Gavi support. For ease of navigation, clicking on one of the below requirements will direct you to the section of this document that contains a further explanation.

- 1) Annual immunisation data quality desk review
- 2) Periodic in-depth assessment of immunisation data
- 3) Immunisation Data Improvement Plan
- 4) National immunisation coverage survey
- 5) Assessment of applications in meeting data quality requirements

1. Annual immunisation data quality desk review

Countries receiving Gavi support are required to conduct an annual data quality desk review in order to assess inherent limitations to be taken into account in the decision-making process. The review will also allow capture changes in data quality and to develop and/or monitor the implementation of plans to improve data quality. Countries are encouraged to focus the annual data quality desk reviews on describing current situations and practices mainly related to immunisation coverage data across sources of data (i.e. whether data are collected by the immunisation programme or through an integrated health management information system (HMIS)), while seeking to understand root causes that drive performance in order to both inform and monitor corrective activities and interventions to be incorporated into plans for improving data quality. The reviews should also be used to monitor whether data quality strengthening activities are being implemented and sustained over time. This report, including analysis and recommendations, is ultimately shared with the Gavi Secretariat via the Country Portal. This is also the case for the other requirements listed below.

For the annual data quality desk review, it is **recommended** that countries:

- Conduct the annual data quality desk review at different levels, but compliance is measured at the national level, with or without partner support, as deemed necessary by the country.
- Closely link the annual data quality desk review to the national planning process (i.e. annual health sector review, national EPI evaluations) to ensure that any issues identified during the review can be appropriately included in a data improvement plan. This would ideally be as part of the EPI annual plan and/or in the comprehensive multi-year plan (cMYP). It is also recommended that the annual desk review is conducted prior to any scheduled Gavi joint appraisal (JA) mission.

- An option is to conduct the annual data quality desk review before the compilation of the WHO/UNICEF Joint Reporting Form (JRF) on Immunisation.
- Track progress on indicators of data quality summary measures that incorporate multiple dimensions including, but not limited to: a) completeness and timeliness of reporting across all administrative levels and data sources (e.g. EPI and HMIS data); b) internal consistency (e.g. check for suspicious values, inconsistencies in the numbers of doses administered at the same time, negative drop out, outliers, duplicates) c) denominators and numerators evaluation in time series, d) external consistency between sources.
- Develop and monitor improvement indicators to assess progress in the development and implementation of the plan for improving data quality, including updating plans as appropriate.

Some examples of types of analyses that may be included but not limited to:

- Assessment of the percentage of expected data reports (e.g. district, facility) that are actually received by each level on an annual basis;
- Assessment of the presence of established reporting dates and a standard in the country for assessing timeliness of reporting (e.g. from district, facility levels);
- If yes to above, assessment of the percentage of submitted reports that are received on time in a given period, usually in the previous year
- If no to above, the programme needs to establish standard procedures for reporting timeliness assessment
- Assessment of data consistency between vaccines and doses and across geographies (or other sub-national disaggregation); and
- Compare different sources of denominators (for example: from the national bureau of statistics, United Nations Population Division (UNPD) estimates, enumerations).
- Assessment of any differences between data collected and processed via EPI vs. HMIS, where appropriate.



WHO data quality review tool kit: [LINK](#)

WHO handbook on the use, collection, & improvement of immunization data: [LINK](#)

WHO analysis and use of health facility data tool kit: [LINK](#)

2. Periodic in-depth assessment of immunisation data

Countries receiving Gavi support are required to conduct an in-depth review of the routine administrative reporting system once every five years, or more frequently where appropriate. In most instances, this requirement will be satisfied by an information system assessment and a field review that could be either a data quality self-assessment (DQS), or an integrated data quality review (DQR) including at least one EPI indicator (e.g. Penta included alongside Malaria and ANC indicators). The periodic in-depth assessment is required to understand the underlying causes of weak data availability, quality and use. This report is ultimately shared with the Gavi Secretariat via the country portal.

For the periodic in-depth assessment of immunisation data, it is **recommended** that countries:

- Involve external evaluators and/or national evaluators from outside the region to reduce bias.
- Align the in-depth review of routine data reporting with the national planning processes (as also indicated above).

