

Joint appraisal report

Country	Azerbaijan
Reporting period	<i>Previous appraisal: Internal Appraisal Report, June 2014</i> <i>Current appraisal: July-August 2015</i>
cMYP period	2011-2015
Fiscal period	January – December
Graduation date	Last year of Gavi funding – 2017

1. EXECUTIVE SUMMARY

1.1. Gavi grant portfolio overview

Gavi began financing immunization activities in Azerbaijan in 2001, providing support for Hepatitis B (2001-2008), immunization services (2001-2008), injection safety (2003-2005), Hib-containing pentavalent vaccine (2011-2015), HSS (2011-2015), and PCV (2013-2017). Since 2001, Azerbaijan received a total of US\$11,209,851 in disbursements from Gavi (both in terms of cash and vaccine support), including US\$1,982,019 in 2014 and US\$1,666,867 in 2015. Currently, two vaccine grants remain active (pentavalent, introduced in 2011, and PCV, introduced in 2013). An additional grant for IPV was approved in November 2014 for a total amount of US\$1,349,500 including a US\$131,000 vaccine introduction grant, with the introduction originally scheduled for July 2015 but delayed due to supply constraints until early 2016. Azerbaijan also has an active HSS grant, approved in 2008, but effectively launched in 2012 with limited progress of implementation demonstrated until now. This grant will end in December 2015.

In 2014, the share of Gavi's financing in the country's total expenditures for immunization was 48% (as per the 2014 APR report), but it will be progressively reduced to 0% in 2018 when the country graduates from Gavi support. Azerbaijan entered the transition process in 2011, with 2017 being the last year of Gavi support for vaccines other than IPV (funded through 2018). Graduation Grants with WHO and UNICEF are expected to be signed in late 2015 and cover the 2016-2017 period.

As per the June 2015 Gavi Board decision, Azerbaijan can benefit from access to Gavi's catalytic support for the HPV vaccine. The NITAG and the Ministry of Health (MoH) have expressed interest in introducing HPV vaccine in Azerbaijan, but the issue has not yet been formally evaluated or discussed by NITAG or the MoH, and no cost-effectiveness or other studies have so far been carried out.

For 2016, Azerbaijan is eligible for requesting renewal for only one vaccine grant (PCV), as the country has been informed that it starts fully financing pentavalent vaccine in 2016. Support for IPV has already been approved through the end of 2016.

1.2. Summary of grant performance, challenges and key recommendations

Grant performance (programmatic and financial management of NVS and HSS grants)

Azerbaijan's National Immunization Programme (NIP) continues to be a strong performer in the EURO region, with coverage against most of the antigens, with the exception of the recently introduced PCV vaccine, being above 95%, as confirmed by WHO/UNICEF coverage estimates, disease surveillance and epidemiology.

In 2014, coverage rates remained above 90% for EPI vaccines (except for PCV, introduced in December 2013), demonstrating an increasing trend since 2008 (WHO/UNICEF estimates). All 64 regions in the country had DTP3 coverage rates above 80%, and 57 regions (89% of the total number) had measles coverage above 80%. The drop-out and wastage rates remained in accordance with the UNICEF and WHO-suggested targets.

Table 1. Reported Vaccination Coverage, 2010-2014.

Vaccine/coverage	2010 (%)	2011 (%)	2012 (%)	2013 (%)	2014 (%)
BCG	98	99	98	98	98
HepB (birth dose)	99	99	99	99	99
DTP1 (pentavalent 1)	97	96	95	95	96
DTP3 (pentavalent 3)	93	95	93	93	94
Polio3	96	98	96	96	97
MCV2	98	98	98	98	98
PCV1	-	-	-	5	91
PCV3	-	-	-	-	64

Source: Official country estimates

During 2013, Azerbaijan registered several measles and mumps cases (see Table 2 below), but their numbers have been significantly reduced in 2014. Over the past year, no outbreaks were detected, with only 5 confirmed measles cases registered compared to 164 in 2013 and to 3,188 cases registered in neighboring Georgia in 2014. The polio immunization is well integrated into the routine immunization program. No polio cases have been registered in the country since 1996. In 2002, Azerbaijan received a certificate on polio-free status along with the other countries in the region. This status has been sustained.

Table 2. Reported Vaccine-preventable Diseases

	2014	2013	2012	2011	2010	2000	1990
Diphtheria	0	0	0	0	0	7	4
Japanese Encephalitis	0	0	0	0	0	-	-
Measles	5	164	0	0	210	2,026	-
Mumps	9	76	126	101	125	6,817	-
Pertussis	0	4	18	27	15	11	63
Polio	0	0	0	0	0	-	-
Rubella	0	0	0	0	1	219	-
Tetanus (neonatal)	0	0	0	0	0	-	-
Tetanus (total)	9	5	7	0	0	3	-
Yellow Fever	0	0	0	0	0	-	-

Source: Azerbaijan Immunization Profile, WHO; Reported measles cases and incidence rates by WHO Member States

The latest vaccine introduction (PCV in December 2013) has been successful, and its coverage, even though currently below target, is expected to reach that of other vaccines soon. 2011 DHS survey showed no gender inequity in Azerbaijan with respect to immunization (next DHS is scheduled for 2015). Outreach immunization services have been institutionalized through fixed, outreach and mobile services. Timeliness of vaccinations is being closely monitored, with additional improvements expected to be brought through planned integration and further development of the E-health system.

Financial management: Budgeting process of the National Immunization program (NIP) benefits from multi-year planning in calculating vaccine resource requirements, with relevant budget holders being duly informed.

In 2014, Azerbaijan received a US\$127,000 Vaccine Introduction Grant for PCV introduction, but these funds have not yet been utilized, as the activity for which they were intended (development of the immunization website) has not yet begun. This activity is scheduled to be performed before the end of 2015. Remaining funds from previous vaccine introduction grants have been used to update inventory of cold chain equipment at the district and health facility levels and replace outdated cold chain equipment, as well as procure additional equipment needed to accommodate pneumococcal vaccine.

Combined expenditures of the HSS grant, which ends in 2015, are US\$ 403k out of a total budget of US\$ 1,182,000. US\$273K were expended in 2014, primarily on trainings, equipment purchase and immunization software development. FMA has been conducted in Azerbaijan in 2011. The combined audit of the HSS grant implementation since 2012 has been completed in August 2015 and is currently under review by Gavi.

Co-financing: Country's co-financing requirements have been consistently met on time, including in 2014. For 2015, Azerbaijan's co-financing requirements are considered partially fulfilled, as the country procured fewer co-financed doses of pentavalent vaccine doses than required due to large available stock of pentavalent vaccine from the previous year. An agreement has been reached between Gavi and the country that Azerbaijan will procure a larger quantity of co-financed PCV13 doses in 2016 to compensate for the partial completion of co-financing obligations for the pentavalent vaccine in 2015.

Key findings

Strengths and achievements:

- High coverage with both new and traditional vaccines
- Availability of adequate financial resources to ensure financial sustainability after transition from Gavi support
- Significant savings achieved through procuring vaccines through UNICEF Supply Division since 2014
- Strong political commitment to the national immunization programme
- Progressive increase in government funding for immunization; required funding for vaccine resource requirements (as reflected in the cMYP) is secured
- Regularly fulfilled co-financing commitments
- Continuously improving vaccine management and procurement structures

- Motivated, functional and influential National Immunization Technical Advisory Group (NITAG)
- Significant investments to the area of healthcare personnel training

Challenges:

- Delayed implementation of the HSS activities, low utilization of HSS funds, insufficient coordination between the HSS implementing team and the NIP
- Lack of expedited review procedures for registration of WHO pre-qualified vaccines
- Analytical Expertise Centre of Medicines (NRA) is functional but requires capacity building and up-skilling to strengthen pharmacovigilance system
- Existence of AEFI reporting system but lack of standardized protocol that provides clear case definitions which has led to inaccurate case-reporting in 2014
- Historically-based reluctance from medical staff to provide information on AEFIs
- Absence of general vaccine communication plan except for a recent risk and a specific IPV communication plan
- Current NITAG is functional but widening expertise areas is recommended
- Overlap of two data systems (immunization programme information system and e-health system) which need to be integrated as one unique system
- The NIP does not fully benefit from the e-Health system
- The e-Health system does not include stock management module

Key recommended actions to achieve sustained coverage and equity

1. Stay vigilant to increasing financial requirements in coming years;
2. Maintain current procurement modality in accessing vaccines at affordable prices;
3. Introduce new technologies to supply chain to improve its efficiency;
4. Sustain programme performance level by investing in quality of services (training, supervision);
5. Be proactive in addressing growing vaccine hesitancy and refusals; and
6. Target unification of current reporting system and e-health immunization module (and developing logistics module)

1.3. Requests to Gavi’s High Level Review Panel

Grant Renewals

New and underused vaccine support: *Request for renewal of PCV in the new presentation (PCV13)*

For 2016, Azerbaijan requested renewal of support for PCV and a change of presentation from PCV10 (two-dose vial) to PCV13 (one-dose vial). The one-dose presentation is critical to Azerbaijan to reduce wastage and to keep down costs considering the growing share of Azerbaijan’s co-financing of the PCV vaccine and full financing of the pentavalent vaccine starting in 2016. The switch from PCV10 to PCV13 has already been approved by Gavi.

Azerbaijan is not eligible for requesting renewed support for other Gavi-funded vaccines, as 2015 is the last year of Gavi funding for pentavalent vaccine, and IPV doses have already been approved until the end of 2016.

Health systems strengthening support

No extension or renewal of support is possible for the Health Systems Strengthening component, as the 3-year approved HSS grant to Azerbaijan comes to an end in 2015. Relevant HSS activities that require continuation following the end of the HSS grant will be considered for implementation under the Graduation Grant, expected to be finalized by late 2015 and cover the 2016-2017 period.

1.4. Brief description of joint appraisal process

The Joint Appraisal was conducted from 13 to 16 July 2015 together with the Gavi Graduation Assessment. During the mission, participants from Gavi Secretariat, WHO EURO Office, UNICEF Regional Office and US CDC met with representatives of the Ministry of Health, Republican Center of Hygiene and Epidemiology, Analytical Expertise Center for Medicines, Innovation and Supply Center, Center of Public Health and Reform, a key opinion leader in Pediatrics and Head of the National Immunization Technical Advisory Group (NITAG), and the WHO and UNICEF country offices.

