

Zambia Internal Appraisal 2014

1. Brief Description of Process

This Internal Appraisal was conducted for Gavi by independent technical expert **Gordon Larsen**, in close cooperation with Gavi SCMs for the country **Alison Riddle** and **Stefano Lazzari** and is based on reports, documentation and clarifications provided to Gavi by the national authorities and institutions in the country for the year 2013. It also took account of findings and recommendations of a **National Integrated EPI, PIE & Surveillance Review** that was conducted in the country in July-August 2014.

In 2013 Zambia received Gavi support for the following vaccines: penta, measles, pneumo, and rota.

2. Achievements and Constraints

The APR clearly states that the country did not meet its coverage targets in 2013, although only the missed target for DPT3 is specifically mentioned (79% compared to a target of 87%). Targets for PCV3 and Rota were missed due to delayed introduction. However, the targets for BCG, OPV3, DPT3, Penta3, measles, and TT were also missed, in some cases by very wide margins. These results suggest that many targets were unrealistic in the first place. The long-term coverage trends for all the traditional EPI vaccines show that change occurs only slowly and the trends for all antigens have been downwards in recent years, so it was unrealistic to expect they would show a sudden increase in 2013 in the absence of a very concentrated effort.

Such a concentrated effort was not possible as 3 new vaccines were added to the national schedule within the same year (i.e. PCV, Measles 2 and Rotavirus), increasing substantially the workload of the programme. In addition, several serious financial, human resource, logistics and management challenges continue to hamper programme implementation, e.g., the programme realignment within the Ministry of Health, an upward revision of the estimated infant target population, the addition of two new districts, inadequate district finances and delayed release of funds leading to a funding gap, inadequate transport and fuel, serious staffing shortages and responding to an outbreak of measles.

There is no mention in the APR of specific plans for accessing marginalised or hard-to-reach populations though the programme has been making efforts to rapidly improve immunization and the equity of immunization services through the Reaching Every District (RED) approach. However, the 2014 EPI review notes that failure to use RED prioritization criteria at facility level could result in non-identification of areas of low performance. It also notes that only 62% of planned outreach sessions were being conducted for a variety of reasons, including:

- lack of transport or inadequate vehicles
- inadequate funding for fuel
- staff shortages for outreach
- logistical challenges (e.g. lack of shelter in harsh weather conditions)

The annual drop-out rate for DPT1-DPT3 is calculated at 8%, which meets the target of 9% set for 2013.

Minutes of the ICC meeting describe a discussion on the need for a change in presentation of PCV vaccine from the 10-valent to the 13-valent version based on evidence from a multi-country study together with surveillance data identifying the pneumococcal serotypes in circulation. Though the APR mentions that “the country wishes to request for change in the presentation of PCV vaccines”,

the Secretariat has followed up with the country numerous times and has recently received the response that the country intends to continue to implement PCV10 for the time being.

The last DHS conducted in 2007 showed no significant discrepancy in reaching boys as compared to girls for immunization. Analysis of results of a DHS conducted in 2013 is still under way, but data is not disaggregated by sex and there are apparently no plans to collect data in a disaggregated format in future. No gender focused information packages have been prepared or used for the immunization programme and no other types of equity issue are mentioned on the APR country template.

Major activities reported for 2013 include the expansion of the national cold chain capacities, improved vaccine management at national level, the introduction of MCV2, PCV10 and Rotavirus vaccines, pilot of HPV vaccine in three districts (with vaccines donated by Gardasi Axiol and reportedly in line with Gavi guidelines on HPV demonstration), training and development of IEC materials.

The main challenges identified in the APR include:

- Government decision to realign the Maternal & Child Health functions from their former location in the Ministry of Health (MoH) to the Ministry of Community Development, Mother and Child Health (MCDMCH),
- Inadequate access to funding for routine immunisation and outreach services by the districts.
- Persistent staff shortages and high turnover of trained EPI staff.
- Introduction of multiple vaccines over a short period of time, overloading already stretched resources.
- Inadequate transport for vaccine distribution, supervision and outreach activities.

