



2015
ASSESSMENT
REPORT OF THE
GLOBAL VACCINE
ACTION PLAN

STRATEGIC
ADVISORY
GROUP OF
EXPERTS ON
IMMUNIZATION

I EXECUTIVE SUMMARY

The Global Vaccine Action Plan (GVAP) set ambitious but achievable goals, to save thousands of lives through vaccination in this Decade of Vaccines to 2020.

The Decade of Vaccines is not on course to achieve its true potential. Good progress has been made in some countries, including those where large numbers of unimmunized children live. **These isolated improvements will have to become the norm if the plan is to get back on track.**

In recommending what needs to change, this report focuses on **two major problems** that are holding back progress in the Decade of Vaccines:

- The elimination strategies for maternal and neonatal tetanus, and for measles and rubella, and their implementation, are in urgent need of change and adequate resourcing.
- The monitoring and accountability framework for the Global Vaccine Action Plan has gaps in its mechanisms for accountability, undermining the translation of the plan's goals into reality.

At this critical midpoint of the Decade of Vaccines, SAGE makes nine recommendations, focusing squarely on the major issues.

To improve accountability to achieve the GVAP goals, SAGE recommends that:

1. Countries have annual plans for immunization consistent with the GVAP and relevant regional vaccine action plans. The Ministries of Health, Finance and other pertinent ministries demonstrate leadership by establishing an annual process for monitoring and accountability at national and subnational levels. Monitoring should be through an independent body, for example the National Immunization Technical Advisory Group (NITAG). Each country should share, every year, with WHO regional offices, its monitoring report which should include monitoring progress towards achievement of outcomes but also sharing of best practices.
2. Once regional vaccine action plans are finalised (by December 2015), WHO regional offices establish a process of annual progress review through their regional technical advisory groups and report to the respective Regional Committees. The first annual review should take place in the first half of 2016 for countries with annual plans consistent with the GVAP. WHO Regional Committees' reports should be made available annually to SAGE as part of the global review process.
3. Global, regional and national development partners align their efforts to support countries in strengthening their leadership and accountability frameworks and in implementing their national plans. This should include establishing and/or strengthening partner coordination mechanisms at each level.
4. Decade of Vaccines secretariat agencies report to SAGE in 2016 on their supporting activities conducted in the 10 countries where most of the unvaccinated and under-vaccinated children live. This annual reporting mechanism should include discussion of those reports in regional technical advisory groups.

To address the shortfalls in disease-specific areas of the Global Vaccine Action Plan's implementation, SAGE recommends that:

5. Given poor progress with elimination of maternal and neonatal tetanus and the relatively small funding gap to achieve this goal, WHO and UNICEF convene a meeting of global partners and the remaining 21 countries to agree on an action plan, resources and respective responsibilities so that the goal is achieved no later than 2017 and thereafter strategies are in place to sustain elimination in all countries.
6. Global, regional and national development partners support countries in securing the required resources and in implementing their measles and rubella elimination or control strategies and plans. The recommendations of the mid-term review of the global measles and rubella strategic plan to be conducted in 2016, once endorsed by SAGE, should be taken into account in refining plans and for monitoring and enhancing quality of plan implementation.

To improve immunization coverage especially where many unvaccinated and under-vaccinated children live, including those affected by conflict and crisis, SAGE recommends that:

7. Global, regional and country development partners coordinate and align their efforts to support countries to immunize more children by strengthening their healthcare delivery systems, combined with targeted approaches to reach children consistently missed by the routine delivery system, particularly in the countries where vaccination rates are below 80% and to provide services to populations displaced due to conflict (both internally displaced persons and refugees).
8. WHO provide guidance for countries and partners on implementation of immunization programmes and immunization strategies during situations of conflict and chronic disruption.

The 2016 GVAP assessment report will also serve as a mid-term review of progress in the Decade of Vaccines and SAGE recommends that:

9. This report be presented at the World Economic Forum in Davos where the Decade of Vaccines was launched. The 2016 report should aim to highlight those activities that were game-changers at global, regional and country levels.

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1. A DECADE OF VACCINES – THE HALFWAY POINT

All countries committed themselves to the goals and strategies of the Global Vaccine Action Plan, to eliminate maternal and neonatal tetanus, measles, congenital rubella syndrome and polio, to free all children from vaccine-preventable diseases no matter where they live, and to explore the potential for vaccines to save more lives.

One year ago, SAGE published a report critical of the progress being made towards the Global Vaccine Action Plan goals. It would not be feasible to expect the major indicators to have changed substantially, not only because there is a lag in the data collection process, but because change takes time. Understanding what needs to be achieved at every level, by when, and by whom, is an important step.

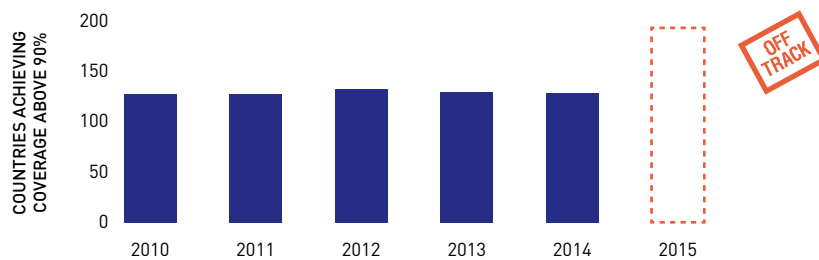
Between now and 2020, each time the Global Vaccine Action Plan targets are missed, so too are opportunities to increase the number of children living their lives free of killer diseases. In the second half of this Decade of Vaccines, countries, regions and global partners can and must achieve results.

