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GAVI

THE GLOBAL ALLIANCE FOR VACCINES & IMMUNIZATION

REPORT ON THE 2003 DATA QUALITY AUDIT (DQA) OF THE YEAR 2002

AFGHANISTAN

KABUL, 7 OCTOBER, 2003

PricewaterhouseCoopers, in association with Finconsult Ltd., is pleased to submit herewith its report on the 2003 DQA in:

AFGHANISTAN

(Kabul, 7 October, 2003)

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Introduction

From August 31 to September 30 of 2003, PricewaterhouseCoopers through its associate Finconsult Ltd. performed the first GAVI Data Quality Audit in Afghanistan. Together with a team of internal auditors from the national EPI office, we assessed the quality of EPI data and systems and audited the reported number of doses of DTP3<1 administered in the year 2002, through visits to a random sample of health care administrations, including:

- The national EPI office
- Four province level administrations: Kabul, Ghazni, Herat and Baghlan. These provinces were selected after a random sampling from the list of the 32 provinces, including Kabul city. Eleven provinces were deemed non-eligible for this audit as not accessible because of security concerns.
- Twenty-four health facilities (six in every province, including hospitals, health units and any other facility where immunizations are administered). All selected Health Facilities could be accessed.

Note: since a majority of the districts in Afghanistan have less than six health units, the decision was taken to sample four provinces instead of four districts. Within each province, 6 health units were sampled through random sampling process approach.

The findings of this audit are included in this report. A debriefing meeting was held with the EPI management on September 23, 2003 and with WHO and UNICEF representatives on September 30, 2003.

Summary of findings and conclusions

The audit of the accuracy of reported DTP3<1 in 2002 was performed in difficult circumstances: post-conflict conditions, disruption of reporting system in 2002 due to war and the recent establishment of the National EPI. The current security situation restricted the number of provinces and districts that could be visited. Eleven out of 32 provinces, as well as 6 districts in Ghazni province, were deemed non-eligible for security reasons. Furthermore, 21 out of the 50 districts within the selected provinces were not accessible.

As the National Expanded Program of Immunization Management Team (NEMT) was set up in October 2002, it is still in the process of developing procedures and of gaining control of the operations of the Health Units. Reporting by Provinces is still done through UNICEF or WHO, the agencies involved in the inoculation programs before the establishment of NEMT. The NEMT depends on these international organizations for the inoculation data country wise.

Furthermore, in some areas of the country and in some Provincial EPI management Team (PEMT) offices, reports and data of year 2001 and partially of year 2002 were lost due to political upheavals and war.

Although data were not always easily available during the first visit, repeated visits to the Health Units and an effort to retrieve data allowed full recounting in 23 out of 24 HU. The calculated Verification Factor reached the rather high score of 91.5 %, well above the 80% threshold set by GAVI. The system and the data it produces were therefore deemed quite reliable.

As for the quality of the system, our findings indicate that the Quality of the System Index (QSI) is generally slightly better at the lower levels (Province and HU) than at the higher level (National):

- QSI at the national level: 56.6 %
- Average QSI for 4 provinces: 61,3 %
- Average QSI for 24 health units: 60.5 %

A more detailed analysis is shown in the following table:

QSI of Provinces and of their Health Units

Provinces		Health Units		
	QSI (%)	Average QSI (%)	Lowest QSI (%)	Highest QSI (%)
Kabul	**79.4**	55.7	46.4	60.7
Ghazni	66.7	58.9	46.4	71.4
Herat	67.6	**68.5**	46.4	**85.7**
Baghlan	31,6	58.9	28.6	82.1
Average QSI	**61.3**	**60.5**	**28,6**	**85,7**

Color legend: **XXX** Highest xxx Lowest

At Provincial level Kabul Province resulted the best with a QSI of 79.4% and Baghlan Province the worst with 31,6%.

Among the Health Units, Kohsan (Herat Province) had the highest QSI with 85.7% and Baghlane Ghadim (Baghlan Province) the lowest with 28.6%.