A follow-up visit to Azerbaijan to discuss and validate the findings of the Joint Appraisal and Graduation Assessment took place on 18-19 August 2015. Based on the discussions during the two visits to Azerbaijan and relevant background documents, the Joint Appraisal report was drafted by independent technical experts in close

cooperation with Gavi SCM. The report was shared for feedback with mission members and relevant country stakeholders, and the final findings and recommendations were discussed with and endorsed by the Ministry of Health and ICC members (Working Group of the Country Coordination Mechanism).

2. COUNTRY CONTEXT

2.1. Key contextual factors that directly affect the performance of Gavi grants.

Azerbaijan's geographical position makes it an important link between the Black and Caspian Seas and between Russia and Iran. With a solid rise in income and a reduction in poverty, Azerbaijan weathered the recent global economic crisis much better than many other countries. While Azerbaijan withstood the post-crisis relatively well, the situation showed Azerbaijan's need for a diversified economy, market-based policies and better social services. Some improvement was driven by high growth rates, increase in wages, and introduction of a well-targeted social benefit system, but much of it resulted from a jump in oil and gas revenues. Even though these revenues are likely to stagnate over the coming decade and then to decline¹, it is expected that this will not result in budget cuts for social and health services.

Leadership, Governance and programme management

Azerbaijan's immunization program benefits from strong political commitment and support, formal communication channels with policy- and decision-makers, functional NITAG, and established working group within the Country Coordinating Mechanism devoted to dealing with HSS and Immunization issues.

Strong leadership and national level program management: Azerbaijan's immunization program is led by a programme manager (Deputy General Director of the Republican Center of Hygiene and Epidemiology, RCHE) who also chairs the Country Coordinating Mechanism (CCM) Working Group on HSS and Immunization which acts as an equivalent of the ICC since 2012. There are formal communication channels with policy- and decision-makers and an established, motivated and functional NITAG.

The MoH coordinates all immunization resources and activities, conducts organizational and methodological work, makes sure legal obligations are fulfilled during immunization activities, issues licenses for vaccination in private sector (maternity houses), and plans for the procurement of vaccines. The Republican Center of Hygiene and Epidemiology (equivalent of center for disease control department in other countries) supervises the organization and implementation of immunization activities through the network of city and district centers. The RCHE implements the national communicable disease surveillance at all levels and determines target groups and annual forecast for vaccines. Procurement of medications, including medical and biological medications, is conducted by the Center for Innovation and Supply, which is also responsible for their storage and distribution to sub-national store levels.

ICC: Azerbaijan does not have an ICC or an HSCC in their traditional form. The ICC functions are performed by the Country Coordinating Mechanism (CCM) established in 2008 and Chaired by the Minister of Health, with members representing several bodies under MOH, other Ministries, Global Fund, UN organizations, and international and local NGOS. In 2012, the CCM established two working groups (WGs) to deal specifically with HSS and immunization, but these have been combined into one WG in 2014 to ensure that HSS investments are better aligned with immunization objectives. The WG includes representatives from the Sanitary-Epidemiological Department of MoH, Center for Informatisation of Healthcare of MOH, Public Health and Reforms Center of MOH, Republican Centre of Hygiene and Epidemiology, Innovation and Supply center, WHO and UNICEF country offices and Rostropovich-Vishnevskaya Foundation. The WG is chaired by Dr. Afag Aliyeva, Deputy General Director of the Republican Center of Hygiene and Epidemiology. In 2015, the WG held 5 meetings to discuss IPV introduction, Partnership Framework Agreement between Gavi and Azerbaijan and implementation of the HSS grant, and to validate the annual immunization and APR reports.

Legislation Framework: The legal basis for state efforts in immunization is expressed in the Law on Immunoprophylaxis of Infectious Disease adopted in 2000. The second State Programme on Immunoprophylaxis of Communicable Diseases was approved by Cabinet of Ministers in 2010 and covers the period 2011-2015. The objectives of the immunization programme include conducting vaccination of all citizens of the country; providing free immunization and vaccination activities in national and municipal medical facilities; using efficient products for immunization activities; training medical staff in the field of immunization; protecting population in cases of

¹ <http://www.worldbank.org/en/country/azerbaijan/overview>

adverse events following immunization; improving data monitoring systems; creating conditions for humanitarian organizations to participate in immunization programs; and developing international cooperation.

Partnership Framework Agreement (PFA): The PFA has not yet been signed due to the need to obtain authorization to waive the requirement for the Ministry of Foreign Affairs to co-sign the Agreement, generally applicable to the signature of all international agreements. The waiver has been obtained in June 2015, and the Agreement is currently being reviewed by the Ministry of Health. It is expected to be signed by end of 2015.

National Regulation Authority (NRA): NRA Assessment in Azerbaijan took place in early September 2015 and looked in depth at the potential bottlenecks and challenges currently existing in this area. The preliminary conclusions show that market authorization function is not being applied for programme vaccines; expedited review procedures for registration of WHO pre-qualified vaccines is not in place; and that gaps exist in the adverse events following immunization (AEFI) surveillance system, which is referred to as 'post-marketing pharmacovigilance' in Azerbaijan.

NITAG: Azerbaijan's NITAG was established in 2012. Composed of 7 members, all of them renowned and influential epidemiologists, pediatricians and infectious disease specialists, it is chaired by the Chief Pediatrician of Azerbaijan. The NITAG in Azerbaijan successfully preserves its independent nature, with the MoH not intervening in the decision-making. It has benefitted from a number of training and strengthening activities in close collaboration with WHO.

Costing and financing

Gavi is the only source of external funding for Azerbaijan's immunization program, though this support will cease in January 2018 in line with the country's graduation schedule. Nevertheless, there are no specific concerns with respect to financial sustainability of Azerbaijan's immunization program following the country's graduation from Gavi support. Overall health budget, as well as specific vaccine budget, is projected to grow in the coming years.

cMYP: Azerbaijan's current cMYP (costed and budgeted) covers the period 2011-2015. In general, it is being successfully implemented. With the exception of issues identified with the HSS grant, programme financial requirements are being met and available resources efficiently used. The country is currently working on the 2016-2020 cMYP and expects to finalize it in Q4 of 2015.

Government funding: Overall health budget of Azerbaijan, as well as specific vaccine budget, is expected to grow in the coming years, as confirmed by the Ministry of Health. Proportion of vaccine budget in the increasing overall health budget is projected to remain constant, allowing to cover the growing share of the government's financing for Gavi-supported vaccines. A major devaluation of Azerbaijan currency in 2015 (close to 30%) had an effect on the availability of sufficient budget for vaccines which are procured in USD, but the government provided the funding necessary to cover the difference.

The funds for Azerbaijan's immunization program are secured via the Program on Immunoprophylaxis of Communicable Diseases, which allocates funding based on the national immunization schedule to ensure sustainable financing. Generally, the government allocates the full amount requested by the NIP, and no delays or significant reductions of disbursements and total approved envelopes have been observed. Between 2006 and 2010, the amount of allocation to vaccines approved by the Cabinet of Ministers varied between AZN 530,000 to AZN 1,200,000 (respectively US\$ 504k and US\$ 1,400k). In 2014, the amount allocated to the NIP was AZN 2,9M and the provisional budget for 2015 is AZN 3M, progressively reaching 4,8 M in 2018, as shown below, reflecting the government's commitment to ensure stable vaccines funding.

Table 3. Reported and Forecasted MoH budget (AZE manat)

	Central MoH budget	Overall health supplies budget (not limited to vaccines):	Health supplies budget as a % of central MoH budget	Vaccine budget	Vaccine budget as a % of central MoH budget
2013	310 427 632	15 400 000	5,0%	4 500 611	1,4%
2014	336 749 717	15 800 000	4,7%	2 790 364	0,8%
2015	405 286 991	14 800 000	3,7%	3 009 600	0,7%
2016	470 795 446	19 031 000	4,0%	3 459 600	0,7%
2017	541 414 763	21 885 650	4,0%	3 977 100	0,7%
2018	622 626 977	25 168 498	4,0%	4 572 225	0,7%

Source: Ministry of Health, Finance Department

Donor funding: Currently, Gavi is the only external source of support to Azerbaijan's NIP. In the past, financial assistance was also provided by the Rostropovich-Vishnevskaya Foundation, notably through support to immunization campaigns by supplying Hepatitis B and MMR vaccines. However, in recent years the VRF has not been

involved in immunization activities. The current World Bank investment portfolio in Azerbaijan includes 16 projects with a total commitment of US\$2 billion, but it cannot be considered as donor funding.

Procurement mechanism: Prior to 2014, Azerbaijan self-procured its non-EPI vaccines, but since 2014 all new and routine vaccines have been purchased through UNICEF Supply Division (SD), saving the country an estimated AZN 2.5 million (2015 US\$2.4 million²). However, a return to self-procurement following graduation cannot be excluded. During the Joint Appraisal, the Innovation and Supply Center expressed a number of concerns with respect to the current UNICEF procurement arrangements (requirement of 100% pre-payment, occasional product replacement without sufficient advance notice, delays in communicating available balances at SD level, concerns with the way information is presented in invoices, etc.), which have been discussed with the representative of the UNICEF SD during the follow-up visit in August 2015. The proposed solutions are expected to address the challenges raised by the country.

Other system components

HR Management: Azerbaijan's Immunization Program benefits from a strong and well-defined structure of program management with specific roles and responsibilities and committed personnel under leadership of the EPI manager. Commitment to continued education and specialization courses for staff of all relevant structures is strong. On the other hand, understaffing has been noted at the national level, especially in the NITAG and NRA. There are also human resource availability and capacity-building challenges at district/rayon level.

Cold Chain and logistics: Azerbaijan continues to improve its vaccine management system, notably in the areas of effective cold chain and logistics management. Significant investments in cold chain were made in recent years, including purchase of refrigerated vaccine transportation vehicles and refrigerators for districts. Additional investments, notably in replacement of old refrigerators and repairing of defective equipment, are planned. This is especially important considering the wide use of unqualified cold chain equipment at service provision level. With respect to temperature monitoring, attempts have been made to automate the alert system in case of temperature fluctuations, but so far a functioning solution has not been operationalized.

Azerbaijan has not experienced any stock-outs since at least 2008, has no unopened vial wastage and low open vial wastage. Azerbaijan does not follow the WHO open vial policy. Vaccines have not been wasted at national level due to efficient monitoring of vaccine expiration dates.