To address these challenges, the programme has increased efforts to mobilize resources from Government and local partners to strengthen routine immunization at district level; a workplan to scale up training of appropriate health workers, introduce retention packages, and improve workforce management system has been developed; budgetary constraints due to the move of MCH to the Ministry of Community Development Mother and Child Health are being resolved.

3. Governance

The ICC functions as a large high-level body chaired by the Minister and dealing with broad policy matters rather than the details of the EPI programme. It meets occasionally with 3 meetings reported for 2012 and only 2 for 2013. For the meeting on 13 May 2014 at which this APR was endorsed for submission to Gavi, a total of 60 members are recorded as attending.

Provinces and states are not represented on the ICC but 5 CSOs (Churches Health Association in Zambia, Centre for Infectious Diseases Research in Zambia, PATH, World Vision International, and Catholic Relief Services) are members and participate actively in meetings. There is no reference to any kind of beneficiary feedback to any of these groups and it is unclear whether any mechanism to encourage or facilitate such feedback has been established.

4. Programme Management

Zambia has been implementing routine EPI in the context of health sector reforms, a Sector Wide Approach (SWAp) and decentralization since the early 1990s. At present, routine EPI is fully integrated into the health service delivery system at the district level. The expanded Maternal Neonatal and Child Health, & Nutrition Inter-Agency Coordinating Committee (MNCH&N ICC) oversees implementation of the immunization programme and the Child Health Technical Working Group functions as the secretariat.

Zambia has drawn a comprehensive multi-Year Plan for immunization for 2011 – 2015, aligned with the sectorial National Health Strategic Plan (NHSP) and the Mid Term Expenditure Framework (MTEF.) The EPI programme develops annual action plans to be approved by

Parliament for funding before the beginning of the subsequent year. District plans are developed individually and funded as such for each of the 104 districts in Zambia.

5. Programme Delivery

An EVM conducted in Zambia in July 2011 identified several weaknesses in the areas of temperature monitoring, cold chain capacity, stock and distribution management, and vaccine management. The EVM included several recommendations and an Improvement Plan estimated to cost US\$4.4 million overall.

With improvement work on-going at the time valued at US\$1.55 million, the country then developed its own revised Improvement Plan to cover the remaining items identified by the EVM.

A status report dated April 2013 is annexed to the APR, listing actions taken to date and next steps but monitoring of implementation is hampered by the lack of a timeline for completion of each action, the corresponding EVM codes, and indication of budget target or budget actually used for each action implemented. The APR refers to 'Partial implementation' of the EVM.

The next EVM is planned for December 2014.

The APR states that there were no vaccine stock-outs of Gavi vaccines at any level during 2013. Vaccine stock management improvements were recommended by the 2011 EVM and the APR notes a rapid assessment of stocks, vaccine management and cold chain status was made in March 2014 at national and provincial levels. Following these activities, the vaccine shipment plan was adjusted to reflect a more realistic scheduling of deliveries that is responsive to both vaccine needs as well as to storage capacities.

Recent vaccine introductions have proceeded approximately to plan, although the introduction of multiple vaccines over a short time period, the challenges of switching to a new Ministry, coupled with chronic staff shortages, a rising target population and setting of unrealistic targets in the first instance have all contributed to slippage in schedules and the missing of targets. Lessons to be learnt are that plans and targets need to be achievable from the outset to avoid unrealistic expectations and a failure to reach them.

6. Data Quality

The APR reports there have been no discrepancies between national administrative data system and WHO/UNICEF estimates although 2 significant differences for 2012 are noted. The country-reported 95% coverage for measles in 2012 while the WHO/UNICEF estimate is 83%, and the country-reported 70% coverage for OPV3 while the WHO/UNICEF estimate is 83%. In general however, there are only minor discrepancies between the two sources and national data quality is considered to be acceptable.

As already mentioned in section 4 above, there are now significant differences between country data and UN Population Division figures for births, surviving infants and pregnant women. It is not known whether local census data is considered to be of sufficiently high quality to be used instead of UN projections.

The country carried out an EPI cluster survey in 2011 which showed coverage rates for most traditional vaccines to be equal or above the national data system figures, thus validating the quality of the latter. A Data Quality Self-Assessment (DQSA) was also conducted in 2012.