No specific pattern could be distinguished in QSI value by geographical location. The individual qualities and accuracy of the PEMT (Provincial EPI Management Team) managers and of the vaccinators at Health Units were the determining factor of the QSI value. Most of the vaccinators were found to be fully dedicated to their mission. The farther from main cities, the more noticeable this attitude was.

The issuance of detailed written instructions and procedures for all operational levels (Provinces and Health Units), the training of provincial supervisors and proper monitoring are considered to be the most important actions to be taken.

National context

The National EPI office was established in October 2002. It reports to the Deputy Minister of Health. It is a vertical programmed within the national health care structure, as reporting and supervision of all health activities are not integrated at national, provincial, district or health facility level.

The national EPI has prepared a series of written instructions to be distributed to PEMTs and Health Units. Instructions cover all aspects of the process of implementation, recording, management and reporting of routine vaccination. These instructions are to be translated from English into Dari and Pashtu and then circulated to all parties involved. The process of setting up clear and detailed procedures is considered by these Auditors to be critically and urgently needed.

The last census of Afghanistan dates back to 1976. The UN has developed its own population data (UNIDATA), on which figures are based the denominators for surviving infants and pregnant women. These theoretical figures are increased each year by 2.4%. The impression received in the field from PEMT and HU managers is that the UNIDATA figures are on the high side. There is however no way to confirm this feeling.

Acknowledgements

We would like to take this opportunity to express our appreciation for the co-operation and courtesy afforded to us during the DQA. We especially would like to thank Dr. Mashal, NEPI manager, Dr. Ahmad Arif Stanekzai, NEPI deputy manager who accompanied the Auditors in the visits to two Provinces, Dr. Ayub, MHIS and Mr. Abdol Matin, who participated in the training at Islamabad and joined in a few visits, and other Ministry of Health (MOH) staff for their assistance and patience.

Background

Objectives of the DQA

The overall goal of the DQA is to ensure that management of immunization services and the allocation of GAVI funding are based on sound and accurate data. This goal is met by:

- Assessing the reliability and accuracy of administrative Immunization Reporting Systems, but not immunization service delivery.
- Auditing the reported DTP3<1 vaccinations for the audit year 2002 and estimating the national verification factor (ratio of recounted / reported vaccinations) for use in the allocation of GAVI Fund shares.

The above objectives are achieved by examining data and the information system in operation at all levels of administration – from collection of data at the point of vaccination to the periodic compilation of this data at district level and at National headquarters. This is done on the basis of randomly sampled administrative levels.

Furthermore, in practice the DQA is also a capacity-building exercise, and an opportunity for exchange of experience between the external auditors and the national counterparts.

Our approach

Our approach was to apply consistently the DQA methodology developed in 2000 by the World Health Organization (WHO).

The PwC team members were from our local associate office (Finconsult Ltd.), in the interest of cultural and linguistic proximity, acceptance by Auditees, ease of travel, and cost-effectiveness. PricewaterhouseCoopers is a federation of partnerships, and we have therefore worked through this network in order to build up our teams.

In preparation for the DQA, we applied country-by-country training, in which the quality assurance manager for each region traveled on-site to train both the PwC teams and the national counterparts appointed by the government. Training of the Finconsult team and the Afghan counterparts took place in Islamabad, jointly with the Pakistani teams. The training materials that we used for these courses have been provided to GAVI. We used this training option in the spirit of the DQA, so that it not only provides objective results to GAVI and its stakeholders, but also enforces the capacity-building aspect of the DQA.

Summary of work done

Two audit teams were formed, comprising one PwC/Finconsult auditor and one or more national auditors. The teams worked together at National level and then split up, one remaining in Kabul and visiting NEMT, REMT and PEMT and 6 Health Units of Kabul province. The other team visited three provinces and 18 Health Units.