Immunization service delivery: Vaccine management assessments were conducted in 2011 and 2014, and development of improvement plans has been institutionalized. Despite this, implementation of the identified recommendations has been slower than desired due to limited resources and strong need for technical assistance. National guidance documents and visual aids are in place. The 2005 and 2010 demographic health surveys (DHS) as well as the 2006 coverage survey show no gender inequity in Azerbaijan with respect to immunization, which is a common trend. Remaining un- or under-vaccination in Azerbaijan is multifactorial with major variables such as parents' income and educational status, as well as punctual tendencies (i.e. roma population), that lead to refusals. It is worth noting that internally displaced persons and migrants actively seek vaccination as it is a requirement for their temporary or continuous stay in Azerbaijan to which they comply.

Reasons for under-vaccination include hesitancy among medical workers and parents, anti-vaccination publicity led by media/journalists, and need for better communication, campaigns and promoting vaccine importance.

Surveillance and reporting: Azerbaijan's NIP has reasonable human capacity for evidence-based decision-making, although the data currently obtained via existing reporting and surveillance systems may not be fit for purpose, i.e. it is not reliable and current systems do not allow existing data to be fully exploited. This is mainly due to sub-optimal computer literacy and associated entry-related errors and an e-Health system that doesn't respond to current needs.

Supportive supervision program is in place with defined frequency of visits, supervisory tools and feedback mechanisms from the national level to the district level.

Safety surveillance of vaccines exists in Azerbaijan through the Republican Centre of Hygiene and Epidemiology and the Center of Analytical Expertise of Medicines, though most monitoring is in fact performed by the NIP. The NRA then takes data from NIP about AEFIs and tries to follow up on all cases. The AEFI surveillance system is not fully functional or well equipped to collect and report relevant cases as there is no standardized protocol that provides clear case definitions or describes the monitoring reporting and investigation process. An estimated four out of five AEFIs reported information per vaccine (not per case). Therefore case reporting is inaccurate and the absence of severe or moderate cases in 2014 seems erroneous and it seems the system is failing to filter events. Furthermore,

² Exchange rate as of July 28, 2015: 1 AZN = 0,96 USD

there is reluctance from medical staff to report on AEFIs. Vaccine vigilance function is carried out at district and national levels.

A number of improvements would be beneficial, including :

- Revising the AEFI surveillance system : aligning AEFI case definitions with WHO recommendations; filtering cases at facility and/or regional level to avoid reporting of all AEFIs (especially mild ones);
- Creating up-to-date protocols and forms and implement reporting requirements;
- Conducting training at all levels on AEFI surveillance, classification and reporting, provide additional trainings on causality assessments for medical staff
- Ensuring proper planning and adequate budgeting of supportive supervision
- Enhancing the mentoring component of supervision and monitor waste disposal at health facilities in all districts.

Communication: The Republican Centre of Hygiene and Epidemiology and the Centre of Public Health and Reform have good relations with the media and are experienced in providing clear and unequivocal messages in emergency situations. Effective media follow-up is in place and importance of the need to periodically inform the population is well recognized. A crisis communication plan has been developed in Azerbaijan, but the NIP does not have a generalized communication plan in place. Earmarked funds exist for specific communication projects, but these are external (e.g. PCV introduction grant). Specific materials have been delivered for pneumococcal and polio vaccines and sanitary education. Azerbaijan has actively participated in Immunization Week since 2007 and this event is used as a nationwide communication campaign.

However, communications on advocacy issues have been challenging, especially with respect to communicating to health staff, advocating for resource mobilization, and addressing the small but growing anti-vaccine movement - mainly concentrated around parent groups, though some healthcare professionals also engage in anti-vaccine messages.

NITAG made plans to engage a professional journalist to attend meetings and disseminate evidence-based immunization messages in simple language to other journalists in an effort to prevent and counter negative messages in the media.

3. GRANT PERFORMANCE, CHALLENGES AND RENEWAL REQUESTS

3.1. New and underused vaccine support

3.1.1. Grant performance and challenges

In 2014, Gavi provided support to Azerbaijan for two vaccines – pentavalent and PCV. According to WHO country estimates (as per the June 2015 Azerbaijan Country Immunization Profile), vaccine coverage for all EPI vaccines was above 90%, with the exception of the recently introduced PCV (estimated 91% for dose 1 and 64% for dose 3). Although the achieved coverage rates for Gavi-supported and other routine vaccines is satisfactory, PCV vaccination requires further efforts to catch-up on implementation to meet the established targets. Reported wastage rates for both Pneumococcal Conjugate and Pentavalent vaccines were 5%, which is within the WHO recommended limits.

Pentavalent vaccine:

2015 is the last year of Gavi support for the Hib-containing pentavalent vaccine (DTP-HepB-Hib). As of 2016, Azerbaijan will start paying fully for the procurement of this vaccine. DTP-HepB-Hib was introduced in Azerbaijan in July 2011. In 2014, 100% of the country's 64 districts reported DTP3 coverage above 80%. The national coverage in 2014 reached 94% according to the JRF data. There is a discrepancy between the JRF and country-reported results (98%) due to the different way of calculation of target populations used on the national level. It has been agreed to address this issue through a data quality review in 2016 and align the reporting systems to ensure consistency of reported data.

Until 2013, the co-financing part of the pentavalent vaccine in Azerbaijan was self-procured. Since 2014, it is being procured through UNICEF Supply Division. According to the 2014 APR, Azerbaijan received a total of 423,500 doses from Gavi in 2014. No stock-outs have been registered.

The country fulfilled its co-financing requirements for the vaccine for 2014 and for all previous years. As explained earlier, in 2015 the co-financing obligations have been only partially fulfilled, as the country procured fewer co-financed pentavalent vaccine doses than required due to large available stock of pentavalent vaccine from 2013. An agreement has been reached between Gavi and Azerbaijan on the appropriate way forward (a larger quantity of co-financed PCV vaccine will be purchased in 2016 to compensate for the partial fulfillment of the co-financing obligations for penta vaccine in 2015).

PCV:

Gavi support for PCV vaccine in Azerbaijan was approved in 2011. Because of the supply issues with the originally requested PCV13 presentation, the country introduced instead PCV10 vaccine, and the introduction was delayed until December 2013. Azerbaijan requested a switch in presentation from PCV10 to PCV13 as of 2016, and this request was approved by Gavi in August 2015.

Overall, the introduction of pneumococcal vaccine in Azerbaijan went smoothly. PCV is provided to all children free of charge through all public immunization services available, including fixed, outreach and mobile. The vaccine is administered in three doses at the age of two, four and six months. National coverage for PCV for 2014 was 91% for 1st dose, 80% for 2nd dose, and 64% for 3rd dose. Significant drop-out between the 2nd and 3rd dose was primarily due to the fact that relatively few children reached required age for the 3rd dose by the end of 2014. Some drop-out and under-vaccination was also due to existence of false contraindications.

In April 2014, Azerbaijan received a PCV introduction grant in the amount of US\$ 127,000 for the development and maintenance of a MoH website on immunization and surveillance on vaccine preventable diseases. To date, this website has not yet been developed. The actual preparation activities for PCV introduction were funded by the Rostropovich-Vishnevskaya Foundation (open vial policy stickers, protocols for PCV10 for the health workers). Trainings on PCV10 introduction and national conference have been conducted with direct technical and financial support of WHO. WHO also provided technical support for the development of country guidelines and technical documents on PCV10. Communication strategy and materials were developed with UNICEF consultancy support.

Rotavirus vaccine:

Rotavirus vaccine has not been introduced in Azerbaijan following a formal MoH decision on this matter taken in 2010. At the time, the MoH considered that the disease burden was not high enough to justify the introduction of rotavirus vaccine, and introduction of other vaccines (pentavalent, PCV) was seen as a higher priority. So far, there have been no follow-up discussions at the MoH level regarding a potential introduction of rotavirus vaccine in the future, but an interest in such potential introduction has been expressed by the NITAG. No cost-effectiveness studies have been conducted for rotavirus infection, but disease burden data exists from surveillance. Even though Azerbaijan will not be eligible to receive rotavirus support from Gavi in the future due to its status of graduating country, the issue of the potential introduction of the rotavirus vaccine will be monitored, and technical assistance obtaining evidence for decision-making on this matter, such as cost-effectiveness studies, may be provided if the MoH requests it.

3.1.2. NVS renewal request / Future plans and priorities

For 2016, Azerbaijan is eligible for requesting renewed support for only one vaccine – PCV. The country requested a change of presentation from PCV10 to PCV13 (one-dose vial), which has been approved by Gavi in August 2015. Estimated needs for PCV requested from Gavi and covered by the country in 2016 are provided below:

Table 6: Estimated GAVI support and country co-financing (GAVI support)

		2014	2015	2016	2017
Number of vaccine doses	#	468,400	261,600	238,700	171,500
Number of AD syringes	#	162,700	271,500	249,300	181,000
Number of re-constitution syringes	#	0	0	0	0
Number of safety boxes	#	1,825	3,000	2,625	1,900
Total value to be co-financed by GAVI	\$	1,646,500	924,000	865,000	612,500

Table 7: Estimated GAVI support and country co-financing (Country support)

		2014	2015	2016	2017
Number of vaccine doses	#	97,200	151,200	280,800	465,800
Number of AD syringes	#	98,200	156,500	291,800	491,500
Number of re-constitution syringes	#	0	0	0	0
Number of safety boxes	#	1,100	1,750	3,225	5,125
Total value to be co-financed by the Country ^[1]	\$	345,500	533,000	992,000	1,663,500

As per the June 2015 Gavi Board Decision, Azerbaijan can benefit from access to Gavi’s catalytic support for HPV vaccine. There is an interest from the NITAG and MoH for introducing HPV in Azerbaijan, but the issue has not yet been discussed by NITAG, and no cost-effectiveness or other studies or analyses have so far been carried out.

The country has originally scheduled to introduce IPV in July 2015, but the introduction has been delayed due to supply issues on global level. Trainings and other preparatory activities have already been conducted, and the introduction will take place as soon as availability of supply is confirmed and vaccine shipment arrives (estimated early 2016). Azerbaijan will receive Gavi support for IPV until the end of 2018.

3.2. Health systems strengthening (HSS) support

3.2.1. Grant performance and challenges

Implementation of the HSS grant in Azerbaijan started in October 2012, almost four years after the submission of the original proposal in 2008. The delay in launching program activities was due to the need to complete a Financial Management Assessment (concluded in 2009) and subsequent need for the country to ratify the Aide-Memoire between Azerbaijan and Gavi (signed in early 2012), as well as due to delays in transferring the funds to the HSS implementing entity (Centre of Public Health and Reform) by the MOH of Azerbaijan, designated recipient of Gavi funding (October 2012). By mid-2015, the HSS grant has completed the majority of activities planned for the 1st year of implementation of this 3-year grant under two of the three objectives of the original proposal, but has not begun implementation of activities planned for Years 2 and 3, or under the 3rd objective.