Activities undertaken to improve data include:

1. Monthly data harmonization between immunization programme and laboratory
2. Quarterly IDSR meetings
3. Post campaign population surveys
4. Developed a strategic plan that will enhance Civil Registration and Vital Statistics (CRVS) to improve registration and documentation of births and deaths (still in progress)

5. Upgraded the HMIS from former access-based to the web-based DHIS2 introduced to all districts and is expected to significantly improve management of health information at all levels.

Teething problems over last 3 years have included delays and incomplete reporting, denominator problems particularly in newly-created districts (not all yet enumerated by Central Statistical Office), inadequate supervision of health information officers and insufficient feedback from districts to national level HMIS on the status of reporting.

Plans to improve administrative data systems include:

- Improved internet connectivity for users of HMIS in all districts to facilitate timely online submissions
- Upgrading of the HMIS to web based system through further strengthening the capacity of the Monitoring and evaluation unit as well as increasing capacity on access rights to program officers.
- The program is partnering with the “Better Immunization Data” project funded by the Bill and Melinda Gates Foundation to explore and implement feasible scalable solutions/innovations to improve quality of data and its utilization at local level. This support is in its final development phase and earmarked to start in the second half of 2014 in one province before being scaled up in a phased manner.
- The EC has provided funding to strengthen capacity for HMIS which will be operationalized in the second half of 2014.

7. Global Polio Eradication Initiative, if relevant

Polio immunization is fully integrated into routine immunization in the country. Bi-annual Child Health Weeks are conducted countrywide, along with bi-annual polio supplemental immunization in 30 high risk districts to sustain the country’s polio free status. The last confirmed case of polio was reported in 2002 (identified as an importation from Angola).

The introduction of IPV to replace oral polio vaccine is mentioned in the APR and the ICC has endorsed an Expression of Interest for Support from Gavi for this vaccine. It was noted however, that OPV coverage in 2013 is already the lowest among the traditional vaccines and it seems likely that any switch to an injectable vaccine will put further downward pressure on polio vaccine coverage rates. Some concerns are voiced that introduction of IPV will result in children receiving yet more injections in an already heavy immunization schedule. Zambia applied for Gavi IPV support in September 2014.

8. Health System Strengthening

Zambia is not reporting on Health Systems Strengthening (HSS) fund utilisation in 2013 as they do not have an active HSS grant. Zambia is expected to submit a new HSS grant application in early 2015.

9. Use of non-HSS Cash Grants from Gavi

The APR reports on ISS funds in-country (MOH) that have remained unused for programme activities since 2009. According to APR, the amount carried over from 2012 was US\$ 267,748 with an additional income of US\$ 11,833 due to interest earned and exchange gains. Expenditure from these funds during 2013 amounted to US\$ 75,386 with a balance of ISS funds carried forward to 2014 of US\$204,195.

The APR states: “Government notes with concern that it continues to report on funds in Gavi accounts which have remained dormant for over 5 years. In its reporting it has continued to send audited financial statements, but recognising the time and effort put into preparing reports on funds that are not in use, this is not an economically viable option. Government is of the opinion that it is in its best interest that these funds are reimbursed to Gavi. In view of the above, government

requests banking details for which these funds can be sent to Gavi so as to close the previous Gavi ISS support window”.

The minutes of an ICC meeting held on 13 May 2014 also draws attention to this issue. The Secretariat has since followed up on the request and the funds have been reimbursed to Gavi.

Zambia is not reporting on CSO (Type A or B) fund utilisation in 2013.

VIGs were awarded to Zambia for the introduction of Penta vaccine, PCV, Rota, and measles second dose in 2012-2013. According to APR, funds received from Gavi in 2013 amounted to US\$567,000 which is confirmed by UNICEF financial statement dated 15 May 2014. Funds carried forward from 2012 are shown as US\$1,103,000 giving an available total for 2013 of US\$1,670,000. However, an expenditure of US\$100,584 was not recorded and the balance to be carried forward to 2013 should have been only US\$1,002,416 and not US\$1,103,000 in both the APR and UNICEF financial statement. These apparent errors notwithstanding, VIG funds awarded appear to have been used for appropriate activities and the intended purposes during the year under review.