We carried out the tasks detailed in the DQA methodology, which included among others:

- Random selection of 4 Provinces (DQA: districts) and 24 Health Units.
- Discussion of the immunization system in place including system design (national level only), denominator issues (national and province levels only), recording, reporting and storage practices, monitoring and evaluation.
- Recount of vaccines administered for DTP3<1 (at least) at health unit level, and comparison of recorded with reported figures at all administrative levels.
- Review of the cold chain at all administrative levels.
- Review of vaccine supply and stock procedures in place.
- Review of the procedure for reporting and investigating Adverse Effects Following Immunization (AEFI) at all administrative levels.
- Performance of the Child Health Card exercise or observation of a vaccination session.

Mobilization

Prior to commencement of the DQA, the Audit Team met a few times the officers of the Expanded Programme on Immunization (EPI) and Ministry of Health (MOH) and briefed them on the objectives, purpose and methodology of the exercise. During the same sessions, the EPI and MOH briefed the Audit Team on the national context, including major public health and vaccination and immunization issues and policies.

The team for the Afghanistan DQA was composed of:

Name	Title	Location
MOH Officer		
Dr. Ahmad Arif Stanekzai	Deputy EPI Manager	National level
Dr. Mohammad Saber Adab	EPI Counterpart	National level
Dr. Mohammad Ayub	HMIS	National level
Mr. Abdol Matin	Assistant, Policy & Planning Dept.	National level
Provincial Officers		
Dr. Zakhmi Mr. Hafizollah Wardak Dr. Mohammad Anwar Dr. Abdorrahman	Provincial EPI manager Provincial EPI manager Provincial EPI manager Provincial EPI manager	Kabul, Kabul Province Ghazni, Ghazni Province Herat, Herat Province Pole Khomri, Baghlan Province
External auditors		
Firouz Afrouz	PwC/Finconsult, external auditor	National level and Provinces
Reza Ravaee	PwC/Finconsult, external auditor	National level
Ms. Aziza Syawash	PwC/Finconsult, external auditor	National level
Jan Grevendonk	PWC, trainer and QA manager	Islamabad

The Logbook provides the details of individuals visited during the DQA.

National – findings and recommendations

Strong points

At the central level, there is a good control over the data and reporting: immunization reports are properly recorded and processed. The chain of reports from provinces to the national level seems to be working fairly well, as it relies on transmission by the UNICEF network. As well, the denominators provided by UNICEF are clearly indicated.

Equally good was the control over vaccine stock and the cold chain in general. These strong points are reflected in Quality of the System Index (QSI) score for Recording practices and Denominator (see further).

Areas for improvement

Whereas the recording of the data is fairly good, there is room for improvement of reporting and for better use of the data. Key metrics such as immunization coverage, drop out rate and vaccine wastage rate are not routinely calculated, displayed, or monitored.

As reports are transmitted from Provinces to UNICEF and not directly to the National level, the National level cannot control the completeness and timeliness of the reports. The empowerment of the MoH and National EPI would clarify responsibilities and improve accountability.

Without good monitoring, also the supervision function of the central level has its problems. Clear and written procedures should be issued to Provinces and Health Units. Control over proper recording and reporting, timely presentation, compilation and particularly reconciliation and monitoring of immunization records could be improved.

Sufficient immunization forms were not available at some levels.

All these weaker points are reflected in the lower scores for System Design, Monitoring and Evaluation and Storing and Reporting (see Quality of System Index later in this report).

Information/data flow and organization of EPI for the country

a) General organizational system

The country is divided in 6 regions, with each Region covering several Provinces. There are 33 Provinces, with each Province divided in Districts. The total number of Districts is 324. Each District has one or more Health Units. Presently EPI is organized along the same administrative lines. Each HU responds to a District Supervisor, who answers to the Provincial EPI Management Team (PEMT). The PEMT reports to the Regional EPI Management Team (REMT), who in turn communicates with the National EPI Management Team (NEMT).

b) Health Units

HUs prepare monthly reports on standard forms and usually submit them to the District Supervisor (DS). In many cases, HUs are sponsored by an NGO, or directly by WHO or UNICEF. The vaccinators of such HUs are usually selected and hired by the sponsoring entity, which pays an additional "incentive" salary. In these cases the HU directly reports to the entity. Whenever the DS needs HU reports, he therefore has to request them from these entities. This disruption in the reporting chain is very obvious and causes shortage of information at upper levels.