As per discussions with the HSS implementing team, the key reasons behind delayed implementation were difficulties in obtaining required approvals from the MoH and the CCM Working Group on immunization, and challenges in coordination with entities involved in the implementation of the various activities. Other challenges identified by the Joint Appraisal team were insufficient collaboration and coordination between the HSS implementation team and the National Immunization Program, and the need to review and update some of the planned activities due to the significant time that passed since the original proposal was submitted.

Some communication challenges between the HSS implementation team and Gavi Secretariat, CCM Working Group on Immunization, and the National Immunization Program were also identified, e.g. with respect to the lack of clarity on the duration of the total grant term, audit requirements, required processes to be followed for reprogramming of funds and activities, and resolution of identified implementation challenges.

3.2.2. Strategic focus of HSS grant

The original objectives of the Azerbaijan HSS grant, outlined in the proposal submitted to Gavi in 2008, were the following:

1. Improve the capacity of eight training institutes, 42 educators and 640 mid-level health workers through a strengthened postgraduate education system
2. Strengthen the health information system for better monitoring of child and maternal health services
3. Strengthen capacity and tools to plan costs and budget for the immunization program

The grant's implementation has been significantly delayed, and many of the originally planned activities lost their initial relevance and strategic importance. Relative progress was achieved only on Objective 1. Activities under Objective 2 have only been partially implemented, with an electronic vaccination passport module developed, but not yet operationalized. The relevance of this objective has decreased in recent years with the development of an E-health system. Activities under Objective 3 have not yet begun, but their relevance is also no longer material, as extensive training and technical support on the development of comprehensive multi-year plans for immunization (cMYP) is being provided to the country's central level by the WHO. Such trainings can be expanded to regional and district level through the Graduation Grant. The cMYP for the 2016-2020 period is currently being developed.

3.3. Request for a new tranche, no-cost extension, re-allocation or reprogramming of HSS funding / Future HSS application plans

Azerbaijan requested a new tranche of funding to be disbursed (USD 205,000). However, the country is not eligible for additional disbursements of funding or a no-cost extension due to the limited time left before the end of the grant and the fact that the agreed 3-year term of the HSS grant in Azerbaijan ended in March 2015, so the grant is already benefitting from a no-cost extension until the end of 2015. No additional tranche of funding or additional no-cost extension can thus be provided to Azerbaijan.

Due to its status as a graduating country, Azerbaijan is no longer eligible to request new HSS funding from Gavi.

3.4. Graduation plan implementation

Graduation Assessment in Azerbaijan was carried out in parallel with the Joint Appraisal mission from 13 to 16 July 2015. Graduation Action Plan, covering the period of 2016-2017, is currently being developed based on the findings of the assessment. Following its finalization by partners with inputs from Gavi, it will be shared with the National Center of Disease Control and Prevention for agreement and validation.

The signature of the Graduation Grants that will provide financial support for implementation of activities identified in the Graduation Action Plan, and disbursement of funds will be subject to the signature by Azerbaijan of the Partnership Framework Agreement, expected to be completed in late 2015.

Implementation of the Graduation Action Plan will be monitored on semi-annual basis by in-country partners, Gavi Secretariat and WHO EURO and will be aligned with Gavi’s monitoring processes.

3.5. Financial management of all cash grants

NVS: In 2014, Azerbaijan received a cash grant in the amount of US\$127,000 for PCV introduction, but these funds have not yet been spent and are held in the Ministry of Health bank account, with US\$ 126,993 available in cash balance as of 31 December 2014. The PCV Introduction Grant has not yet been utilized by the country, as the activity for which the funds were intended (development of an immunization website) has not yet been implemented. Discussions are underway with the MoH to see whether this activity is planned to be implemented in 2015. If that is not the case, Gavi will request Azerbaijan to return the funds to Gavi or apply them to the Graduation Grants.

The NVS grants have never been audited due to their amounts being below the established thresholds.

HSS: After two years of very low spending (US\$118k spent in total in 2012-2013 vs. US\$ 800k approved budget), the grant increased its financial execution to US\$273k in 2014. The grant was not audited despite a formal requirement to do so every year, as stated in the signed Aide-Memoire. Gavi requested the audit to be conducted, and the audit took place in August 2015. Its results are currently being analyzed.

The majority of 2014 expenditures (under categories “equipment” and “other”) were for the purchase of computers and for contract payments to software companies for the development of software for immunization passport cards and for maternity registers.

Table 8: 2014 expenditure of Gavi HSS grant

	Budget in manat	Budget in USD	Actual in manat	Actual in USD
Salaries and per diems				
Salaries	17,660	22,612	17,660	22,612
Per diems	12,645	16,191	4,691	6,007
Other expenditures				
Trainings	117,920	150,986	41,478	53,109
Purchase of equipment	62,480	80,000	86,401	110,629
Fuel	133	170	133	170
Bank fees	247	316	247	316
Postal expenses	94	121	94	121
Other expenses	150,912	193,229	62,991	80,665
Total for 2014	316,205	463,625	213,696	273,618

The grant’s term ends in 2015. A limited number of activities will continue to be carried out, most of them related to Objective 1 (improving the capacity of medical training institutes and mid-level health workers). Other originally planned HSS activities that are still deemed relevant are proposed to be implemented through the Graduation Grant between 2016 and 2017.

3.6. Recommended actions

Following the technical meetings and discussions that took place during the combined Joint Appraisal/Graduation Assessment mission, a number of recommendations were raised and discussed by the mission participants with in-country stakeholders, including the CCM Working Group members. These observations and recommendations focused on the key priority activities and suggested actions for addressing the challenges identified during the Joint Appraisal, notably with respect to enhanced potential for financial and programmatic sustainability of national immunization programme.

Annex D provides a summary of these recommended actions, translated into technical assistance support, together with intended outcome/s, indication of the implementing agency (potential provider), modality, costing and potential sources of funding. A more detailed activity plan, including full list of proposed technical assistance together with proposed costing, will be available in the coming weeks following the finalization of the Graduation Assessment Action Plan.

In summary, the key recommended actions for Azerbaijan for the coming years, as described in the Executive Summary section above, are:

1. Stay vigilant to increasing financial requirements in coming years;
2. Maintain current procurement modality in accessing to vaccines at affordable prices;
3. Introduce new technologies to supply chain to improve its efficiency;
4. Sustain programme performance level by investing in quality of services (training, supervision);
5. Be proactive in addressing (growing) vaccine hesitancy and refusals; and
6. Target unification of current reporting system and e-health immunization module (and developing logistics module)

4. TECHNICAL ASSISTANCE

4.1 Current areas of activities and agency responsibilities

In 2014 and 2015, Azerbaijan received technical assistance from the WHO on the following:

- National conference on immunization data quality in the framework of the European Immunization Week (EIW, April 2014)
- Development of publication on PCV cost-effectiveness study
- Monitoring of PCV implementation (May- July 2014)
- Effective Vaccine Management technical assistance on installation of continuous temperature monitoring equipment at national cold store, Log tag trainings for national level facilitators, SOP development on temperature monitoring (June 2014)
- IPV introduction decision-making and application to Gavi (June - September 2014)
- Effective Vaccine Management assessment and development of Improvement Plan (joint WHO and UNICEF consultancy, September 2014)
- Coordination, independent monitoring and LQA for measles-rubella SIA (July - September 2014)
- Technical support on maintaining polio-free status (annual activity 2014-2015)
- Invasive bacterial diseases sentinel surveillance (since 2009)
- Rotavirus sentinel surveillance (since 2006)
- PCV post-introduction evaluation (March 2015)
- IPV introduction trainings (May - June 2015)
- Graduation Assessment and development of Graduation Action Plan (July- August 2015)

The following activities are planned until the end of 2015:

- Technical support on cMYP development (on-going, July- November 2015)
- Training workshop on vaccine safety and contraindications to vaccination (September 2015)
- NRA assessment (September 2015)

UNICEF:

During the 2014-2015 period, UNICEF provided the following technical assistance to Azerbaijan:

- Technical support and assistance in procurement of equipment for strengthening cold chain capacity of the country (refrigerators – April 2014)
- Assistance in procurement of cold chain monitoring equipment (2014)
- Technical support in estimation of needs for vaccines and vaccination devices (2014-2015)
- Procurement services for purchasing vaccines for routine immunization (2014-2015)
- Technical and financial support in implementation of selective components of PCV Introduction Communication Strategy (training of health care providers and advocacy with parents-2014)

4.2 Future needs

As Azerbaijan will graduate from Gavi support in 2017, technical assistance availability is limited to the 2016-2017 period. The majority of technical assistance during this period will be provided through the Graduation Action Plan, which is currently being finalized in close collaboration with partners and in-country stakeholders.

It has been proposed that some of the technical assistance - notably for the routine on-going immunization activities - be channeled through the Joint Appraisal/Partnership Engagement Framework stream. These activities include: assistance with IPV post-introduction evaluation; preparation of the potential new HPV proposal and introduction (if the country applies for HPV support and receives it); standard assessments and evaluations (e.g. coverage surveys), as well as regional workshops and conferences aimed at increasing capacity of in-country experts in various areas of immunization work. More details are provided below.

The key future priorities for Azerbaijan as reported by the country in the 2014 APR and redefined during the joint appraisal are:

Short-term (2015):

- IPV vaccine introduction (revision of regulatory documents, development of training and communication and social mobilization materials, conducting national and regional workshops, trainings of HCWs and academic staff) – being implemented in 2015;
- Refresher training for supervisors and management training for programme management staff;
- Development of cMYP for 2016-2020;
- Maintenance and repair of idle equipment and procurement of cold chain equipment suitable to needs including those of district fixed, outreach and mobile providers;
- Creating a Web-site for immunization based on website of the Ministry of Health – if this is not implemented before September 2015, allocated funds for this activity should be returned to Gavi;
- initiation of collaboration with partners and stakeholders to ensure programmatic readiness for a school based HPV vaccination programme before any firm decision is made;
- Visit countries with established e-Health systems (e.g. Georgia, Turkey) to learn and share experience and best practice; and
- Agree upon a clear set of needs from the perspectives of both the Health Informatics and the Republican Center for Hygiene and Epidemiology so that an e-Health system can be built based on needs.
- Continuation of vaccine safety and contraindications trainings and their integration into medical education curricula

Medium term (2016-2017):

- Stay vigilant to increasing financial requirements in coming years;
- Maintain current procurement modality in accessing vaccines at affordable prices;
- Introduce new technologies to supply chain to improve its efficiency;
- Sustain programme performance level by investing in quality of services (training, supervision);
- Be proactive in addressing (growing) vaccine hesitancy and refusals; and
- Target unification of current reporting system and e-health immunization module (and developing logistics module)

Based on the above priorities and key recommendations, the technical assistance areas and activities listed below have been proposed.

