



World Health
Organization



Business case for WHO immunization activities on the African continent

2018-2030

Business case for WHO immunization activities on the African continent, 2018–2030

ISBN: 978-929023411-1

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Cataloguing-in-Publication (CIP) data. CIP data are available at <http://apps.who.int/iris>.

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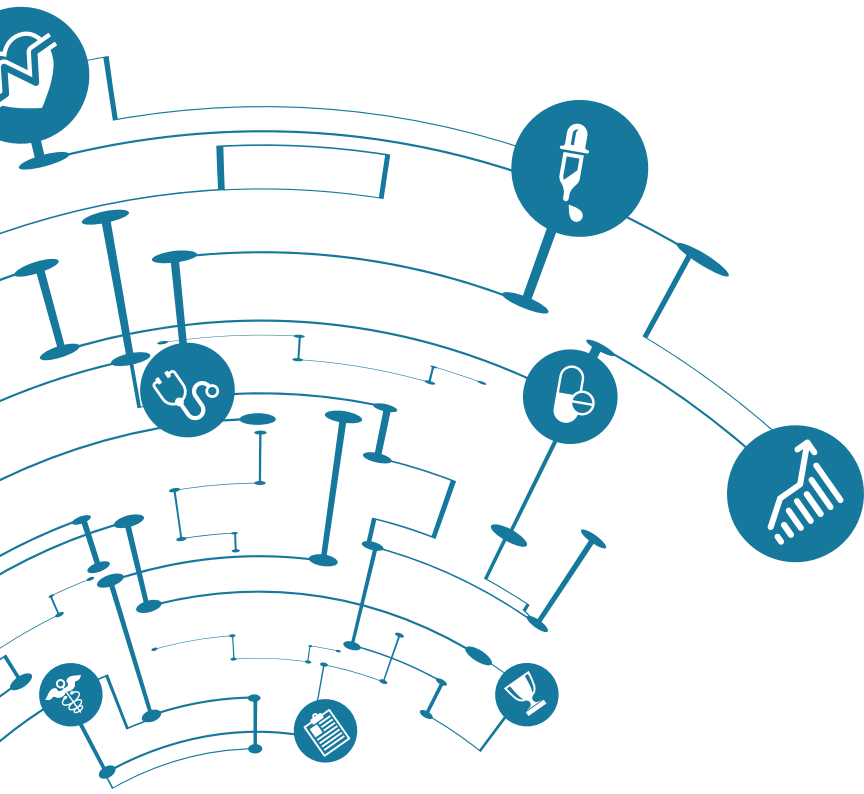
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Printed in Geneva, Switzerland





Business case for WHO immunization activities on the African continent



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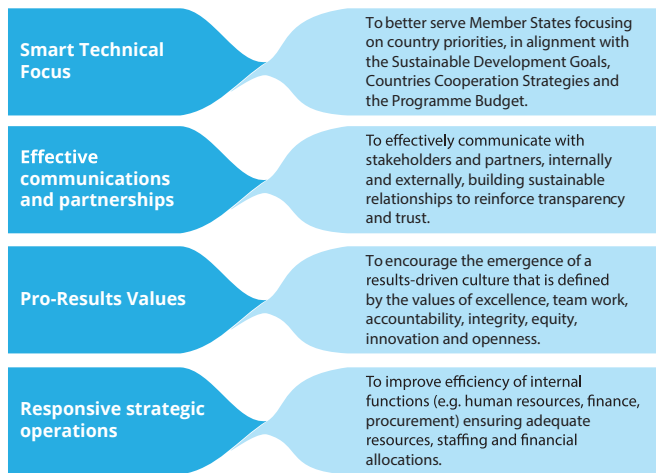
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WHO/AFRO Transformation Agenda

The Regional Office for Africa has launched the Transformation Agenda under the leadership of Dr Matshidiso Moeti. The Transformation Agenda is bold, ambitious and seeks to engender a regional health organization that is responsive, results-driven and accountable. It aims to enable the organization to become the WHO that staff and stakeholders want.

The Transformation Agenda is structured around 4 "Focus Areas".

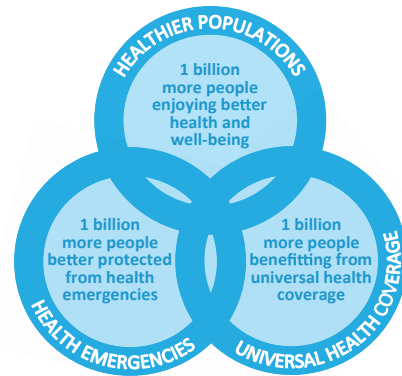


13th General Programme of Work (GPW13)

The overall mission of GPW13 is to promote health, keep the world safe and serve the vulnerable which is in line with the 3rd Sustainable Development Goal (SDG); ensuring healthy lives and promoting well-being for all at all ages.