Until such time as the NEMT was established, the system of sponsoring and reporting was the only one operating. Now that a national system is set up, the empowerment of the national structure is needed. Monthly reports are submitted to the higher level (entity or DS) at the end of each month. The deadline for submission varies from case to case, but generally speaking it is within the 5th of each following month.

c) Districts

The District level (corresponding to "sub-district" for GAVI) has a collection and transmission role. It is usually the District Supervisor (DS) who goes around and visits the HUs, collects reports, finds out needs and provides supplies. The logistics are difficult in most areas because of poor road conditions and lack of transport means.

At District level the monthly reports of the HUs of the District are tabulated into aggregated monthly data. The aggregation is done by type of vaccination, but not by individual HU. This change in tabulation from HU to District has obliged the Audit Teams to rearrange all data by HU, considerably slowing down the audit process. HU performance becomes then difficult to monitor and supervise.

The District Supervisor does not receive the data from HUs sponsored by other entities than the official institutional chain.

The rearranged monthly data are then submitted to the Provincial EPI Management Team (PEMT), usually by the 10th of each following month.

d) Provinces

The 32 Provinces have each a Provincial EPI Management Team (PEMT). The District reports received by PEMT are compiled together at Province level and submitted monthly to the Regional level. In 3 out of 4 visited PEMTs, a computer was used for data entry and tabulation. Only Baghlan used manual tabulation. In Ghazni, where a computer was available, there had been a computer crash in 2002; no back up being available, the 2001 data were lost.

Where the HUs submit their reports to other entities (NGO, UNICEF, WHO), PEMT has access to the relevant data upon request to the sponsoring entity, where these reports are filed. The Audit team addressed these entities whenever needed and could recover the needed data in some cases. Where the responsible person was not available, the HU data could not be obtained.

e) Regions

The 32 Provinces are grouped into 6 Regions, each one of which has a Regional EPI Management Team (REMT). The 6 REMTs receive the reports from all PEMTs (usually transmitted through the good services of UNICEF) within 15 days from the end of each month and produce summary tables for all types of vaccinations by Province and District. The system does not provide data by HU.

Because the National EPI was set up recently and is not fully empowered, REMTs continue to remit their reports quarterly to the regional offices of UNICEF or WHO, which then forward them to the central WHO office in Kabul.

REMTs have proper direct control over the cold chain data and supplies.

f) National level

All reports at National level are obtained from the central office of WHO. Now that NEMT has become operational, it is expected that it will take a more active attitude towards collection of data from REMTs.

Verification Factor

The verification factor is calculated based on data collected during the DQA and is a measure to verify the reported performance at national level. It compares the number of doses recounted from the Health Unit tally sheets to the numbers that were reported to the higher levels. The main problem for the calculation for the verification factor in this DQA was obtaining all the needed data at Health Unit levels. In three HUs and in one Province (Baghlan) monthly reports were not complete.

Furthermore, not many inconsistencies in data between District and National levels were encountered. At Health Unit level, on the other hand, immunization registers were widely available, while tally sheets were not always stored, obliging the recount to be carried out from child vaccination registers. Sometimes this resulted in variations between recounted and reported numbers. Still, a Verification Factor of 91.5 % was calculated. One of the main reasons for this relatively high verification factor is systematic under-reporting from District to Province and to National level.