10. Financial Management

A draft FMA was prepared in 2013 and sent to the country for comment. However, with the creation of the new ministry, the FMA will need to be revised in 2015. The Secretariat has plans to do so in conjunction with the country's expected new HSS proposal

11. NVS Targets

All baseline data, performance indicators and future targets are adequately included in APR and, apart from setting overly-optimistic targets for immunization coverage, all information is provided and updated as required. It is noted that following the release of the final 2010 country census report, numbers for total births, surviving infants and pregnant women have all been revised, along with the numbers of children targeted for immunization with each of the EPI antigens. This latest census data results in country estimates for the numbers of live births and surviving infants that diverge even further from the data provided by the UN Population Division. National figures for live births are now 13.6% higher than UN predictions for 2013, and surviving infants are 12.8% higher than UN predictions. These changes clearly have implications for all forms of Gavi support to the country.

The targets for DTP3 and PCV3 were revised downwards following IRC recommendations in December 2012, but revisions were minimal and targets are still considered around 10% pt. too high. The targets set for DPT1, Penta1, PCV1 and Rota1 for 2015 are also probably unrealistic and need to be adjusted. First quarter 2014 coverage results, annualized for the year, show that none of the NVS targets set for 2014 are likely to be met based on current trends. Coverage with measles 2nd dose was especially low in the first quarter, (at 29%), but it is noted that the target set for this dose is a more reasonable 39% in APR baseline (revised downward from the 91% that was originally set)

2014 targets for PCV are higher than previously approved targets (595,194 vs 534,122, so dose adjustment needed), but lower than those of Penta despite full year intro (79% coverage vs 88% coverage). 2015 targets are in line with targets previously approved and with Penta at 700,905 for 1st dose. 22% increase for Penta between 2013 and 2015, so targets may need to be adjusted downwards. Country had indicated intent to switch from PCV10 to PCV13 but has later confirmed that it will continue with PCV10 for the time being.

2014 targets for Rota are also higher than previous approved targets (595,194 vs 588,273), but coverage higher than PCV due to 2 dose schedule. 2015 targets are in line with targets previously approved. Third dose coverage is the same as PCV despite 2-dose schedule. 22% increase for Penta between 2013 and 2015, so targets may need to be adjusted downwards.

The target set for drop-out rate for DPT1-DPT3 for 2014 is 3% which appears optimistic, but for 2015 the target is a surprising 8%, although this may be an error in data entry (i.e. 2015 DPT1 estimates were not corrected).

12. EPI Financing and Sustainability

In 2013, Zambia funded traditional vaccines and other routine recurrent costs in full and 6% of new and underused vaccines, with Gavi funding the remaining 94%. The country and JICA contributed to Cold Chain costs. Government share of the EPI budget has decreased substantially being just below 46% of the total for 2013, down from nearly 59% in 2012. Gavi support has grown significantly over this same period while both UNICEF and WHO contributions have remained more or less unchanged at around 2% each.

According to APR, support from Gavi is reported in the national health sector budget.

EPI performance is likely to continue improving as there is a clear commitment from Government to continue and probably expand its contributions and commitments from the current long-term partners in support to EPI are expected to continue.

13. Renewal Recommendations

Topic	Recommendation
NVS - Penta	Renewal of support with targets adjusted based on 2013 achievements, without a change in presentation.
NVS - PCV	Renewal of support with targets adjusted based on 2013 achievements, without a change in presentation.
NVS – Rota	Renewal of support with targets adjusted based on 2013 achievements, without a change in presentation.
MVS- Measles	Renewal of support without a change in presentation.

14. Other Recommended Actions

Topic	Action Point	Responsible	Timeline
Targets	Follow up with country with regard to revised targets for set for DPT1, Penta1, PCV1 and Rota1 for 2015.	SCM, country	Asap
Supply chain	Country to provide additional detailed information on status of the EVM Improvement Plan.	country	Asap
non-HSS Cash Grants	A revised table 7.3.1 should be provided and a corrected financial statement from UNICEF will be required.	country	Asap