This third report of the SAGE focuses on **leadership and the accountability systems for countries, regions and at global level** that can take the Global Vaccine Action Plan forward towards success.

2. WHERE ARE THE UNVACCINATED PEOPLE?

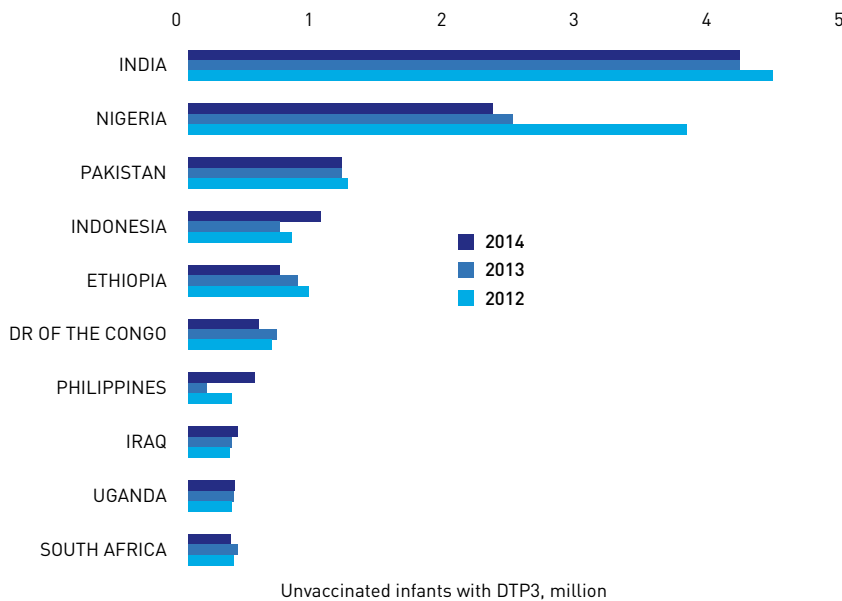
The 2014 SAGE Report focused on five key disease targets of the Global Vaccine Action Plan that are off-track. The first of these, national DTP3 coverage, shows how many of a country's children are protected from diseases. It is also an indicator of the functionality of the immunization programme and more broadly of the health system.

The target was to achieve coverage of 90% in all 194 countries by 2015. In 2014, only 129 countries achieved coverage of 90%, one less than in 2013 and only one more than in 2010.



THE TEN COUNTRIES WHERE MOST UNVACCINATED CHILDREN LIVE

Worldwide, 86% of children receive DTP3 and this has not shifted markedly in the last five years. The ten countries with the largest numbers of unvaccinated or under-vaccinated children are all low-income or lower-middle income countries. In most of these countries, large populations and weak performance combine to create the overall large numbers of unvaccinated children. In some countries, there may also be data quality issues.



Many countries other than these will have geographic areas with low immunization rates. Only 54 Member States were able to report reaching national DTP3 coverage of 90% as well as coverage in all districts of 80% or more which is the second part of the target for national vaccination coverage. Data are still not available at district level in 73 countries.

Transitory migrant populations in cities and peri-urban areas, and indigenous populations are under-served. Rapid urbanization has opened new gaps in immunization coverage where health services are unable to meet demand. In countries where children are missed, there are now adolescent and adult unvaccinated populations. Some countries experience natural disasters and conflict which bring particular challenges.

In seven countries fewer than half of all children are immunized.

DTP3 NATIONAL COVERAGE FOR 2014 IN THE SEVEN COUNTRIES WHERE MORE THAN 50% OF CHILDREN ARE UNVACCINATED OR UNDER-VACCINATED.

Equatorial Guinea	24
South Sudan	39
Somalia	42
Syrian Arab Republic	43
Chad	46
Central African Republic	47
Haiti	48

In countries in which wars and natural disasters have decimated health systems, an unvaccinated diaspora have fled to neighbouring countries or further abroad. There are internally displaced children who cannot access immunization services and areas where ongoing fighting makes vaccination very challenging. WHO has finalized a framework for decision-making about selecting vaccines in acute humanitarian emergencies¹ but more guidance is needed in relation to implementation of sustainable immunization in ongoing conflict or crisis among both internally displaced people and those who have become refugees in other countries.

¹ Vaccination in acute humanitarian emergencies: a framework for decision making, WHO, 2013, http://apps.who.int/iris/bitstream/10665/92462/1/WHO_IVB_13.07_eng.pdf

CASE STUDY: HARD-WON IMPROVEMENTS IN SOMALIA

Somalia on the Horn of Africa experiences child mortality that is achingly high, with 20% of children not seeing a fifth birthday. The leading cause of death is an infectious disease controlled in many parts of the world by vaccination. Two decades of civil war and faction fighting have left the Somali healthcare system decimated, which, combined with malnourishment, has created the perfect storm needed for an opportunistic virus like measles to thrive.