This Business Case has been developed in alignment with the GPW13, which envisions a world where everyone can live healthy, productive lives, regardless of who they are or where they live.

In setting the three "1 billion goals", WHO is signaling its ambition and extending an invitation to members of the global health community to work with the Organization in order to optimize and implement these SDG-based goals.



As part of the Transformation Agenda, I am committed to demonstrating results, using funds efficiently and being transparent in the African Region.



Dr Matshidiso Moeti
WHO Regional Director for Africa

We need a WHO that is efficiently managed, adequately resourced and results-driven, with a strong focus on transparency, accountability and value for money.



Dr Tedros Adhanom Ghebreyesus
WHO Director General

The rationale for the WHO immunization Business Case

This Business Case addresses four main issues:

- Increasing demand for WHO's support by Member States in order to meet GVAP targets and ADI commitments;
- GPEI and Gavi transitions;
- Evolving immunization environment;
- WHO transformation.

Increasing demand by Member States to meet GVAP targets and ADI commitments

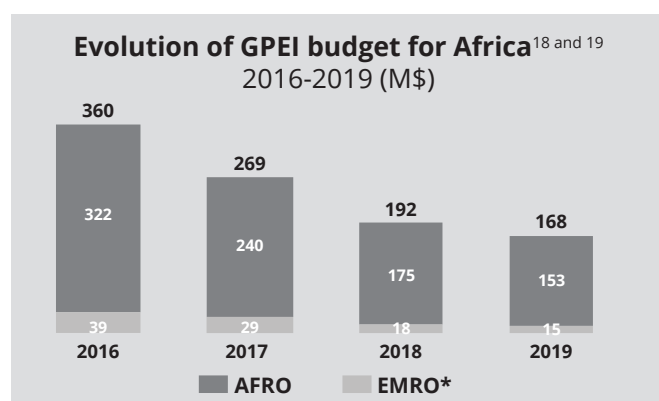
The 2015 GVAP assessment report commissioned by the WHO Strategic Advisory Group of Experts (SAGE) on immunization concluded that progress remains too slow for most goals to be reached by end of the Decade of Vaccines in 2020.

To address this concern, WHO in collaboration with the African Union Commission, convened the first-ever Ministerial Conference on Immunization in Africa (MCIA) in February 2016. This resulted in the [Addis Declaration on Immunization](#) (ADI) signed by African Ministers and subsequently endorsed by the Heads of States from across Africa in January 2017 to deliver on the promise of universal immunization coverage.

The [ADI roadmap](#) has led to an increasing demand for support by Member States to accelerate progress toward these targets.

GPEI and Gavi transitions

Nigeria, the only polio-endemic country on the continent has not reported any case of wild polio-virus since August 2016 and the WHO African region is on target for certification by 2020. Consequently, the GPEI has started its ramp down and is expected to close the programme on the African continent by 2020. Both AFRO and EMRO's budgets have been reduced by half for the 2016-2019 period.



Source: 18) WHO 2017, 19) Budget - WHO AFRO 2017

Following the closure of GPEI, the polio essential functions will need to transition to different public health programmes including the immunization programme.

As of 2018, Angola and Congo will transition from Gavi's support and several others will enter the accelerated transition process. It is anticipated that these countries will face major resource (human, technical and financial) challenges.

This Business Case addresses the need to mitigate the consequences of a drastic reduction of resources from the GPEI and Gavi transitions.

Evolving immunization environment

WHO is shifting its immunization and surveillance support to Member States from a disease-specific to an integrated, multi-sectoral life-course (from new borns to the elderly) approach within the broader health system.

The number of available vaccines is continuously expanding, with major efforts being made in terms of research and development. Strong and robust routine immunization systems with full involvement of communities, political commitment and the adequate resources are required to deliver these vaccines.

To maintain a robust VPD laboratory and epidemiological surveillance network in the post polio eradication era and linked to the Anti-Microbial Resistance (AMR) agenda, an integrated disease surveillance network needs to be in place.

As national economies improve, an increasing number of countries will move into the middle income status. This will require tailored strategies to address their specific needs.

WHO transformation

In pursuit of the Transformation Agenda, WHO has engaged in an unprecedented transformation.

WHO will work differently, in line with six guiding principles:

- Place countries at the centre;
- Set priorities according to the new immunization value proposition;
- Focus on outcomes and impact on the health of the African population;
- Achieve "value for money" through results-driven and cost-efficient operations;
- Target WHO's support to countries based on country needs;
- Reinforce coordination of the health ecosystem within countries.