- If a country programme has never conducted a data quality self-assessment or another in-depth review of the routine administrative monitoring system, or if there is insufficient institutional memory since the last conducted assessment, consider seeking partner technical assistance for planning, implementation, and quality assurance of the in-depth assessment.
- Incorporate data sources and information systems (e.g. EPI and HMIS, where appropriate) used in-country, from the point of contact with immunisation services to the national level (i.e. across all data collection and reporting levels), in the scope of the assessment. Data of interest include the number of children or other targeted groups in a given target population vaccinated with a given vaccine during a specified period of time as well as the data sources and processes used to obtain the denominators for calculating administrative immunisation coverage.
- Include assessments of data agreement between the various administrative levels, as well as data reporting completeness and timeliness.
- Describe in full in report form the administrative recording/reporting process(es), tools (paper and electronic) and data flow in the country from the point of contact with immunisation services to the national level.
- This includes a description of the information systems (norms and manuals, tools, and human resources roles and responsibilities) that are in place, particularly if there are separate systems for EPI and HMIS, to produce the data.
- Describe in full in report form the methods used (including sampling strategy), results and recommendations of the in-depth assessment.
- Utilise implementers for the assessment from areas other than their own geographical programme area and include a description of the implementers in the report.
- The assessment can be nationally representative or focusing in specific geographical areas (purposely sampling) according to the objectives.
- Provide documentation that the results, or a report, from the in-depth assessment, were shared in a timely manner with decision-making bodies (i.e. relevant Ministry of Health Departments, Coordination Forum such as ICC, HSCC or equivalent) and that corrective actions were or will be included in an improvement plan, ideally as part of a country immunisation or other health sector plan.



WHO data quality review tool kit: [LINK](#)

WHO handbook on the use, collection, & improvement of immunization data: [LINK](#)

WHO Data Quality Self-Assessment Tool: [LINK](#)

3. Immunisation Data Improvement Plan

Countries receiving Gavi support are required to develop an Immunisation Data Improvement Plan following the diagnosis phase made by the data quality desk review and the in-depth assessment of routine immunisation data. This periodic plan should include 1) a root cause analysis to define actionable recommendations to improve data availability, quality, and use, 2) a set of prioritised recommendation with clearly defined, actionable goals that are feasible for the country to accomplish and 3) a costed plan for action. Upon sharing the completed plan with the Gavi Secretariat and implementation of activities in the plan has occurred or sufficient plans are in place, the country is considered compliant with this data requirement. On an annual basis, countries will also be required to provide a progress update against their improvement plan. This report and the data improvement plan are ultimately shared with the Gavi Secretariat via the country portal.



For the Immunisation Data Improvement Plan, it is **recommended** that:

- Improvement plan efforts should foster country ownership and include national immunisation programme staff at all stages (design, training, implementation, and interpretation of results, recommendation setting, and activity planning).
- National planning processes (NHSP, CMYP, EPI Reviews, HMIS strengthening plan) should be aligned. Improvement plans for immunisation data can be included –if sufficiently developed-- as a section or module within a CMYP, an EPI Review, or an HMIS strengthening plan.
- If possible, improvement plan recommendations and activities should be based on findings from an annual desk review, in-depth data assessment and/or review of an existing improvement plan that has been previously implemented.
- Clear set of recommendations, activities, budget, monitoring plan and timelines for implementation is included

4. National immunisation coverage survey

Countries receiving Gavi support are required to conduct a high quality, nationally representative survey assessment of immunisation coverage at least once every five-year period with interim / targeted surveys, as appropriate. For many countries the survey-based assessment requirement may be satisfied through the conduct of a Demographic and Health Survey (DHS), Multiple Cluster Indicator Survey (MICS) or other population-based, nationally representative multi-indicator survey designed to collect data on a wide range of population and health topics, including immunisation, in a standardised manner.

In countries where a DHS, MICS or other multi-indicator survey is not periodically conducted, it may be necessary for the national immunisation programme to plan and implement a stand-alone immunisation coverage survey. In either case, it is ideal for the immunisation coverage survey assessment to be designed to support a country's immunisation programme and planning.

The following key principles are highlighted for countries and should be kept in mind when considering a survey:

- Survey efforts should foster country ownership, ideally be country-driven with the involvement of the national immunisation programme staff at all stages and viewed as an opportunity to build national capacities.
- National immunisation programme staff should be involved in the development/adaptation of the survey questionnaire and training, implementation and interpretation of data results.
- Survey assessments should be included in a country's national plans, and involve the National Immunisation Technical Advisory Group (NITAG) and the relevant Coordination Forum (ICC, HSCC or equivalent) as appropriate, very early in the process.
- Countries are encouraged to align survey implementation with existing national planning cycles based on the cMYP and health system strengthening activities.
- Interim assessments of immunisation coverage might be considered where appropriate to assess coverage in selected sub-populations defined by person and/or place characteristics to further guide programme planning for targeted intervention and corrective action. Oversampling during a national survey, or other similar strategies, could be considered to assess the coverage of special or at-risk populations.
- Countries with very large birth cohorts may consider conducting sub-nationally representative surveys.