Somalia has only the faintest echoes of the healthcare system components within which an effective immunization programme would operate. The central government has collapsed and there is no legal or governance framework for immunization. Many healthcare professionals have left, and facilities have been destroyed. Violence and conflict continue in some regions. There are vast numbers of internally displaced people, poor security conditions and a scattered nomadic population struggling to survive in the face of repeated droughts and food insecurity.²

In a rebuilding process over the last decade, an immunization programme has been established, filling a coordination vacuum that has existed among the 40 partners involved in immunization in Somalia. The national unit was set up in 2012, following establishment of units in Somaliland and Puntland in 2008. Improvements are starting to be seen in those parts of the country that are now accessible. The fledgling immunization system faces enormous challenges of access, governance, staffing and resources.

Despite these difficult circumstances, Somalia has succeeded in stopping two major polio outbreaks, thanks to the commitment of community health workers and local immunization champions. But improvements in routine immunization are hard-won. Coverage is hampered and only 30 to 40% of children are immunized against major childhood diseases. Inaccessible areas are home to more than half a million children still requiring catchup vaccination. Child health days supported by WHO and UNICEF have increased coverage by 20% but the strategy is costly, requiring \$4.5 million per round, which needs to be externally funded. The funds are not available.

UNVACCINATED CHILDREN AT INCREASED RISK

The reality is that the child who doesn't have access to immunization is likely to be marginalized, living in poorly-served rural or remote areas, deprived urban settings, fragile states or strife-torn regions.³ He or she is more susceptible in the first place to the diseases vaccines help prevent, with less access to treatment. It is unacceptable that children die of diseases for which vaccines are readily available.

More children in these countries need to be immunized and immunization needs to be sustainable. Improvements over time and against a country's own previous performance are of key importance. Notably, Nigeria and India have fewer unvaccinated infants in 2014 than in 2012. It is also these two countries that have seen major leaps forward in disease elimination. Both have achieved their outcomes through accountability systems binding all partners to their agreed actions, leading to real results.

**The hard face of inequity
-children at greater risk of
diseases also least likely to
be immunized.**

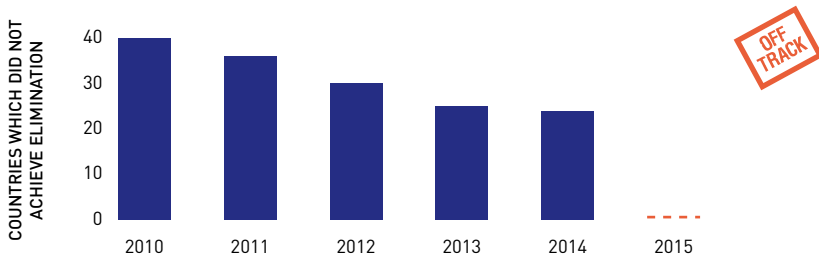
² Country Cooperation Strategy for WHO and Somalia 2010–2014, WHO, 2010; http://applications.emro.who.int/docs/CCS_Somalia_2010_EN_14487.pdf

³ State of the world's vaccines and immunization, 3rd edition, 2009, WHO, Unicef and the World Bank http://apps.who.int/iris/bitstream/10665/70114/1/WHO_IVB_09.10_eng.pdf

3. DISEASE TARGETS: CHALLENGES AND OPPORTUNITIES

MATERNAL AND NEONATAL TETANUS

24 COUNTRIES DID NOT ACHIEVE MNT ELIMINATION IN 2014



The Global Vaccine Action Plan’s key disease targets included the achievable target to eliminate the terrible disease of maternal and neonatal tetanus by the end of 2015. That target will now almost certainly be missed. It is frustrating for countries, regions and the world to see a door left open to a disease that exploits those with few resources and visits needless suffering on innocents.

Sustainable maternal and neonatal tetanus elimination is achievable

Maternal and neonatal tetanus is a stark reminder of the shocking inequity in healthcare provision. The bacterium that causes tetanus will never be eradicated, but clean birth and umbilical cord care, and vaccinating mothers during pregnancy, stops maternal and neonatal tetanus from developing, saving mothers and babies.

The funding gap to rid the world of maternal and neonatal tetanus is estimated at \$130 million, which is miniscule compared with the \$1.1 billion spent in 2014 by Gavi, the Vaccine Alliance on its new and underused vaccine programmes. In the second half of the Decade of Vaccines, there is an opportunity for countries and global partners to reorient efforts and meet and sustain the elimination goal.