<p>Immunization financing & resource mobilization</p>	<ul style="list-style-type: none"> • Train key staff on immunization financing and monitoring performance (WHO TA) • Train relevant staff for resource mobilization and development of a resource mobilization plan – (WHO TA) • Develop resource mobilization plan – (WHO TA) • Develop advocacy materials (for resource mobilization) and advocate for immunization – (WHO TA) • Monitor implementation of resource mobilization action plan and report on progress achieved (WHO TA) • Include introduction of new vaccines in cMYP to be developed for 2016-2020 (as alternative scenarios) (WHO TA) • Advocate for increased funding for operational activities
<p>Vaccine procurement</p>	<ul style="list-style-type: none"> • Continued advocacy on benefits of procuring through UNICEF to sustain commitment • Increased and continued collaboration with UNICEF to find solutions to problems (including alignment of national procurement and accounting procedures with of UNICEF’s process) – (UNICEF TA) • Continue building capacities in self-procurement (needed for procurement of vaccines that are not available in UNICEF’s portfolio), by improving the knowledge on vaccine market

	<p>dynamics, how vaccine prices evolve, measures that increase procurement efficiency; such as long-term contracting - (WHO and UNICEF TA)</p> <ul style="list-style-type: none"> • Review vaccine procurement practices and identify areas for improvement - (WHO TA) • Participate in procurement-related WHO training workshops – (WHO TA)
Evidence-based decision-making	<ul style="list-style-type: none"> • Continued WHO support to the NITAG (in disseminating guidance and providing training, participation to WHO meetings, visit to other NITAGs, experts attending to NITAG meetings, twinning) & review of the NITAG performance – (WHO TA) • Ministry of Health may wish to consider adding members from social & behavioral sciences, health economics • NITAG should consider introduction of HPV vaccine (following collection of local evidence on vaccine cost-effectiveness) • WHO support in conducting cost-effectiveness and school vaccination readiness study on introduction of HPV vaccine – (WHO TA) • Development of national plan for prevention of cervical cancer – (WHO TA) • Continued WHO support to both (rotavirus and IBD) surveillance networks – (WHO TA) • Ministry of Health should gradually take over the external financial support provided by WHO
Programme performance	<ul style="list-style-type: none"> • Conduct trainings to improve timeliness of vaccinations (by eliminating false contraindications and increasing simultaneous administrations; not limited to PCV, but for all vaccines – WHO TA) • Develop guidelines to complete interrupted and delayed vaccinations (for all vaccines) – WHO TA • Conduct qualitative studies to better understand reasons behind refusals to address vaccine hesitancy ad refusals and to reach the unreached – WHO TA • Use WHO tool on Tailoring Immunization Programme to address needs of unreached – WHO TA • Continued training (using MLM and IIP modules) to rayon and facility levels – WHO TA • Further strengthening of supportive supervision through introduction of SOPs and improved guidance – WHO TA • Continued quarterly supportive supervision with particular emphasis to relatively low performing districts – WHO TA (+financial support) • Conduct technical assistance in switching to b-OPV - (WHO TA) • Continue working on revision of nursing curricula and provide training materials to nursing schools and, expand the experience to the field of maternal and child health – (WHO TA)
Data quality	<ul style="list-style-type: none"> • Improve collaboration between the Programme and the e-health unit (Informatics Center) to ensure Immunization Programme needs are met through e-health modules developed (MoH) • Defining immunization programme data and analytical functions requirements – (WHO TA) • Review of the developed immunization module and development of an upgrade plan (particularly for analytical functions) – (WHO TA) • Development of vaccine stock management module (system design and software development – (WHO TA) • Provide technical assistance in improving registration of pregnant women through use of e-health system – (WHO TA) • Provide training to users of the e-health modules at rayon and facility levels – (WHO TA) • Conduct data quality review to assess bottlenecks and areas for improvement, with particular attention to target population estimates – (WHO TA) • Improve target population estimates – (WHO TA) • Assess private immunization services and define roadmap for integration of private immunization services to the national programme – (WHO TA)
Communication & social mobilization	<ul style="list-style-type: none"> • Conduct communications review – WHO TA • Develop communication plan – WHO TA • Conduct further (in-country) trainings to key staff (including spokespersons) on communications – WHO TA • Provide training to media staff (WHO TA) • Develop and produce key communication materials (WHO TA + financial assistance)

	<ul style="list-style-type: none"> • Conduct communication activities (WHO TA + financial assistance) • Develop software for the immunization website – (WHO TA) • Develop communication strategy and messages for HPV introduction (prior to HPV application) - (WHO TA)
Vaccine management & logistics	<ul style="list-style-type: none"> • Develop a renewal plan for cold chain equipment based on recent and upcoming cold chain inventory studies – (WHO TA) • Review of inventory study findings and develop procurement list (EVM recommendations) – (WHO TA) • Purchase cold chain equipment (freeze tags and voltage stabilizers for national level and other equipment according to findings of the inventory study and renewal plan for rayon and facility levels) – (UNICEF TA) • Explore and develop an efficient and feasible maintenance system for cold chain equipment in use – (WHO TA) • Follow up implementation of EVM recommendations at national level and during delivery of vaccines to district level (i.e., vaccine monitoring study; use continuous temperature recorders; recording of diluents; use of freeze indicators) for further institutionalization of vaccine management practices– (WHO TA) • Address identified weaknesses of vaccine management system (i.e., lack of established max-min stock levels; inappropriate stock recording system; diverse knowledge on stock management; not use of freeze indicators; temperature indicator status not indicated on vaccine receipt forms; no documentation of supervision; SOPs not available) at district and facility level – (WHO TA) • Follow-up implementation of EVM recommendations provided for rayon and facility levels – (WHO TA) • Develop a national systematic training programme on vaccine management - (WHO TA) • Train staff involved in vaccine management, particularly at district and facility levels – (WHO TA) • Develop action plan to implement WHO Open Vial Policy - (WHO TA) • Provide training to field staff on WHO Open Vial Policy – (WHO TA)
Vaccine regulations & AEFI surveillance system	<ul style="list-style-type: none"> • Familiarize staff to WHO recommendations on AEFI surveillance system by participate to the sub-regional workshop - (WHO TA) • Conduct AEFI surveillance system assessment to identify areas that require further improvement (legislation; case definitions; reporting forms; case investigation; filtering cases to be reported; causality assessment; data analysis; feedback) - (WHO TA) • Revise the AEFI surveillance system in line with the recommendations of the assessment - (WHO TA) • Train key field staff on revised procedures (make use of upcoming MLM and IIP trainings) • Train expert review committee members on causality assessment - (WHO TA) • Engage NRA to the AEFI surveillance system (data analysis and feedback functions) • Review vaccine registration procedures and develop action plan to introduce collaborative procedures for registration prequalified vaccines – (WHO TA) • Introduce collaborative procedures for registration of prequalified vaccines – (WHO TA)

5. ENDORSEMENT BY ICC, HSCC OR EQUIVALENT & ADDITIONAL COMMENTS

The findings of the Graduation Assessment and Joint Appraisal have been presented to the Minister of Health, Deputy Ministers of Health, Chiefs of International Relations Department and of sanitary-epidemiological surveillance sector, larger CCM Vice-Chair, CCM Working Group on immunization and in-country partners (UNICEF and WHO country offices) on 18-19 August 2015 during meetings specifically called for this purpose.

Please find the full presentation in Annex E to this report.

- **Annex B. Status of implementation of the key actions from the last joint appraisal and any additional High Level Review Panel (HLRP) recommendations**

Key actions from the last appraisal or additional HLRP recommendations	Current status of implementation
<p>EVM Assessment: To intensify the follow up on the EVM recommendations and provide an update to GAVI</p>	<p>Addressed – Graduation Assessment and Joint Appraisal reviewed the status of EVM recommendations. - Moderate progress in implementing EVM assessment recommendations has been made by Azerbaijan. As part of final JA and Graduation Assessment recommendations, the country was recommended to integrate EVM assessment recommendations into annual and multi-year planning and budgeting and establish a formal procedure to review the progress (i.e. ICC meetings).</p>
<p>HSS: To speed up processes of grant implementation. In addition, Azerbaijan is requested to report on output indicators and related results, with submission of a completed M&E framework.</p> <p>As there have been reallocations, it would be useful to clarify budget and workplan for remaining funds to GAVI Secretariat, including any reallocation of funds, with approval by CCM sub-group for HSS.</p>	<p>Addressed – discussions during the Joint Appraisal visit allowed to agree on the way forward with the HSS grant implementation, with a limited set of activities being implemented until the end of 2015, and other relevant HSS activities considered in the context of the Graduation Grant.</p>
<p>A graduation assessment was conducted in 2013 and there is an agreed report and plan with key recommendations. As per the GAVI Alliance board decision of November 2013, there will be another assessment by the Alliance to further detail the graduation process and develop a costed plan which may be partially supported by GAVI.</p>	<p>Addressed – Graduation Assessment has been carried out together with the Joint Appraisal in July 2015.</p>

- **Annex C. Description of joint appraisal process** (e.g. team composition, how information was gathered, how discussions were held)

Two processes (the Joint Appraisal and Graduation Assessment) were conducted jointly and simultaneously in two separate visits: the first, which took place from 13 to 16 July 2015, included technical review and discussions on various aspects related to these two evaluations. The second trip, conducted on 18-19 August, followed up on the July 2015 mission and allowed to share final findings and recommendations with country stakeholders.

Joint Appraisal and Graduation Assessment reviews were built upon information submitted in the 2014 APR, details provided in the 2014 Internal Appraisal, 2015 post-introduction evaluation of PCV vaccine and July 2013 graduation assessment, additionally covering programmatic and performance-related challenges. In this perspective, the overarching objective was to assess the conditions of continuous performance of the Azeri immunization program, which until now has been both highly effective and efficient.