- In special circumstances, for example, where coverage is known to be very low (i.e. under 50%), the survey requirement may be waived in favour of investing in activities to increase immunisation coverage. The country should contact the Secretariat and Alliance Partners to discuss further.

Technical partners are available to provide technical consultations and assistance as appropriate and agreed by the country during the planning and implementation of surveys, including data analysis, as well as supporting country-led interpretation and use of survey results. When a recent DHS, MICS or other standardised multi-indicator survey is not available, countries are encouraged to refer to the World Health Organization's most recent update of the immunisation coverage cluster surveys reference manual (see Suggested Resources below). The immunisation coverage survey has been used extensively over the past 30 years to measure immunisation coverage at national and sub-national levels, and the reference manual was updated most recently in 2015.

When conducting an immunisation coverage survey, it is **recommended** that the survey:

- Be population / community-based and representative.
- Target a full birth cohort that has completed its infant immunisation schedule, most often children aged 12-23 months for vaccines recommended during the first year of life (i.e. 0-11 months), as they represent the most recent cohort of children who should have completed their infant immunisation schedule. In countries where the recommended age for vaccination of interest in the survey is administered between 12-23 months (e.g. MCV1 if recommended at 12 or 15 months, MCV2 and DTP-containing vaccine), it is recommended that the survey also target a cohort aged 24-35 months.
- Be consistent with the EPI schedule(s) recommended for all people in the target population, i.e. takes into consideration changes to the immunisation schedule in the period being assessed.
- Be of sufficient sample size relative to the target population of interest and the purpose of the survey (e.g. monitoring programmatic objectives or testing hypotheses).
- Allow selection of households to be completed centrally by the survey coordinator or statistician and not by field teams.
- Utilise standardised survey questionnaires (see WHO reference manual) or questionnaires that have been reviewed by an external expert committee to ensure conformity with best practice and validated questions for collecting data on immunisation coverage.
- Include a report with:
 - A sufficiently detailed description of the rationale and purpose of the survey, scope of the survey, target population, sampling procedures, planned sample size, and strategies used to minimise bias (e.g. revisits to target populations), in order to facilitate the interpretation of the results and replication of the survey in the future;
 - A sufficiently detailed description of the actual sample from whom data on vaccination history were collected.
- Conduct the appropriate statistical analysis given the survey sampling design.
- Report on coverage by vaccine and dose, if pertinent, using standard reporting formats (see WHO reference manual) and by documented vaccination (in home-based or facility-based records) as well as caregiver history in the absence of documented evidence of vaccination history. However, a premium should be placed on documented evidence of vaccination history (from home-based records, and where possible, from facility-based records).

Countries conducting surveys following supplementary immunisation activities (SIAs) or vaccination campaigns are encouraged to consider the above recommendations as well.



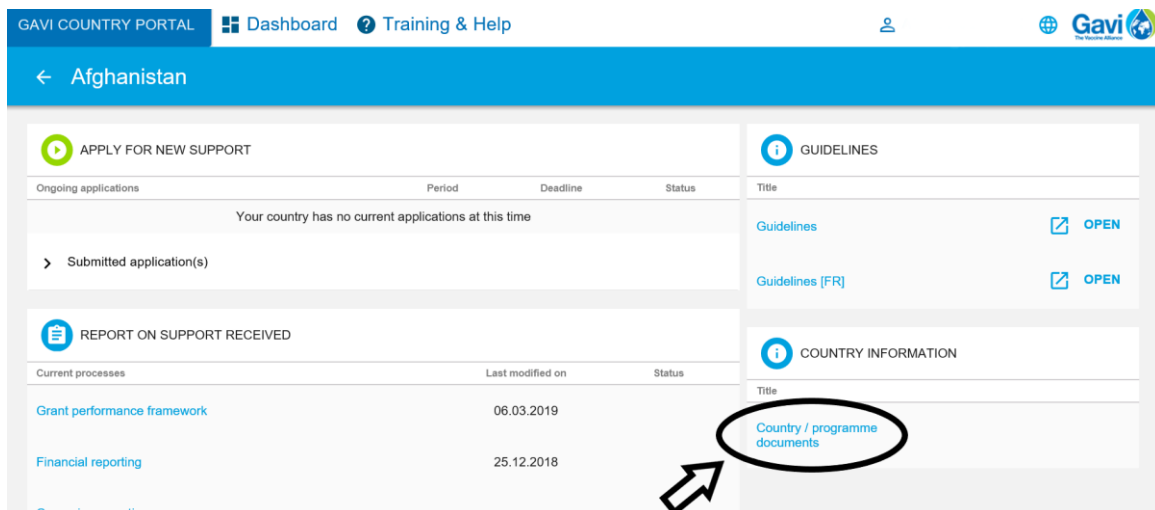
World Health Organization Vaccination Coverage Cluster Surveys: Reference Manual, 2015: [LINK](#)