Quality of the System Index

QSI at National level:	56.6 %
Recording practices	4.3 / 5.0
Storing and reporting	2.0 / 5.0
Monitoring and evaluation	2.2 / 5.0
Denominator	4.5 / 5.0
System design	1.9 / 5.0

Recording practices (score: 4.3 / 5.0)

Issues observed	1. Supervision of lower levels is not carried out regularly and supervisors do not provide written instructions.
Recommendation	1. Issuance of written instructions and procedures for recording and for supervision would greatly enhance data completeness, quality and reliability. 2. Better supervision should be carried out at all levels to ensure correct recording.
EPI management comments	

Storing and reporting (score: 2.0 / 5.0)

Issues observed	1. Computer utilization is limited to Provincial and regional levels. 2. The date of printing/production was not available on every tabulation/chart.
Recommendation	1. All reports, tabulations and other data produced at all levels should be dated and signed.
EPI management comments	

Monitoring and Evaluation (score: 2.2 / 5.0)

Issues observed	1. There was no up to date monitoring chart of table of the current year's immunization coverage and drop out rate displayed in the EPI office. 2. Supervision is not monitored properly, and supervisors are not fully conversant with their tasks. There is no feedback from supervision.

Recommendation	1. A chart or table monitoring the current year's immunization coverage and drop out rate should be made and displayed in the relevant office. 2. Supervision activities should be planned for and monitored. Data received from districts should be thoroughly analyzed and proper feedback should be given.
EPI management comments	1. NEMT agrees with the observation and states that the map is available at WHO. 2. Supervision feedback started in 2003

System design (score: 1.9 / 5.0)

Issues observed	1. There are no written instructions and procedures for reporting from Health Units to higher levels. 2. The reporting from District to higher levels (Province, Region and National) does not allow tracking of monthly vaccination data down at HU level. 3. The reporting format from the Districts to higher levels (Province/Region) does not allow for calculation of vaccine wastage. 4. Adverse Events Following Immunization (AEFI) are only reported on a case by case basis. There is no quarterly, semi annual or annual report on Adverse Events Following Immunization.

Recommendation	1. NEMT should issue clear, detailed and comprehensive operating and reporting instructions to all levels 2. The report from the District level to higher levels should provide the information necessary for tracking monthly vaccination data down to each individual HUs. 3. The report from the District level should provide the information necessary for calculation of the vaccine wastage (doses used versus administered and discarded). 4. AEFI aggregate information should be introduced in the periodic reports.
EPI management comments	

Denominators (score: 4.5 / 5.0)

Issues observed	1. No breakdown of infant immunizations was known between fixed, outreach and mobile strategy.
Recommendation	3. Knowing the percentage of infant immunizations per strategy would be helpful for the EPI management to focus resources.
EPI management comments	

Vaccine wastage rates

Overall vaccine wastage rates cannot be calculated because of the lack of information provided by the reporting system. System wastage at central level was reported to be nil.

Reporting Adverse Effects Following Immunization (AEFI)

No system is in place for the aggregate reporting of AEFI. However, guidelines exist as to what to do on a case-by-case basis and implementation should start soon.

Availability and completeness of reports

For 3 out of 4 provinces, sets of monthly reports were available for the audit year and the year previous to the audit year. However, not all reports were complete and did not cover all Districts and Health Units. One province was particularly short of most monthly reports for the audit year, apparently because of fighting during the war.

District – findings and recommendations

District context

Under the administrative divisions of Afghanistan, there are 324 relatively small districts, with a majority of the districts controlling less than 6 health units. This leads to a situation were the resources seem to be spread thin and staffing and resources in the districts are not adequate for their important responsibilities, as the primary supervisors of the Health Units.

The “Districts” as defined for GAVI DQA correspond to the “Provinces” in Afghanistan. The Provinces were therefore treated as DQA Districts and consequently the Quality of Systems Index in the following discussion refers

to the Province level, not to the District level. To be able to sample 24 health units for this DQA, 4 Provinces were selected. In every Province 6 Health Units were selected.

Data accuracy

Some variances were observed in tabulations at National, Province and District levels for all selected Provinces. They show both over reporting and under reporting. Transcription errors may be the reason for some smaller variances, but they cannot explain all the variances found in many Provinces and Health Units. The reason may be incomplete recording of outreach vaccinations and late reports that did not get updated at higher levels.

Since not all Health Unit tabulations could be found at the Province level, and since tabulation from District level upwards are different from Health Unit level reports, it is impossible to comment on the consistency of data at district level, between the Health Unit reports and the Province level tabulations.

No indications were found that data was deliberately altered to improve the reported numbers.