ANGOLA	CHAD	AFGHANISTAN
CAMBODIA	HAITI	CENTRAL AFRICAN REPUBLIC
DEMOCRATIC REPUBLIC OF THE CONGO	KENYA	MALI
EQUATORIAL GUINEA	NIGER	SOMALIA
ETHIOPIA	NIGERIA	SOUTH SUDAN
GUINEA	PAKISTAN	YEMEN
INDIA	PAPUA NEW GUINEA	
INDONESIA	SUDAN	
MAURITANIA		
PHILIPPINES		
<p>10 COUNTRIES CLOSE TO ELIMINATION 8 COUNTRIES ARE DRASTICALLY BEHIND DESPITE RELATIVELY STABLE POLITICAL SITUATION 6 COUNTRIES ARE BEING SET BACK BY POLITICAL INSTABILITY</p>		

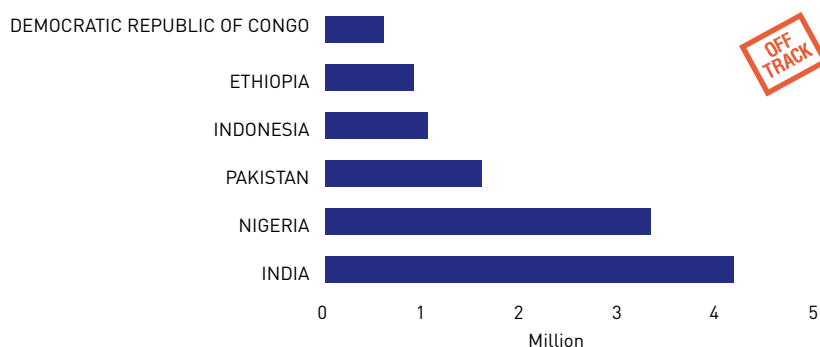
MEASLES AND RUBELLA

Three WHO regions – the Eastern Mediterranean, European and Western Pacific – vowed to wipe out measles by the end of 2015. All regions have vowed to do so within the decade. The first target will be missed and 2020 is not far away. Worse, disease is flaring in places that have forgotten what measles is like, imported from countries where vaccination rates are not high enough to stop disease spreading among the inadequately vaccinated or haphazardly or intentionally unvaccinated.

Measles is infectious and opportunistic. Children need two doses of the vaccine and countries need 95% coverage or better – nationally and across every district – to achieve elimination. But world coverage at around 85% has flatlined for the last five years.

Half of the 20.6 million children in the world who were not vaccinated at all for measles in 2014 live in six countries, which accounted for two-thirds of the conservatively estimated 145,000 measles deaths in 2014.

UNVACCINATED INFANTS FOR MEASLES FIRST DOSE, IN MILLIONS, 2014



The Global Vaccine Action Plan included a key disease target to eliminate rubella from two WHO regions by the end of 2015. Although the Americas Region has achieved elimination in 2015, the target will almost certainly be missed for the other regions. The South East Asian, African and Eastern Mediterranean WHO regions have not established elimination goals for rubella and the Western Pacific region has no target date for elimination. Europe has a goal for elimination in 2015 but is off-track.

Measles and rubella elimination – an opportunity being missed

Rubella is usually a mild illness but in early pregnancy it can cause birth defects and fetal death or lifelong disabilities due to congenital rubella syndrome. By December 2014, 140 countries had introduced rubella-containing vaccines. Global coverage is increasing but remains low, 46% in 2014 (compared with 41% in 2010). Coverage has not increased in many countries and 54 countries still do not include rubella-containing vaccines in their national schedule.

The combined vaccine for measles and rubella offers an economic solution, and the failure to link the elimination of rubella to the elimination of measles is so far a missed opportunity.

The world needs to get serious about the goal to eliminate measles along the lines of what countries, regions and global partners have mobilized to rid the world of polio. Rubella needs to be included in a new strategy so that both goals can see real progress.

4. SUCCESSES THAT CAN BE THE NORM

Performance against key immunization targets remains off-track globally in 2015, but some countries have made major breakthroughs and some targets are on-track.

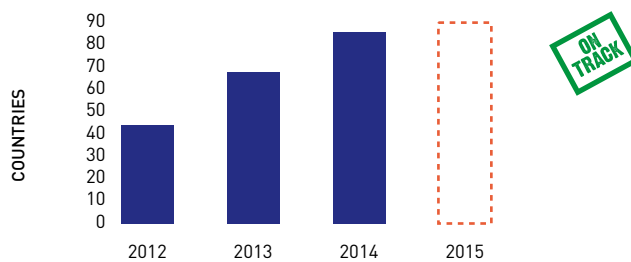
→ BREAKTHROUGHS IN NEW VACCINES

The Ebola candidate vaccines were developed and tested swiftly with potential to protect against a terrible disease.

The Global Vaccine Action Plan target for introduction of new or under-utilized vaccines is on track worldwide, with 86 low and middle-income countries introducing (and sustaining for at least one year) a total of 128 vaccines since 2010.

Although this target is on track, coverage remains low at global level and sustainability in countries eligible for Gavi, the Vaccine Alliance support continues to be of concern, along with the ability of middle-income countries ineligible for Gavi support to provide vaccines. The coverage with rotavirus and pneumococcal vaccines worldwide remains low (19% and 31% respectively in 2014).

INTRODUCTION OF NEW AND UNDER-UTILIZED VACCINES⁴



New vaccines on track but much more potential to save lives

→ BETTER DATA ON VACCINE PRICING

Following the resolution by the World Health Assembly on vaccine pricing,⁵ the WHO secretariat has worked with countries to share pricing data. To date, 40 countries have shared information with WHO.

Countries recently graduated from aid have access to Gavi pricing and UNICEF procurement but they remain vulnerable in the transition period where they need to increase domestic resources. Middle-income countries that have never received significant Gavi aid and rely on self-procurement are vulnerable to vaccine pricing and stockout issues. Vaccine supply, discussed later, continues to be an issue.