Main institutions and persons visited:

- **Ministry of Health of Azerbaijan**
 - Dr. Ogtay SHIRALIYEV, Minister of Health of the Republic of Azerbaijan
 - Dr. Azad VALIYEV, Chief of Finance and Economic Department
 - Dr. Viktor GASIMOV, Chief of sanitary-epidemiological surveillance sector
 - Dr. Oleg SALIMOV, Advisor of sanitary-epidemiological surveillance sector
 - Dr. Jabrail ASAD-ZADE, Director of the Health Informatics Center
 - Dr. Mekhti AMRAKHOV, Chief of the health statistic department
 - Dr. Samir ABDULLAYEV, Chief of International Relations Department
- **Republican Center of Hygiene and Epidemiology of Azerbaijan**
 - Dr. Afag ALIYEVA, Deputy General Director of the Republican Center of Hygiene and Epidemiology, EPI
- **Analytical expertise Center of Azerbaijan**
 - Dr. Farid ALIYEV, Head of Analytical Expertise Center
- **Innovation and Supply Center of Azerbaijan**
 - Dr. Farhad ALIYAR-ZADE, Director
 - Dr. Rashida ABDULLAYEVA, Head of Planning Department
- **Center of Reform and Public Health**
 - Dr. Jeyhun MAMMADOV, Director
 - Dr. Lufti GAFAROV, Head of the Department of primary health care organization
 - Dr. Sabina BABAZADE, Head of Department of Project Coordination
- **Research community / Academia**
 - Dr. Nasib J. GULIYEV, Major Paediatrician, professor, scientific research institute of Pediatrics, Head of the National Immunization Technical Advisory Group (NITAG)
- **UNICEF Country Office**
 - Dr. Andro SHILAKADZE, Representative
- **WHO Country Office**
 - Dr Kamran GARAKHANOV, WHO Representative

Discussions and technical meeting with people and organisations listed above took place during the combined Joint Appraisal and Graduation Assessment mission. The findings of these discussions, as well as the recommendations and proposed activities to be implemented through the Graduation Action Plan and Joint Appraisal technical assistance, have been presented to the MoH, CCM Working Group members, and WHO and UNICEF country representatives. The draft Joint Appraisal report has also been circulated to all relevant stakeholders, and feedback received was incorporated in the final version of the report.

Annex D: Future technical assistance needs					
Programme component (or strategy)	Activity (that requires TA)	Intended outcome/s	Provider (potential)	Modality	Source of funding
Immunization financing & resource mobilization	Train key staff on immunization financing and monitoring performance	Increased in-country capacity on immunization financing	WHO	Sub-regional workshop and in-country TA	TBD
	Train relevant staff for resource mobilization and development of a resource mobilization plan	Developed in-country capacity	WHO	Sub-regional workshop and in-country TA	TBD
	Develop resource mobilization plan	Road map for targeted resource mobilization efforts	WHO	In-country work with external technical assistance	TBD
	Develop advocacy materials (for resource mobilization) and advocate for immunization	Increased targeted resource mobilization efforts	WHO	In-country work with external technical assistance	TBD
	Monitor implementation of resource mobilization action plan and report on progress achieved	Assessed and documented performance in mobilizing resources	WHO	Sub-regional workshop and in-country TA	TBD
	Include introduction of new vaccines in cMYP to be developed for 2016-2020 (as alternative scenarios)	Input for resource mobilization efforts and plan	WHO	In-country work with external technical assistance	TBD
Vaccine procurement	Increased and continued collaboration with UNICEF to find solutions to problems (including alignment of national procurement and accounting procedures with of UNICEF's process)	Ensured timely access to quality-assured vaccines	UNICEF	In-country TA	TBD
	Continued advocacy on benefits of procuring through UNICEF	Sustained procurement modality	UNICEF & WHO	Financial analysis of procurement modalities	TBD
	Train key staff on procurement to improve knowledge on the vaccine market, vaccine procurement and supply	Increased in-country capacity on procurement	WHO & UNICEF	Sub-regional workshop	TBD
	Conduct external review of vaccine procurement policies and practices	Performance and efficiency increase in vaccines procurement	WHO	In-country TA	Graduation grant
Evidence-based	Continued capacity building support to NITAG members	Improved strategic guidance to the Programme	WHO	Sub-regional workshop, study	Graduation grant

decision-making				tours, in-country TA	
	Monitoring performance of NITAG and upgrading NITAG mechanism in line WHO recommendations	Improved strategic guidance to the Programme	WHO	Sub-regional workshop, in-country TA	TBD
	Conduct cost-effectiveness study on introduction of HPV vaccine	In-country data and evidence on effectiveness of HPV vaccine introduction	WHO	In-country TA	TBD
	Conduct school vaccination readiness study for HPV vaccination	Evidence on readiness for HPV vaccination	WHO	In-country TA	TBD
	Develop national plan for prevention of cervical cancer	Comprehensive approach for cervical cancer prevention	WHO	In-country TA	TBD
	Documenting impact of PCV vaccinations	Advocacy support for continuation of PCV vaccinations	WHO	In-country TA	TBD
	Provide continued technical assistance and supply support to both new vaccine sentinel surveillance networks	Sustained rotavirus and IBD surveillance in-country network and evidence for continuation of both vaccinations	WHO	Sub-regional workshops, in-country TA, procurement	TBD
	Provide technical assistance with conducting IPV PIE	Sustainable introduction of IPV	WHO	In-country TA, sub-regional workshop	TBD
	Follow up of implementation of PCV PIE recommendations	Increased coverage with PCV vaccine	WHO	In-country TA, sub-regional workshop	TBD
Programme performance	Develop guidelines to complete interrupted and delayed vaccinations (for all vaccines)	Increased timeliness of coverage	WHO	In-country TA	TBD
	Conduct trainings to improve timeliness of vaccinations (by eliminating false contraindications and increasing simultaneous administrations; not limited to PCV, but for all vaccines)	Increased vaccination coverage	WHO	Sub-regional workshops, in-country TA	TBD
	Conduct mid-level management training to sub-national level managerial staff	Increased vaccination coverage	WHO	In-country TA and training	Graduation grant
	Conduct immunization in practice training to facility level staff	Increased vaccination coverage	WHO	In-country TA and training	Graduation grant
	Provide supportive supervision on quarterly basis based on developed SOPs and improved guidance	Increased vaccination coverage	WHO	In-country TA and financial support	Graduation grant
	Improve pre-service training and curriculum on immunization	Improved quality of future staff on immunization	WHO	In-country TA and training	Graduation grant

	Conduct qualitative studies to better understand reasons behind refusals to address vaccine hesitancy ad refusals and to reach the unreached and tailor immunization programme accordingly (utilizing TIP approach)	Improved access to unreached and increased vaccination coverage	WHO	In-country TA, assessment	Graduation grant
	Develop in-country materials and train staff to address vaccine refusals and hesitancy	Improved access to unreached and increased vaccination coverage	WHO	In-country TA, in-country training	Graduation grant
	Continue working on revision of nursing curricula and provide training materials to nursing schools and, expand the experience to the field of maternal and child health	Improved qualification of future staff on immunization	WHO	In-country TA and procurement	Graduation grant
	Conduct technical assistance in switching to b-OPV - (WHO TA)	Smooth switch to b-OPV	WHO	Sub-regional workshops, in-country TA	TBD
Data quality	Conduct data quality review to assess bottlenecks and areas for improvement, with particular attention to target population estimates	Data quality improvement plan developed to address weaknesses	WHO, USCDC	In-country TA	TBD
	Provide training to national and district immunization staff on data quality issues (with emphasis on improving target population estimates)	Improved target population estimates and reporting	WHO, USCDC	In-country TA	TBD
	Define immunization programme data and analytical functions requirements	Guidance to improvement of immunization module	WHO	In-country TA	Graduation grant
	Review the developed immunization module and development of an upgrade plan (particularly for analytical functions)	Guidance to improvement of immunization module	WHO	In-country TA	Graduation grant
	Develop vaccine stock management module (system design and software development)	Improved management of vaccines and supplies	WHO	In-country TA	Graduation grant
	Provide technical assistance in improving registration of pregnant women through use of e-health system	Improved access to newborns	WHO	In-country TA	Graduation grant
	Provide training to users of the e-health modules at rayon and facility levels	Increased in-country capacity in use of immunization information systems	WHO	In-country TA and training	Graduation grant
	Assess private immunization services and define roadmap for integration of private immunization services to the national programme	Integrated immunization services	WHO	In-country TA	Graduation grant
	Conduct communications review	Road map for intensified and targeted communication activities	WHO	In-country TA	TBD

Communication & social mobilization	Develop communication plan	Intensified and targeted communication activities	WHO	In-country TA	TBD
	Conduct further (in-country) trainings to key staff (including spokespersons) on communications	Intensified and targeted communication activities	WHO	In-country TA and training	Graduation grant
	Provide training to media staff	Reduced negative media influence	WHO	In-country TA and training	Graduation grant
	Develop and produce key communication materials	Improved knowledge of parents and increased demand for vaccines	WHO	In-country TA, procurement	Graduation grant
	Conduct communication activities	Improved knowledge of parents and increased demand for vaccines	WHO	In-country TA, procurement	Graduation grant
	Develop communication strategy and messages for HPV introduction (prior to HPV application)	High coverage with HPV	WHO	In-country TA	TBD
	Develop software for the immunization website	Improved communication on immunization to parents	WHO	In-country TA; procurement	Graduation grant
Vaccine management & logistics	Develop a renewal plan for cold chain equipment based on recent and upcoming cold chain inventory studies	Road map for cold chain improvement	WHO	In-country TA	TBD
	Review of inventory study findings and develop procurement list (EVM recommendations)	Road map for cold chain improvement	WHO	In-country TA	TBD
	Purchase cold chain equipment (freeze tags and voltage stabilizers for national level and other equipment according to findings of the inventory study and renewal plan for rayon and facility levels) – (UNICEF TA)	Improved supply chain	UNICEF	Procurement	Graduation grant
	Explore and develop an efficient and feasible maintenance system for cold chain equipment in use	Sustainability of supply chain	WHO	In-country TA	TBD
	Follow up implementation of EVM recommendations at national level and during delivery of vaccines to district level (i.e., vaccine monitoring study; use continuous temperature recorders; recording of diluents; use of freeze indicators) for further institutionalization of vaccine management practices	Improved supply chain	WHO	In-country TA	TBD
	Address identified weaknesses of vaccine management system (i.e., lack of established max-min stock levels; inappropriate stock recording	Improved supply chain	WHO	In-country TA	TBD