Quality of the System Index

Average QSI at Province level:	61.3 % (range between 31.6 % and 79.4%)
Average score recording:	3.5 / 5.0
Average score storing and reporting:	1.7 / 5.0
Average score monitoring and evaluation:	3.3 / 5.0
Average score demographics and planning:	3.5 / 5.0

Recording (3.5/5.0)

Issues observed	1. No date is stamped or written on the HU reports as they are received at PEMT. 2. Not all immunization forms were sufficiently available in all the visited HU.
Recommendation	1. District staff should promptly write the date of report received, which will make it easier to identify the final report version. 2. All forms should be made available in all the HU, as a minimum requirement for high quality reporting.
EPI management comments	

Storing and Reporting (1.7/5.0)

Issues observed	1. Poor filing system, or lack of it, is resulting in an unnecessarily complex and time consuming reporting process (no separate file for each HU at the district level). 2. Many HU reports and tally sheets missing from PEMT files. 3. No date and time of report printing is mentioned. 4. Computer shortage and no backup system 5. Shortage of several immunization forms at HU level (tally sheets, vaccination cards, child register, monthly report).
Recommendation	1. An orderly filing system should be set-up as a matter of priority 2. The date and time of report printed should be mentioned in the report to allow the user to identify the updated report. 3. Timely supply of immunization forms to HUs. 4. Computerization should be seriously expanded.

EPI management comments	

Monitoring and Evaluation (3.3/5.0)

Issues observed	1. There was no up to date monitoring chart or table of the current year's immunization coverage and drop out rate displayed anywhere. 2. No monitoring on reporting timeliness for HU immunization reporting. 3. No regular meetings with health workers to discuss immunization performance. 4. No annual report is produced at provincial or district level. 5. No monitoring of completeness of reporting from HU at district level.
Recommendation	1. Up to date chart/table of the current year's immunization coverage should be on display in relevant office for public information. 2. The Province should monitor timeliness for HU reporting and follow up on the missing ones. 3. Regular meetings with HU workers should be held to discuss the HU performance and issues facing to solve the problems promptly. 4. Annual reports could be made and distributed among people involved in the provincial health system. 5. The Province level should monitor and follow up on the reports from the HU to ensure that the report send by HU is complete and accurate.
EPI management comments	

Denominators (3.5/5.0)

Issue observed	1. The proportion of infants immunization per strategy type was not set up at 2 PEMT. 2. District map of catchments area showing immunization strategy not displayed in any of 4 PEMT.
Recommendation	1. A consistent vaccination target rate should be agreed upon for all levels. 2. The percentage of infant immunization should be known for each type of strategy. 3. The district map of the catchment's area showing immunization strategy should be displayed prominently in all district offices for public information.
EPI management comments	

Vaccine wastage rates

No system wastage was reported at Province level. No wastage could be calculated as the required information is not available in the reports.

Reporting Adverse Effects Following Immunization (AEFI)

No aggregate reporting system is in place. A form exists as to what to report on a case-by-case basis.

Availability and completeness of reports

Several Health Unit reports were missing at Province level. No information was available about completeness of reporting.

Health Units – findings and recommendations

Health Unit context

The Extended Program on Immunization has been operating in Afghanistan for several years, long before the national office was established. Most of the visited Health Units were found to be well run and the vaccinators properly trained.

“Taking ownership” of the Health Units by the Ministry of Health (MoH) is still in process, as the National EPI was established in November 2002 and the transfer of power from the organizations sponsoring the HUs - namely NGOs, WHO and UNICEF - to the MoH is not complete.

Resources are adequately distributed to Health Units. Shortages of supplies are not frequent and are mostly due to lack of supervision and lack of personnel attention.

Outreach activities are constrained by the shortage of staff.

Data accuracy

Tally sheets for the audit year were not available in almost half of the 24 HU, either because they had bee transmitted to higher level or were missing from files. Recount of reported data was performed on tally sheets when available, otherwise on child registers, which were always available. Monthly reports were usually available at all HUs, although not complete in 6 HUs out of 24. Recounted and reported numbers were fairly close at 15 HUs. In 9 HUs recounted and reported numbers had a variation of more than 20%.