Voice of
Member
States

Member states are looking for a trusted advisor, focusing on strategy, planning and resource mobilization

"We recognize WHO for its strong technical expertise, that is indeed of higher value than any other immunization partner."

"We would like WHO to develop new skills on innovation and benchmarking of immunization partners and suppliers."

Partners are questioning WHO'S current ability to assist countries in developing stronger immunization capacities



Voice of
Partners

"We see great progress with the AFRO transformation agenda and we also see that immunization can spearhead the programmatic side of the new approach."

"WHO is perceived as conducting many activities and playing many roles, with no clear focus and priorities. We would prefer to see WHO gradually step out from implementing activities."



Voice of
WHO Staff
(Country
Offices)

WHO country offices are asking for help as they feel under-staffed and overwhelmed

"WHO country offices are under-staffed compared with other United Nations' agencies (e.g. UNICEF, UNHCR)"

"We would like to get more support from ISTs and the Regional Office. We would also like the possibility to hire national or international consultants to increase our productivity and results."

WHO understands the critical need for change.

WHO is determined to play a transformational role on the continent's future by strengthening immunization systems that are enablers to global health, economic security and universal health coverage.

This Business Case highlights the new orientations of the WHO immunization programme on the African continent. WHO will:



Adopt a **comprehensive approach** of immunization over the life-course and consider its broader impact on health care.



Focus its efforts in supporting countries build stronger immunization systems.



Adopt a **tailored approach to countries**, dependent on the maturity of their immunization system.



Reinforce **coordination and communication** with immunization stakeholders.



Strengthen **its accountability framework** to better achieve efficiency and transparency.



Launch **transformative initiatives** in line with the Transformation Agenda and GPW13 priorities.



Progressively **phase out its technical support** to countries as they gain maturity.

To achieve this ambitious transformation, WHO needs support and commitment from Member States and its partners.

OVERVIEW



With this Business Case, WHO communicates a bold vision and ambition for 2030 for immunization on the African continent. WHO is committed to change by engaging in an unprecedented transformation.

Section one examines the implications of vaccine-preventable diseases in Africa.

More than thirty million children under-five suffer from vaccine-preventable diseases (VPDs) every year in Africa. Of these, over half a million children die from VPDs annually, due to limited access to immunization services, accounting for 58% of all global deaths. Recurrent VPD outbreaks persist in many countries.

Since 2000, significant progress has been achieved with nine new antigens successfully introduced into routine immunization programmes. However, overall coverage rates remain low and need to be significantly improved to attain GVAP targets. Inequities in vaccine coverage persist between and within countries. VPDs result in a significant annual economic burden estimated at \$13 billion.

Section two sets a new ambition for 2030 and presents its impact in terms of lives saved, cases averted and economic benefits.

The 2030 ambition will save at least 1.9 million lives, avert 167 million cases and save up to \$58 billion over ten years. The return on investment is estimated to be 37 fold. However, if current vaccination efforts are not maintained, there is a risk to reverse progress made, leading to more than 2.4 million deaths and a negative economic impact of \$59 billion over the next decade.

Despite the fact that all African countries have committed to universal immunization coverage, challenges and barriers still remain to achieve GVAP targets on the continent. Therefore, African countries need to accelerate efforts toward GVAP targets and beyond.

This business case sets a new ambition for 2030 that relies on sustained control, elimination and eradication of key VPDs. The 2030 ambition will ultimately

help countries reach broader goals such as Universal Health Coverage and Sustainable Development Goals.

Section three clarifies WHO's value proposition (e.g. assets, comparative advantages, roles and functions) in supporting African countries to reach the 2030 ambition.

WHO as a recognized health authority has a long-standing relationship with Member States and is well positioned to coordinate immunization stakeholders to deliver results in an efficient and transparent way. With 70 years of experience, WHO has developed a unique set of assets, in terms of local footprint, surveillance and laboratory networks and breadth of expertise.

In order to maximize its impact, WHO will focus its efforts on three main roles as a: health authority, advisor and ecosystem coordinator thus complementing other stakeholders in their contribution to service delivery, financing and health transformation projects. WHO will continue to support all countries by establishing norms and standards, developing evidence-based policies and guidance, monitoring the VPD situation and advocating with governments and partners.

Section four presents a new tailored approach in supporting countries, based on an immunization maturity grid and a country categorization.