	system; diverse knowledge on stock management; not use of freeze indicators; temperature indicator status not indicated on vaccine receipt forms; no documentation of supervision; SOPs not available) at district and facility level				
	Follow-up implementation of EVM recommendations provided for rayon and facility levels	Improved supply chain	WHO	In-country TA	TBD
	Develop a national systematic training programme on vaccine management	Improved supply chain	WHO	In-country TA	TBD
	Train staff involved in vaccine management, particularly at district and facility levels	Improved supply chain	WHO	In-country TA; training	TBD
	Develop action plan to implement WHO Open Vial Policy	Road map for efficient use of vaccines	WHO	In-country TA	TBD
	Provide training to field staff on WHO Open Vial Policy	Efficient use of vaccines	WHO	In-country TA; training	Graduation grant
	Conduct temperature monitoring study and mapping study of cold-rooms	Improved supply chain	WHO	In-country TA	TBD
Vaccine regulations & AEFI surveillance system	Review vaccine registration procedures and develop action plan to introduce collaborative procedures for registration prequalified vaccines	Facilitated access to quality assured vaccines	WHO	In-country TA	TBD
	Train key staff on implementation of collaborative procedures for registration of prequalified vaccines	Facilitated access to quality assured vaccines	WHO	Sub-regional training	TBD
	Familiarize staff to WHO recommendations on AEFI surveillance system by participate to the sub-regional workshop	Improved safety of immunizations	WHO	In-country TA	TBD
	Conduct AEFI surveillance system assessment to identify areas that require further improvement (legislation; case definitions; reporting forms; case investigation; filtering cases to be reported; causality assessment; data analysis; feedback)	Improved safety of immunizations	WHO	In-country TA	TBD
	Train expert review committee members on causality assessment	Improved safety of immunizations	WHO	Sub-regional workshop	Graduation grant
	Revise the AEFI surveillance system in line with the recommendations of the assessment	Improved safety of immunizations	WHO	In-country TA	TBD
	Train key field staff on revised procedures (make use of upcoming MLM and IIP trainings)	Improved safety of immunizations	WHO	In-country TA and training	Graduation grant

• **Annex D. HSS grant overview**

General information on the HSS grant							
1.1 HSS grant approval date		2008					
1.2 Date of reprogramming approved by IRC, if any		N/A – no formal reprogramming of the grant has been done since its start					
1.3 Total grant amount (US\$)		\$1,182,500					
1.4 Grant duration		2012-2015					
1.5 Implementation year		March 2012 – December 2015					
(US\$ in million)	2009	2010	2011	2012	2013	2014	2015
1.6 Grant approved as per Decision Letter				\$582,000	\$395,000	\$205,500	
1.7 Disbursement of tranches				\$582,000	-	-	
1.8 Annual expenditure				\$2,500	\$116,000	US\$ 273,000	US\$11,500
1.9 Delays in implementation (yes/no), with reasons		<p>Yes: As per discussions with the HSS implementing team, the key reasons behind delayed implementation were difficulties in obtaining required approvals from the MoH and the CCM Working Group on immunization, and challenges in coordination with entities involved in the implementation of the various activities. Other challenges identified by the Joint Appraisal team were insufficient collaboration and coordination between the HSS implementation team and the National Immunization Program, and the need to review and update some of the planned activities due to the significant time that passed since the original proposal was submitted.</p>					
1.10 Previous HSS grants (duration and amount approved)		N/A					
<p>1.11 List HSS grant objectives</p> <p>The original objectives of the Azerbaijan HSS grant, outlined in the proposal submitted to Gavi in 2008, were the following:</p> <ol style="list-style-type: none"> 1. Improve the capacity of eight training institutes, 42 educators and 640 mid-level health workers through a strengthened postgraduate education system 2. Strengthen the health information system for better monitoring of child and maternal health services 3. Strengthen capacity and tools to plan costs and budget for the immunization program 							
<p>1.12 Amount and scope of reprogramming (if relevant)</p> <p>Azerbaijan will continue implementing activities planned originally for Year 1 of implementation and use available funding from the 1st disbursed tranche. No additional disbursements will be made to HSS grant. Undisbursed HSS funds will be used to fund graduation activities.</p>							

- Annex E. Final Debriefing Presentation



De-briefing on Graduation assessment and action plan development July & August 2015, Azerbaijan

WHO Europe
UNICEF Regional Office & Supply Division
US CDC
GAVI Secretariat

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GAVI Graduating Country Assessment and Action Plan Development

The purpose of the mission is to;

- identify **financial and programmatic challenges** faced in Azerbaijan, due graduation from GAVI support,
- provide **recommendations to sustain immunization program achievements** following graduation from GAVI support and,
- develop an **action plan** (costed and funded) to **implement the provided recommendations.**

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Process for Development of Action Plan

- Assessment conducted in July 2013 and July 2015
- Review of documents, reports and programme data
- Meetings with:
 - Ministry of Health (Sanitary-Epidemiological Surveillance Center; Legal; Finance-Economic)
 - Republican Center of Hygiene & Epidemiology (RCH&E)
 - Innovation and Supply Center
 - Public Health and Reform Center
 - Health Informatics Center
 - Health Statistics Center
 - Center of Analytical Expertise of Medicines (NRA)
 - National Immunization Technical Advisory Group (NITAG)
 - Working Group of of the Country Coordination Mechanism (CCM)
 - In-country partners (WHO, UNICEF)

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General Observations - Strengths

- Strong political commitment to and prioritization of the national immunization programme to support the achievement of the MDG's
- Country Coordination Mechanism (CCM) is a real asset enabling coordination between structures with immunization functions
- All essential functions of the NIP are in place and kept centralized
- National Immunization Technical Advisory Group (NITAG) established
- Sustained polio-free status and, significant progress toward measles and rubella elimination goal
- Improved efficiency through procuring UNICEF (significant savings)
- Significant achievement toward self-sufficiency (only PCV in 2016)
- Successful expansion of the Programme (currently with 11 antigens)
- Strong collaboration with partners

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General Observations - Challenges

- Limited benefit from current health system strengthening support to the NIP
 - Low implementation rate
 - Outdated objectives and activities
 - Limited collaboration with national immunization programme structures
- Further upgrade and expansion of e-health system (immunization module) is required, so benefits to immunization programme are maximized
- Critical operations of the NIP being underfunded and dependent on decreasing donor support (training, supervision, monitoring, surveillance)
- Growing vaccine hesitancy and refusals
- Concerns on quantity and quality of private immunization services provided
- Vaccine management at district and facility level requires significant improvement
- **Recommendations will be provided under specific programme components**

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Immunization financing & resource mobilization - Strengths

- Separate budget item exists for vaccines & supplies
- Calculation of vaccine resource requirements in place
 - Benefiting from cMYP costing exercise and updates on annual basis (vaccines in the calendar x annual need x estimated price)
- Vaccine resource requirements are communicated to budgetary process of MoH (including MTEF process) and secured till 2018
- Required funding secured till 2018 (3 M AZN for 2015; 4,5 M AZN for 2018)
- Disbursement of allocated funds is timely and complete
 - As a result, uninterrupted vaccine supply observed
- Immunization (and its financing) seen as a priority
 - Significant share of the MoH budget is allocated for vaccines and supplies
 - 3 to 5% of budget for pharmaceuticals
 - 0.7% of the MoH budget
- Since 2009, all vaccines funded by the Government, except GAVI support
- Country co-financing requirements met, no stock-out due to funding gap

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Budget allocated for & expenditures on Vaccines & Supplies (in million AZN)

Years	Vaccines & Supplies (in million AZN)	As % of central MoH budget	Central MoH budget (in million AZN)
2013	4.50	1.4 %	310.4
2014	2.79	0.8 %	337.8
2015	3.01	0.7 %	405.3
2016	3.46	0.7 %	470.8
2017	3.98	0.7 %	541.4
2018	4.57	0.7 %	622.6

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Immunization financing & resource mob. – Challenges & recommendations

- ❑ Communicated and reflected vaccine resource requirements (and budget) require continued commitment and increase in case of devaluation of the local currency
 - Train relevant staff for resource mobilization – (WHO TA)
 - Develop resource mobilization plan – (WHO TA)
 - Develop advocacy materials (for resource mobilization) and advocate for immunization – (WHO TA)
- ❑ Introduction of new vaccines will require additional funding
 - Include introduction of new vaccines in cMYP to be developed for 2016-2020
 - Revise resource mobilization plan accordingly and implement
 - Continue benefiting from access to vaccine at affordable and optimum prices (GAVI prices procuring through UNICEF)
- ❑ Operational activities of the Programme is heavily under funded
 - Make use of graduation grant to fill the gap in the short term
 - Advocate for increased funding for operational activities
- ❑ Risk of changing current vaccine procurement modality and losing current efficient use of resources
 - Communicate benefits of current procurement modality

Vaccine procurement - Strengths

- Benefiting from procurement through UNICEF- efficient use of resources (recommendation of 2013 assessment)
- National procurement capacity exists and system functional
- Use of WHO prequalified vaccines is a condition in self-procurement
- Eligible to access GAVI prices another 5 years after graduation
- No vaccine stock-outs related to procurement

Vaccine procurement– Challenges & recommendations

- Government's current commitment to procure vaccines through UNICEF Supply Division may be vulnerable to potential changes
 - Continued advocacy on benefits of procuring through UNICEF to sustain commitment
- Alignment of national procurement and accounting procedures with of UNICEF's process
 - Increased and continued collaboration with UNICEF to find solutions to problems – (UNICEF TA)
- Self procurement of non-programme vaccines (that are not available in Supply Division's portfolio) require strengthened procurement capacity to improve its efficiency
 - Continue building capacities in procurement, by improving the knowledge on vaccine market dynamics, how vaccine prices evolve, measures that increase procurement efficiency; such as long-term contracting - (UNICEF TA)
 - Review vaccine procurement practices and identify areas for improvement - (WHO TA)



Evidence-based decision-making - Strengths

- Functional and motivated national immunization technical advisory group (NITAG).
 - Established in Cot 2013 (following 2013 assessment recommendation)
 - Chaired and populated with leading and reputable specialists
 - National Certification & Verification Committee (NCC & NVC) representation
 - Empowering the Programme (as being spokespersons) and providing strategic guidance (recommendations)
 - Chair participated to trainings and WHO meetings
 - Motivated to provide strategic guidance on new vaccines
 - Recommendations of the NITAG are appreciated and respected by the MoH
- Both rotavirus and invasive bacterial disease surveillance are in place
 - Sentinel sites are functional and providing surveillance data
 - Plan to shift to PCV-13 in 2016