5. Assessment of applications in meeting data quality requirements

Country achievements and progress over time with regards to data improvement requirements form a key criterion for review of applications for all types of Gavi as well as ongoing routine grant monitoring, review and renewal. It is **important for national immunisation programmes to take seriously their responsibilities in improving the collection, analysis, and use of data to measure and improve immunisation program performance** through appropriately resourced plans and activities.

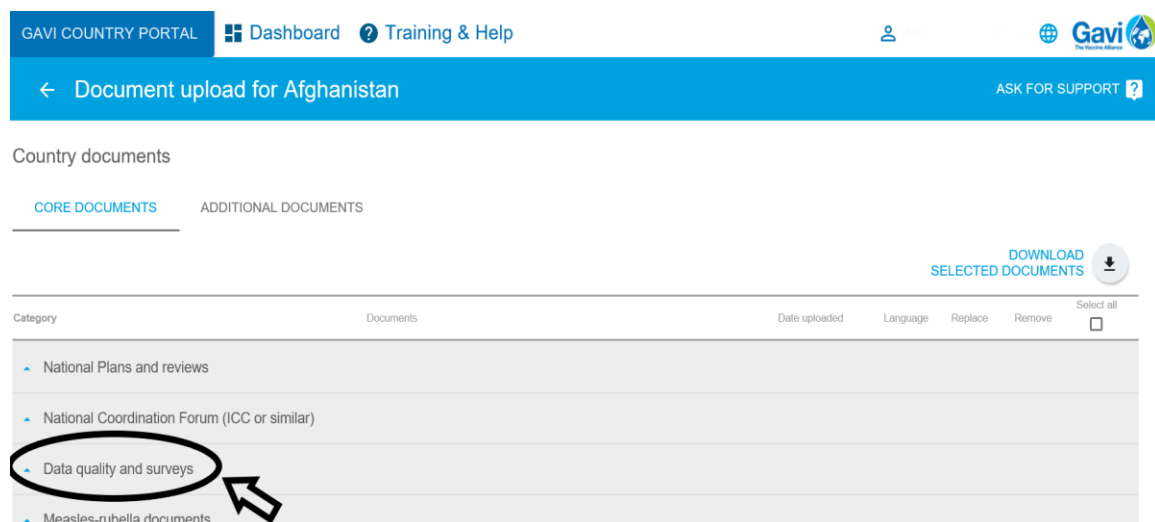
Uploading reports into the Country Portal

1. Within the Gavi Country Portal, select the “Country/programme documents” link located within the “Country Information” toolbox.



The screenshot shows the Gavi Country Portal interface for Afghanistan. The top navigation bar includes 'GAVI COUNTRY PORTAL', 'Dashboard', and 'Training & Help'. The main content area is divided into several sections: 'APPLY FOR NEW SUPPORT', 'GUIDELINES', 'REPORT ON SUPPORT RECEIVED', and 'COUNTRY INFORMATION'. The 'COUNTRY INFORMATION' section is highlighted with a red circle, and an arrow points to the 'Country / programme documents' link within it.