→ SUCCESS ELIMINATING DISEASES

While worldwide progress against disease targets remains sluggish, some countries have achieved breakthrough success.

- India has been declared free of maternal and neonatal tetanus, demonstrating that it is possible to eliminate this terrible disease even in challenging circumstances. India is among the countries with the

⁴ Low and middle-income countries that have used at least one new or under-utilized vaccine in their national immunization programme and sustained it for at least 12 months.

⁵ WHA68 Resolution WH68.6 on Global Vaccine Action Plan : procurement and vaccines pricing, http://apps.who.int/gb/ebwha/pdf_files/WHA68/A68_R6-en.pdf

largest numbers of unimmunized and under-immunized children. India joins Cambodia and Mauritania, which were also declared free of maternal neonatal tetanus in the first half of 2015, and Madagascar, declared free in 2014.

- Africa has not had a case of wild poliovirus since August 2014 – an enormous achievement. Nigeria is no longer a polio-endemic country, leaving just two – Afghanistan and Pakistan. Only these two countries have had wild polio cases in 2015. India was able to make use of polio infrastructure in its recent immunization successes. Similarly, polio resources were brought to bear in containing the outbreak of Ebola virus in Africa.
- The Americas region is the first to eliminate rubella and congenital rubella syndrome, a major achievement.

Isolated examples of success that need to become the norm

5. FACTORS COMMON TO SUCCESSFUL ENDEAVOURS

The SAGE has focused its earlier reports on, among other things:

- data quality
- community involvement
- vaccine supply.

These three ingredients were part of the mix in the countries where significant gains against disease targets were made in 2015.

QUALITY DATA

Without knowing who has been vaccinated for which diseases at local, country, regional and global level, it is impossible to allocate limited resources where they will provide the most return or to understand how to improve programme effectiveness or efficiency. Data need to be useful and inform strategy at every level.

In India, the strategy to eliminate maternal and neonatal tetanus was data-driven. Elimination was supported by Mission Indradhanush (Rainbow), a 2015 vaccination campaign that made good use of resources by targeting low vaccination coverage areas to maximize success. Data drove every step of Mission Indradhanush, from understanding why children were being missed and implementing strategies to overcome, to targeting districts where vaccination rates were low. Data were also available at delivery level, with meticulous planning of vaccination sessions to locate missed children and constant monitoring of outcomes. Data informed India's maternal and neonatal tetanus elimination strategy more broadly too, to determine education and training needs so that health workers and nurses would be in place – 500,000 frontline health workers were trained – to upgrade primary health care clinics to accommodate birth care in response to community demand, and to integrate immunization and antenatal care to maximize success.

Data quality is of key importance and perhaps no country understands this better than Mexico, which had to see a 'drop' in vaccination rates in order to improve them.

CASE STUDY: 'POOR' PERFORMANCE LEADING TO REAL IMPROVEMENTS

During 2013, Mexico started a process to improve data for its immunization programme. This included revising population figures as well as replacing an antiquated information system.

The improvement process resulted in 2013 immunization coverage figures lower than previously recorded.

As the data quality improvements were implemented in each state and more accurate counts were able to be done, 2014 coverage rates improved and will likely continue to do so.

Mexico has persisted courageously with its data quality improvement plan and is now, with better data, moving forward towards filling gaps in immunization coverage in a more targeted manner.

COMMUNITY OWNERSHIP

A WHO review of the countries that have successfully eliminated maternal and neonatal tetanus put a high value on early and active community engagement. The effectiveness of community health worker interventions is well documented especially in rural and marginalized populations.⁶

In Africa, polio eradication has been transformed by involvement of community leaders at local and district levels and by armies of community workers, even in countries with chronic disruption like Somalia.

India's success with maternal and neonatal tetanus similarly relied heavily on community health workers and civil society organizations. The key factor is that volunteers are from the communities in which they work.

VACCINES AVAILABLE

In 2014, the SAGE drew attention to a lack of good data on vaccine affordability and supply of vaccines. In order to increase vaccination rates, vaccines must be available.

A total of 33 countries reported interruptions in service because of vaccine shortages during 2014. More than half the stockouts were caused by problems within countries. Stockouts at national level caused stockouts at district level that interrupted immunization services.

Clearly, this problem needs to be addressed in legislative frameworks for procurement and in national immunization plans. Running out of vaccines because of poor procurement mechanisms or a lack of planning will imperil vaccination programmes. A child arrives ready for vaccination and there's no vaccine. This needs to be avoided at all cost, as a demotivated caregiver will not return which means that large numbers of under-immunized children are at risk. It must be addressed in country planning and governance processes for immunization.

CASE STUDY: MORIBUND PROCUREMENT SYSTEM LEAVES CHILDREN AT RISK

The Philippines has been funding its immunization programme since the 1990s but in recent years the complicated procurement process applying to all government-bought goods and services has led to long delays and restarts in procurement.

Vaccine stockouts continue to plague delivery of immunization and coverage has now been affected. In 2014, the immunization rate dropped below 80%.