Evidence-based decision-making – Challenges & recommendations

- ❑ NITAG members require continuous update on programme policies and strategies
 - Continued WHO support (in disseminating guidance and providing training, participation to WHO meetings, visit to other NITAGs, experts attending to NITAG meetings, twinning) & review of the NITAG performance – WHO TA
- ❑ NITAG composition lacks some disciplines
 - Ministry of Health may wish to consider adding members from social & behavioral sciences, health economics.
- ❑ NITAG should consider introduction of HPV vaccine (following collection of local evidence on vaccine cost-effectiveness)
 - WHO support in conducting cost-effectiveness and readiness study on introduction of HPV vaccine – WHO TA
- ❑ Sustainability of both new vaccine surveillance systems (after graduation from GAVI support) should be considered
 - Ministry of Health should gradually take over the external financial support provided by WHO

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Programme performance & data quality - Strengths

- Discrepancy problem between reported vaccination coverage and WHO/UNICEF estimates have been resolved by release of DHS 2011 data
- E-health under development is a great opportunity for the Programme, as system is quite close to universal coverage
- Coverage is equal or more than 94% at national level for all Programme vaccines
- PCV coverage is expected to catch up other Programme vaccines (PCV1 91%; PCV3 64%)
- All districts (64 out of 64) have equal or more than 90% coverage with DTP3
- 57 out 64 districts have equal or more than 95% coverage with MCV1
- Surveys show no gender inequity
- Outreach immunization services have been institutionalized
- Reporting system is robust and functional
 - Timeliness of vaccinations can be monitored

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Programme performance – Challenges & recommendations

- Vaccine coverage is challenged with timeliness of vaccinations (may hit PCV more than others)
 - Requires further efforts to improve timeliness of vaccinations (by eliminating false contraindications and increasing simultaneous administrations; not limited to PCV, but for all vaccines – WHO TA)
 - Development of guidelines to complete interrupted and delayed vaccinations (for all vaccines) – WHO TA
- Reaching the last few percent unreached is challenged by vaccine hesitancy and refusals (by some religious groups)
 - Qualitative studies to better understand reasons for refusals and use WHO tool on Tailoring Immunization Programme – WHO TA
 - Continued training to rayon and facility levels – WHO TA
 - Further strengthening of supportive supervision through introduction of SOPs and improved guidance – WHO TA
 - Continued quarterly supportive supervision with particular emphasis to relatively low performing districts – WHO TA (+financial support)
 - Continue working on revision of nursing curricula and provide training materials to nursing schools and, expand the experience to the field of maternal and child health – (WHO TA)

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Data quality – Challenges & recommendations

- E-health development initiative requires external support so that the Programme ultimately benefits
 - Increased collaboration between the Programme and the e-health
 - Defining immunization programme data requirements – (WHO TA)
 - Review of the developed immunization module and development of an upgrade plan (particularly for analytical functions) – (WHO TA)
 - Development of vaccine stock management module (system design and software development – (WHO TA)
 - Provide technical assistance in improving registration of pregnant through use of e-health system – (WHO TA)
- Despite achieved recent improvements, particularly immunization data is still challenged with target population estimates
 - Data quality review in 2016, to assess bottlenecks and areas for improvement – (WHO TA)
 - Technical assistance to improve target population estimates – WHO TA
- Integration of private immunization services through improved reporting
 - Assess private immunization services and define roadmap for integration – (WHO TA)

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Communications & social mobilization - Strengths

- Communication plans have been developed for new vaccines introduced
- Crisis communication plan exists
- Immunization website development is underway
- Key programme staff received training on communications

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Communications & social mobilization – Challenges & recommendations

- ❑ Immunization Programme lacks a communications plan
 - Conduct communications review – WHO TA
 - Provide technical assistance in development of communication plan – WHO TA
 - Conduct further (in-country) trainings to key staff (including spokespersons) on communications – WHO TA
- ❑ Media staff requires better understanding on immunization
 - Provide training to media staff (WHO TA)
- ❑ Programme requires additional support to enable continuity of key communication materials and communication activities
 - Supporting the Programme in developing and printing key communication materials (WHO TA)
 - Support the Programme (financially) in conducting communication activities (WHO TA)
- ❑ Immunization website development may require additional external technical support
 - Provide technical assistance in design and software development – WHO TA

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Vaccine management & logistics - Strengths

- Vaccine management assessments (2011 and 2014) and development of improvement plans practice have been institutionalized
- Significant investment has been made at central store level and to vaccine delivery system
- National guidance documents and visual aids are in place at national level
- Immunization supply chain is optimized (national – district – health facility)
- Continuous investment in strengthening cold chain infrastructure
- Cold chain inventory is conducted regularly
- Uninterrupted and efficient vaccine supply (no vaccine stock-outs, no wasted doses in unopened vials, low open vial wastage)
- Well established organizational structure for vaccine management, defined roles and responsibilities, strong management and committed human resources at the national level
- Supportive supervision in place, with defined frequency of visits and supervisory tools (from national to district level)

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Vaccine management & logistics – Challenges & recommendations (1)

- ❑ Renewal plan for cold chain equipment does not exist (inventory data not adequately used)
 - Based on recent and upcoming cold chain inventory studies, a renewal plan for cold chain equipment to be developed – (WHO TA)
 - Review of inventory study findings and develop procurement list (EVM recommendations) – (WHO TA)
 - Purchase cold chain equipment, freeze tags and voltage stabilizers (for renewal and upgrade) – (UNICEF TA)
- ❑ Cold chain equipment in use is lacking a functional maintenance system
 - Explore an efficient and feasible maintenance system for cold chain equipment in use – (WHO TA)
- ❑ Further institutionalization of vaccine management practices at national level
 - Follow up of implementation of EVM recommendations at national level and during delivery of vaccines to district level (i.e., vaccine monitoring study; use continuous temperature recorders; recording of diluents; use of freeze indicators) – (WHO TA)

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Vaccine management & logistics – Challenges & recommendations (2)

- ❑ Vaccine management system requires significant improvement at district and facility level (poor performance against 6 out of 8 indicators) (i.e., lack of established max-min stock levels; inappropriate stock recording system; diverse knowledge on stock management; not use of freeze indicators; temperature indicator status not indicated on vaccine receipt forms; no documentation of supervision; SOPs not available)
 - Provision of technical assistance to address identified weaknesses (listed above) at district and facility level – (WHO TA)
 - Conduct follow up to assess implementation of EVM recommendations – (WHO TA)
- ❑ Lack of institutionalized training programme on immunization and vaccine management
 - Develop a national systematic training programme on immunization and vaccine management. (WHO TA)
 - Training of staff involved in vaccine management, particularly at district and facility levels – (WHO TA)
- ❑ WHO Open Vial Policy is not fully implemented
 - Develop action plan to implement WHO Open Vial Policy - (WHO TA)
 - Provide training to field staff on WHO Open Vial Policy – (WHO TA)



AEFI surveillance system – Strengths

- AEFI surveillance system is in place and functional
 - Legislative basis exists
 - Reporting forms in place
 - Case investigations conducted
- Adverse events are reported to the national level (5565 cases in 2014, but no serious cases reported)
- National regulatory authority (NRA) has planned to get engaged
- NRA assessment is scheduled from 7 to 9 September
 - More findings and recommendations expected in September



AEFI surveillance system – Challenges & recommendations

- AEFI surveillance system requires update in line with WHO recommendations (legislation; case definitions; reporting forms; case investigation; filtering cases to be reported; causality assessment; data analysis; feedback)
 - Familiarize staff to WHO recommendations on AEFI surveillance system by participate to the sub-regional workshop - (WHO TA)
 - Conduct AEFI surveillance system assessment to identify areas that require further improvement - (WHO TA)
 - Revise the AEFI surveillance system in line with the recommendations of the assessment - (WHO TA)
 - Train key field staff on revised procedures (make use of upcoming MLM and IIP trainings)
 - Train expert review committee members on causality assessment - (WHO TA)
 - Engage NRA to the AEFI surveillance system (data analysis and feedback functions)

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Summary of key recommendations

- ❖ Stay vigilant to increasing financial requirements in coming years
- ❖ Maintain current procurement modality in accessing to vaccines at affordable prices
- ❖ Introduce new technologies to supply chain to improve its efficiency
- ❖ Sustain programme performance level by investing in quality of services (training, supervision)
- ❖ Be proactive in addressing (growing) vaccine hesitancy and refusals
- ❖ Target unification of current reporting system and e-health immunization module (and developing logistics module)

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Next Steps

1. The graduation action plan (2016-2017) will be finalized in line with the recommendations provided and shared with the MoH following NRA assessment in September (7 to 9 Sept).
2. Endorsement of the Plan required by the ICC and an official communication should be sent to GAVI Secretariat by the MoH requesting funding for the Plan.
3. Graduation grant will be channeled through WHO and UNICEF country offices to support implementation of activities. (Partnership Framework Agreement is a prerequisite). Technical assistance will be provided by partners in implementing the action plan.
4. Implementation of the plan will be monitored on semi-annual basis (by in-country partners, WHO Regional Office and GAVI Secretariat) and aligned with joint appraisals (on annual basis), where the plan could be updated, if required.

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We (as the Mission Team) would like to extend our appreciation and thanks to all the people who have dedicated their time to meet and work with us.

The experience has been very informative and we hope we have reflected today the considered views and opinions expressed to us by your staff.

We all look forward to working with you in the future to achieving our mutual goals.

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Azerbaijan Graduation Action Plan (2016 – 2017)

Areas of work:

1. Immunization financing & resource mobilization (financial sustainability)
2. Vaccine procurement
3. Evidence-based decision-making
4. Programme performance (coverage & equity)
5. Data quality
6. Communications & social mobilization
7. Vaccine management & logistics (supply chain)
8. Vaccine regulations & AEFI surveillance

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Azerbaijan Graduation Action Plan (2016 – 2017)

Structure:

- Areas of work – Strategies – Activities (to operationalize recommendations)
- Year and cost of activity
- Implementation: responsible agency – supportive agency
- Deliverables and deadlines for each activity
- External support, if required
- Funding source: Government; Programme Partners' Business Plan; Graduation Grant

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