Quality of the System Index

Average QSI at Health Unit level:	60.5 % (range between 28.6 % and 85.7 %)
Average score recording:	3.5 / 5.0
Average score storing and reporting:	3.2 / 5.0
Average score monitoring and evaluation:	2.2 / 5.0

Recording (3.5/5.0)

Issues observed	1. No tally sheets were available for audit year in 10/24 HUs. 2. Stock ledger was not maintained in several HUs. 3. Proper instructions were not given on how to properly enter stock ledgers 4. Recurrent shortage of vaccination forms and other stationary
Recommendation	1. Instructions should be issued to HU for archiving Tally sheets for recording of the number of immunization for the period, as this form is the initial source of information for reporting purpose. 2. HU staff should be properly trained and monitored by higher level from time to time to ensure compliance with standards. 3. Stock ledger should be maintained at HU level to inform the number of vaccine receipts each session and report the total for the whole year for reconcile to the record in the district level. 4. Each PEMT should make sure that all HUs under its jurisdiction have sufficient supplies of stationary and forms.

EPI management comments	

Storing and reporting (3.2/5.0)

Issues observed	1. Not all HU reports were available for the entire audit year. 2. No properly organized filing of HU reports. 3. HU staff was not aware of standard operating procedure and the forms to complete if there is an AEFI case to report. Only 2 HUs were aware of such reporting forms.
Recommendation	1. One copy of all reports and tally sheets should be maintained at HU for future reference. 2. An orderly filing system should be set-up as a matter of priority. 3. HU staff should be trained by higher level and standard operating procedure and forms should be provided by the district/province/national level.
EPI management comments	

Monitoring and evaluation (2.2/5.0)

Issues observed	1. In 4 HUs there was no target number of infants and pregnant women that they strive to vaccinate against DTP during a calendar year or reporting period. 2. No awareness of new births in the target area. Attempt to follow-up to ensure that all children are immunized in 2 HUs. 3. No vaccine wastage calculated and monitored. 4. Map of catchment's area showing immunization strategy not displayed in HU. 5. No mechanism in place to track defaulters. 6. No chart/table on display showing the number (or coverage) of child vaccinations by report period for the current year in 6 HUs.
Recommendation	1. Target number of infants and pregnant women should be defined by HU. 2. HU staff should update new birth information and establish closer communication with community. 3. Vaccine wastage should be calculated at least once a year and investigated to identify causes and possible methods to reduce wastage. 4. Immunization coverage rates and drop-out rates should be calculated at least once a year to evaluate HU performance and future planning. 5. Map of catchment area should be displayed prominently. 6. Chart/table showing the number (or coverage) of child vaccinations by report period for the current year should be displayed at all HUs.
EPI management comments	

Drop-out rates

Not systematically calculated at 4 HU level.

Vaccine wastage rates

No instruction and procedure for calculation of vaccine wastage rates at HU level.

Reporting Adverse Effects Following Immunization (AEFI)

There was no formal written reporting instruction for AEFI. In case an AEFI is reported to HU, HU staff fills in the AEFI form with all necessary information and gives it to the District Supervisor.

Availability and completeness of reports

Completely or partially missing reports and/or tally sheets were found in 2 HUs in Baghlan Province and 1 HU in Ghazni Province.

Way forward and lessons learned

Upon completion of the DQA, a debriefing was held on 23 September 2003 for EPI managers before they all left for a visit to a foreign country. They generally agreed with the DQA conclusions. The recurrent comment is that NEMT has been recently established (although by now almost a year ago) and is in the process of setting up its operation

system.

The National EPI should take urgent and strong action to empower itself and take control of the of the routine vaccination system. Issuance of procedures and instructions, as an operational handbook, to all levels is particularly needed.

It is clear that the supervision on each level on the lower one has to be reinforced and continuous training at all levels should be implemented.