⁶ How effective are community health workers? an overview of current evidence with recommendations for strengthening community health worker programs to accelerate progress in achieving the health-related millennium development goals, Perry H and Zulliger R, Johns Hopkins Bloomberg School of Public Health, September 2012; http://www.coregroup.org/storage/Program_Learning/Community_Health_Workers/review%20of%20chw%20effectiveness%20for%20mdgs-sept2012.pdf

6. LEADERSHIP AND ACCOUNTABILITY - THE WAY FORWARD

For more than one year, there has not been a single case of wild poliovirus in Nigeria. On 25 September 2015, the Director-General of WHO announced that Nigeria is no longer a polio-endemic country. Ask anybody involved what was responsible for this momentous success. They soon mention one word: accountability. The country and its technical partners established and enforced clear accountability systems, to measure results, reward those who achieve them, and to discipline or part company with those who did not. This was not the only factor, but it was a crucial one.

While SAGE would not expect there to be major shifts against key disease targets globally year on year, the SAGE has examined what has changed in vaccination programmes themselves over the last year. Accountability has improved a little, but nowhere near the extent it needs to. Accountability is key to success.

In the successful programmes reviewed by the SAGE in 2015, in-country leadership has been of key importance. In Somalia, a lack of national leadership has affected service delivery, staffing, information and especially financing. Even if vaccines are provided and delivered by external aid agencies and campaigns, the underlying healthcare system issues mean change will be unlikely to be sustained.

In India, the successful strategy to eliminate maternal and neonatal tetanus had many strengths but there is no doubt that one of them was leadership to build accountability at every level.

Leadership - the difference between failure and success

CASE STUDY: LEADERSHIP CHARACTERIZES SUCCESS IN MISSION INDRADHANUSH

India's Mission Indradhanush (Rainbow) was underpinned by leadership at every level. This campaign throughout India over four months of 2015 combined with routine immunization to vaccinate an additional 6.65 million children and 1.86 million pregnant women.

The Indian Government resourced Mission Indradhanush and was committed to its success at the highest level. The Prime Minister made a national statement. The Minister for Health wrote to all frontline health workers involved in the programme. This was followed up by district and local leaders.

Another aspect of leadership was community-based. Research had suggested awareness and apprehension were key factors in children being missed for vaccination. The strategy to recruit an army of local community health workers who played a key social mobilization role combined with others such as translation to local language to aid success, along with an integrated media strategy.

Leadership ensured that Mission Indradhanush was supported. Leadership gave Mission Indradhanush its authority and resources. Leadership also ensured resources would be delivered where needed. And finally, leadership mobilized civil society organizations who could in turn play a community leadership role.

The SAGE working group heard from a number of support organizations that are working innovatively with countries towards better leadership, partnering low-income countries with recently Gavi-graduated countries that have a good understanding of the challenges to be faced. Gavi, the Vaccine Alliance, through its planning process, is able to make major steps toward not only improving healthcare systems for sustainability

but also improving leadership in-country so that sustainability can be guaranteed and accountability can be clear.

Accountability to ensure achievement of the Global Vaccine Action Plan's goals needs to occur at three levels:

- In countries – where the difference is made
- In WHO regions – where the Global Vaccine Action Plan is translated into a regional framework, support ensured and best practices shared
- At global level – where the Global Vaccine Action Plan partners can do much to support countries towards accountability and SAGE can help them.

COUNTRY ACCOUNTABILITY

Countries dedicated themselves to achieving the goals of the Global Vaccine Action Plan. As part of the accountability system, every country should have in place a national vaccine action plan. Currently 72 countries supported by Gavi, the Vaccine Alliance, along with 9 other countries, have comprehensive multi-year plans as part of the planning system. The new planning guidelines reflect the Global Vaccine Action Plan goals and strategies and 61 plans recently revised or in process of revision have been or will be prepared with the new guidelines. Other countries will have national immunization plans which now need to be aligned to the Global Vaccine Action Plan and its regional counterpart.

Progress towards outcomes set out in plans should be reviewed annually by an independent body with technical expertise such as the country's national immunization technical advisory group (NITAG) and a body with management expertise such as an inter-agency coordinating committee (ICC). In 2014, 123 countries reported having a NITAG, and only 25 of these were Gavi-eligible countries. Only 81 countries had a NITAG that met WHO criteria for functionality, and only 15 of these were Gavi-eligible countries. All countries should have an independent technical advisory group with a range of responsibilities, not least of which must be a key role in accountability.

Human and physical resources must be in place to deliver plans; and integration with other healthcare services can create efficiencies and reduce missed opportunities. Where these building blocks of sustainable healthcare systems are not in place, global partners can be of great support.

With most unvaccinated and under-vaccinated children living in either particular geographical areas where there is inequity within countries or within countries where health systems are weak, national plans must have strategies to promote equity in immunization, across the lifespan and different population groups.

It is far better that plans be useful than tick boxes and for this reason those who implement plans should have a key role in developing them. Underpinning country-level plans, there should be more detailed district implementation plans to ensure that the limited resources are being allocated where they will do most good.

WHO REGIONAL ACCOUNTABILITY

Last year, WHO regions were asked to finalize their own vaccine action plans. In 2015, mid-decade, three of the six regions have a regional vaccine action plan in place. Regions play a leadership role in ensuring that the Global Vaccine Action Plan's goals are made relevant to the particular region and a key role in the accountability system for the plan.