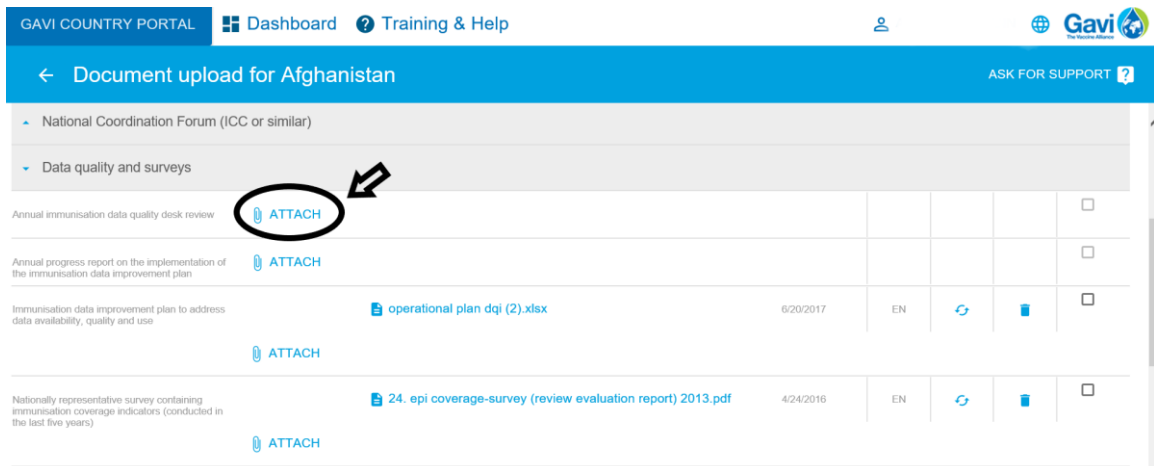
2. Now locate and select the category, “Data quality and surveys.”



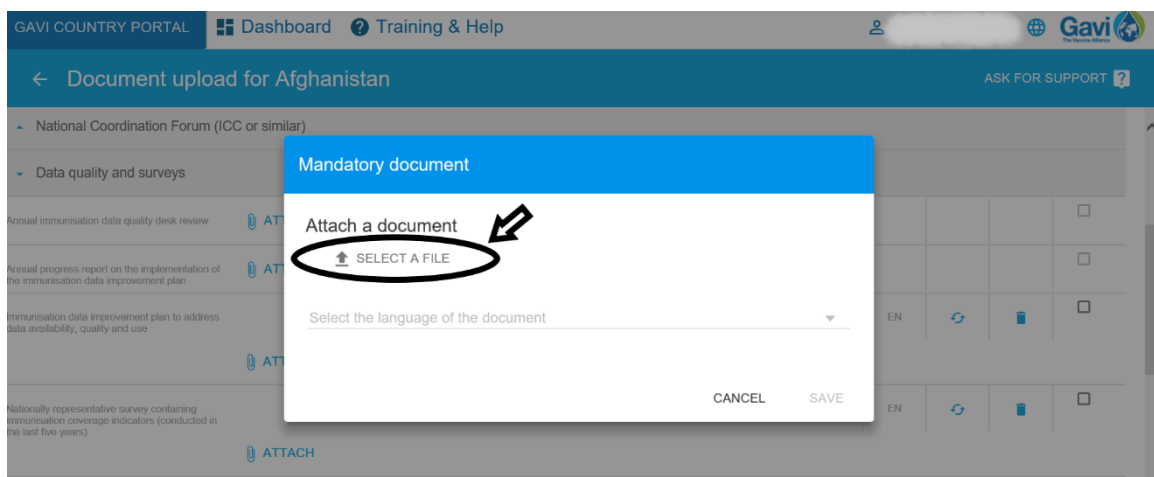
The screenshot shows the 'Document upload for Afghanistan' page. The page title is 'Document upload for Afghanistan' and it includes a 'ASK FOR SUPPORT' button. Below the title, there are tabs for 'CORE DOCUMENTS' and 'ADDITIONAL DOCUMENTS'. A 'DOWNLOAD SELECTED DOCUMENTS' button is visible. The main content area is a table with columns for 'Category', 'Documents', 'Date uploaded', 'Language', 'Replace', 'Remove', and 'Select all'. The 'Data quality and surveys' category is highlighted with a red circle and an arrow.

Category	Documents	Date uploaded	Language	Replace	Remove	Select all
▾ National Plans and reviews						<input type="checkbox"/>
▾ National Coordination Forum (ICC or similar)						<input type="checkbox"/>
▾ Data quality and surveys						<input type="checkbox"/>
▾ Measles-rubella documents						<input type="checkbox"/>

- This will expand the drop-down window and display the various documents that may be uploaded. Select “Attach” under the corresponding document that you want to upload into the portal.



- The window will then open for document attachment. Click on “Select a file,” and proceed to navigate to the appropriate file you wish to upload.



- Once you have selected the document you wish to upload, then select the language of the document and click “Save.” You have now successfully uploaded your document!