The Auditors also learned that the present EPI manager, Dr. Mashal, is going to leave soon for a period of 4 years in Japan to continue for a PhD program. MoH is looking to find a suitable replacement as EPI manager. These management changes shall obviously have a negative effect on the efficiency of the EPI operations.

APPENDIX I. NATIONAL PERFORMANCE INDICATORS

A. Performance Indicators - 2001 and 2002

Calendar year	Reported DTP3 <1	Change in reported DTP3 <1	DTP3 <1 coverage rate	%Districts DTP3 <1 coverage >= 80%	%dropout DTP1 <1 to DTP3 <1	%Districts dropout < 10%	%DTP vaccine system wastage	Qualty of the System Index Score
2001	missing		missing	missing	missing	missing		
2002	448,575	missing	47.6%	missing	11.2%	19.0%	missing	56.6%

APPENDIX II. DISTRICT PERFORMANCE INDICATORS

Province	QSI	Recording	Storage Reporting	Monitoring Evaluation	Demographics Planning
Kabul	79,4	4,00	2,50	4,09	5,00
Ghazni	66,7	3,89	1,43	3,18	4,44
Herat	67,6	3,89	2,14	3,64	3,50
Baghlan	31,6	2,22	0,63	2,27	1,00
Average	**61,3**	**3,50**	**1,68**	**3,30**	**3,49**

APPENDIX III. HEALTH UNIT PERFORMANCE INDICATORS

Kabul Province	QSI	Recording	Storage reporting	Monitoring Evaluation
Chahar Asyab	57,1	3,00	3,75	2,22
Bagrami	51,9	2,86	3,75	1,67
Bebe Mahro	60,7	3,00	3,75	2,78
Sra Miashta	57,1	3,00	3,75	2,22
Khoshal Khan	60,7	3,00	3,75	2,78
Pinja Bister	46,4	3,00	1,25	2,22
Average	**55,7**	**2,98**	**3,33**	**2,32**

Herat Province	QSI	Recording	Storage reporting	Monitoring Evaluation
Islam Qala	71,4	4,67	2,50	2,22
Kohsan	85,7	4,67	5,00	3,33
Pashtun Zargun	78,6	4,67	2,50	3,33
Turghundi	78,6	5,00	3,75	2,22
Shekiban	46,4	2,67	2,50	1,67
Now Abad	50,0	3,00	3,75	1,11
Average	**68,5**	**4,11**	**3,33**	**2,31**

Ghazni Province	QSI	Recording	Storage reporting	Monitoring Evaluation
Ghazni Hospital	50,0	3,00	3,75	1,11
Clinic Shams	60,7	3,67	3,75	1,67
Qeyaq	57,1	3,67	3,75	1,11
Khogiani	71,4	4,00	2,50	3,33
Khaje Omari	67,9	4,00	3,75	2,22
Arzoo	46,4	2,67	3,75	1,11
Average	**58,9**	**3,50**	**3,54**	**1,76**

Baghlan Province	QSI	Recording	Storage reporting	Monitoring Evaluation
Khenjan	50,0	2,67	2,50	2,22
Doushi	82,1	4,67	3,75	3,33
Baghlane Ghadim	28,6	2,67	0,00	0,00
Baghlane Sanati	57,1	3,00	1,25	3,33
Baghe Shomali	64,3	3,67	3,75	2,22
ARCS	71,4	3,67	5,00	2,78
Average	**58,9**	**3,39**	**2,71**	**2,31**

APPENDIX IV. CORE INDICATORS

Indicator		**Information at the District level**		
District DTP3 coverage	N	2001:	63,830	69 %
(last tabulation available)	%	2002:	82,454	87 %
District measles coverage	N	2001:	51,178	
(last tabulation available)	%	2002:	59,762	
District drop-out (DTP1-3)		2002:	4 %	
Nr syringes supplied in 2002 to the district		2002:	164,908	
Total immunization given in 2002 (less OPV)		2002:	638,622	
Nr district coverage reports received per year		61 HUs /12		
Nr district coverage reports received on time		61 HUs /12		