Africa, Europe and the Western Pacific regions have developed regional plans. At time of writing, the Americas and Eastern Mediterranean regions are in the process of adopting plans. The South East Asian region needs to complete its plan as a high priority and certainly all plans must

Accountability for achieving the GVAP goals rests with countries

be finalized by the end of 2015 and adopted in 2016, to give countries guidance in their own planning processes.

When the Global Vaccine Action Plan was adopted by the World Health Assembly in 2012, countries were urged to report yearly to their regional committees during the Decade of Vaccines on lessons learned, progress made, remaining challenges and updated actions. Each region should now have in place formal monitoring and accountability processes. Country performance against plans should be reviewed at regional level by the regional immunization technical advisory group and regional committee.

Last year the WHO convened a meeting of countries in which vaccination rates were below 80%. This year, the SAGE has focused on the ten countries where most unvaccinated and under-vaccinated children live and the seven countries where vaccination rates are below 50%. Regions should ensure that they are working with countries where vaccination rates are low to support them to strengthen healthcare systems and improve immunization rates.

GLOBAL ACCOUNTABILITY

At global level, SAGE remains unclear about accountability mechanisms. Each partner organization has its own planning and evaluation frameworks. It is not clear how leadership and accountability operate to ensure contribution to achievement of the Global Vaccine Action Plan's goals. In areas where the plan is furthest behind – maternal and neonatal tetanus and measles and rubella – coordination is of key importance but there also needs to be wider accountability if the Global Vaccine Action Plan is to reach its goals.

Countries are primarily accountable for achievement of the Global Vaccine Action Plan, and support from technical partners must always be aligned to country-owned strategies and frameworks. But many countries could benefit from more help from technical partners in developing their accountability frameworks. Partners therefore have an important part to play in strengthening the accountability mechanisms that exist in countries, focusing on building leadership and health system improvements.

As part of the WHA resolution adopting the Global Vaccine Action Plan, WHO was asked to foster alignment and coordination of global immunization efforts by all stakeholders to support the plan. At this midpoint, the global partners - including the GVAP core group of WHO, UNICEF, Gavi, The Bill & Melinda Gates Foundation and the National Institute of Allergy and Infectious Diseases – should align their efforts and contributions to achieving the GVAP's goals going forward, both in relation to specific disease targets and to the broader immunization agenda. They can best do this by supporting countries towards better healthcare systems and improved accountability. Gavi, the Vaccine Alliance already achieves this through its processes for comprehensive multi-year plans, providing accountability and ensuring resources are used effectively towards changes in healthcare systems. Global partners have leverage – they provide resources and technical support – to achieve much.

This is critical to ensure that support to countries for the implementation of the Global Vaccine Action Plan during the remaining half of the Decade of Vaccines is transformative and goes away from the incremental and 'business as usual' approaches observed thus far.

SAGE, which through its Decade of Vaccines Working Group has the key role in assessing progress towards the Global Vaccine Action Plan goals, will use reports from global partners – on their efforts to support countries to strengthen leadership and accountability and on their contributions to strengthening healthcare systems – as well as reports from WHO regions on progress in countries, as the framework for future annual reports to 2020.

Regional plans provide the accountability framework for countries

Global partners need to strengthen country accountability

7. CONCLUSION AND RECOMMENDATIONS

The Decade of Vaccines is at its critical mid-point. The Global Vaccine Action Plan remains off-track, though 2015 Assessment report gives cause for optimism. If the successes won by some countries, through leadership and accountability at all levels, can be replicated, the Global Vaccine Action Plan will achieve its goals in the second half of the Decade of Vaccines.

SAGE RECOMMENDS:

To improve accountability to achieve the GVAP goals, SAGE recommends that:

1. Countries have annual plans for immunization consistent with the GVAP and relevant regional vaccine action plans. The Ministries of Health, Finance and other pertinent ministries demonstrate leadership by establishing an annual process for monitoring and accountability at national and subnational levels. Monitoring should be through an independent body, for example the National Immunization Technical Advisory Group (NITAG). Each country should share, every year, with WHO regional offices, its monitoring report which should include monitoring progress towards achievement of outcomes but also sharing of best practices.
2. Once regional vaccine action plans are finalised (by December 2015), WHO regional offices establish a process of annual progress review through their regional technical advisory groups and report to the respective Regional Committees. The first annual review should take place in the first half of 2016 for countries with annual plans consistent with the GVAP. WHO Regional Committees' reports should be made available annually to SAGE as part of the global review process.
3. Global, regional and national development partners align their efforts to support countries in strengthening their leadership and accountability frameworks and in implementing their national plans. This should include establishing and/or strengthening partner coordination mechanisms at each level.
4. Decade of Vaccines secretariat agencies report to SAGE in 2016 on their supporting activities conducted in the 10 countries where most of the unvaccinated and under-vaccinated children live. This annual reporting mechanism should include discussion of those reports in regional technical advisory groups.

To address the shortfalls in disease-specific areas of the Global Vaccine Action Plan's implementation, SAGE recommends that:

5. Given poor progress with elimination of maternal and neonatal tetanus and the relatively small funding gap to achieve this goal, WHO and UNICEF convene a meeting of global partners and the remaining 21 countries to agree on an action plan, resources and respective responsibilities so that the goal is achieved no later than 2017 and thereafter strategies are in place to sustain elimination in all countries.
6. Global, regional and national development partners support countries in securing the required resources and in implementing their measles and rubella elimination or control strategies and plans. The recommendations of the mid-term review of the global measles and rubella strategic plan to be conducted in 2016, once endorsed by SAGE, should be taken into account in refining plans and for monitoring and enhancing quality of plan implementation.

To improve immunization coverage especially where many unvaccinated and under-vaccinated children live, including those affected by conflict and crisis, SAGE recommends that:

7. Global, regional and country development partners coordinate and align their efforts to support countries to immunize more children by strengthening their healthcare delivery systems, combined with targeted approaches to reach children consistently missed by the routine delivery system, particularly in the countries where vaccination rates are below 80% and to provide services to populations displaced due to conflict (both internally displaced persons and refugees).
8. WHO provide guidance for countries and partners on implementation of immunization programmes and immunization strategies during situations of conflict and chronic disruption.

The 2016 GVAP assessment report will also serve as a mid-term review of progress in the Decade of Vaccines and SAGE recommends that:

9. This report be presented at the World Economic Forum in Davos where the Decade of Vaccines was launched. The 2016 report should aim to highlight those activities that were game-changers at global, regional and country levels.

ANNEX 1: STRATEGIC ADVISORY GROUP OF EXPERTS ON IMMUNIZATION (SAGE) DECADE OF VACCINES WORKING GROUP MEMBERSHIP

SAGE MEMBERS

- Narendra Arora (Chair of the Working Group), Executive director, International Clinical Epidemiology Network, India
- Yagob Al-Mazrou, Secretary General - Health Services Council of the Kingdom of Saudi Arabia, Saudi Arabia
- Alejandro Cravioto, Senior Epidemiologist, Global Evaluative Sciences, Seattle, USA (as of February 2015 and previously Chief Scientific Officer, International Vaccine Institute, Seoul, Republic of Korea) (SAGE member as of October 2015)

EXPERTS

- Fuqiang Cui, Epidemiology Professor, Deputy Director National Immunization Program, China CDC, China
- Elizabeth Ferdinand, Associate Lecturer, University of the West Indies – Cave Hill, Barbados (affiliation as of September 2014 and previously Senior Medical Officer of Health and EPI Manager, Barbados)
- Alan Hinman, Senior Public Health Scientist - Task Force for Global Health, USA
- Stephen Inglis, Director, National Institute of Biological Standards & Control, Health Protection Agency, UK
- Marie-Yvette Madrid, Independent Consultant, Geneva, Switzerland (as of June 2014 to replace Shawn Gilchrist)
- Amani Mahmoud Mustafa, Project Manager, Sudan Public Health Training Initiative, The Carter Center, Sudan (affiliation as of May 2014 and previously EPI Manager, Ministry of Health, Sudan)
- Rebecca Martin, Director, Global Immunization Division, US CDC, USA
- Rozina Mistry, Lecturer and Course Director, Aga Khan University, Pakistan
- Helen Rees, Executive Director - Reproductive Health Research Unit, University of Witwatersrand, South Africa (former SAGE Chair 2010 - 2013)
- David Salisbury, Associate Fellow, Centre on Global Health Security, Chatham House, London, UK (affiliation as of January 2014 and previously Director of Immunization, Department of Health, UK and former SAGE Chair 2005 - 2010)
- Independent consultant: Mary-Rose MacColl

WORKING GROUP SECRETARIAT

- Bill & Melinda Gates Foundation
- Gavi, the Vaccine Alliance
- United States National Institute of Allergy and Infectious Diseases
- United Nations Children's Fund
- World Health Organization

ANNEX 2: STRATEGIC ADVISORY GROUP OF EXPERTS ON IMMUNIZATION (SAGE) MEMBERSHIP

- Jon Abramson (Chair of SAGE), Chair, Wake Forest University School of Medicine, Department of Pediatrics, United
- Yagob Yousef Al-Mazrou, Secretary General, Saudi Health Council, Saudi Arabia
- Narendra Arora Kumar, Executive director, International Clinical Epidemiology Network, India
- Alejandro Cravioto, Senior Epidemiologist, Global Evaluate Sciences USA, Inc., United States of America
- Juhani Eskola, Director General, National institute for Health and Welfare (THL), Finland (SAGE membership ended October 2015)
- Ilesh Jani, Director General, Instituto Nacional de Saúde (National Institute for Health), Mozambique
- Jaleela Jawad, Head of Immunization; Public Health Directorate, Ministry of Health, Bahrain
- Kari Johansen, Expert Vaccine Preventable Diseases, European Centre for Disease Prevention and Control (ECDC), Sweden
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- Claire-Anne Siegrist, Head, WHO Collaborating Centre for Vaccine Immunology, University Hospital of Geneva, Switzerland
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- Nikki Turner, Associate Professor, Director, Immunisation Advisory Centre, University of Auckland, New Zealand
- Frederick Were, Dean, School of Medicine, University of Nairobi, Kenya
- Charles Shey Wiysonge, Professor and Deputy Director, Centre for Evidence-based Health Care, Stellenbosch University, South Africa