WHO identified six major components for immunization on which the development of the immunization maturity grid was based. These components are:

- Programme management and financing.
- Immunization service delivery and new vaccine introduction.
- Disease surveillance and VPD outbreak management.
- Data management and analytics.
- Vaccine quality, safety and regulation.
- Community engagement.

All African countries were assessed using the immunization maturity grid and grouped into four categories on a scale of 1 (low maturity) to 4 (high maturity). By 2030, WHO aims to bring all African countries to a satisfactory level of immunization maturity. In an effort to optimize its support to countries in building maturity, WHO will focus on its core functions.

At country level, WHO will prioritize its support to address specific gaps in the national immunization system. Over time, WHO will re-purpose its efforts as countries advance in the maturity scale, to ensure country ownership and sustainability.

Milestones have been defined to serve as intermediary objectives toward 2030 targets. WHO will define key performance indicators to monitor and evaluate countries' progress. Governance mechanisms will be implemented to facilitate monitoring, evaluation, formulate recommendations and inform decision making.

Section five describes WHO's commitment to engage in an unprecedented transformation.

WHO is committed to transformation and has defined clear guiding principles. The transformation journey will be structured around three phases: internal transformation, country maturity strengthening and phasing down. The internal transformation phase will encompass six initiatives.

WHO is introducing major organizational changes. The roles and responsibilities of different levels are clarified to avoid overlaps and inefficiencies. WHO's sub-regional offices will be re-organized in accordance with four country offerings.

WHO requires a complementary \$53.4 million to secure its 2018-2019 budget.

Together, let's re-purpose WHO to save the lives of African children and attain Universal Health Coverage.

SECTION 1:

VACCINE-PREVENTABLE DISEASES IN AFRICA



KEY MESSAGES

More than thirty million children under-five suffer from vaccine-preventable diseases (VPDs) every year in Africa.

Of these, over half a million children die from VPDs annually, due to limited access to immunization services, accounting for 58% of all global deaths.

Recurrent VPD outbreaks persist in many countries.

Since 2000, significant progress has been achieved with nine new antigens successfully introduced into routine immunization programmes.

However, overall coverage rates remain low and need to be significantly improved to attain GVAP targets.

Inequities in vaccine coverage persist between and within countries.

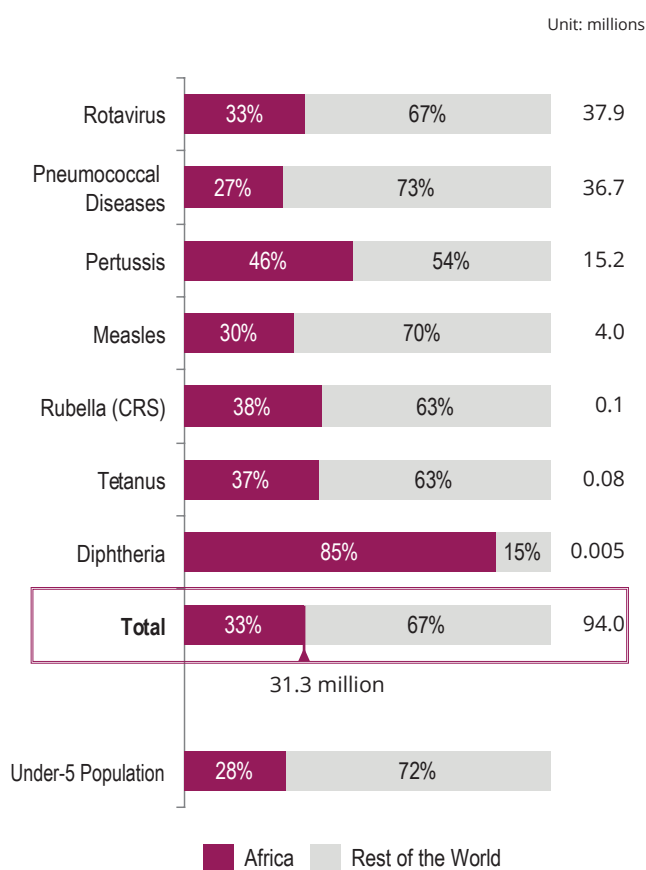
VPDs result in a significant annual economic burden estimated at \$13 billion.

More than thirty million children under-five suffer from vaccine-preventable diseases (VPDs) every year in Africa.

Globally in 2015, more than 90 million children under-five years of age suffered from seven major VPDs. Africa accounted for 33% of VPD incidence among under-fives worldwide, with more than 30 million cases. Africa accounted for:

- 85% of cases worldwide of diphtheria.
- 46% of cases worldwide of pertussis.
- 38% of cases worldwide of rubella.
- 37% of cases worldwide of tetanus.
- 33% of cases worldwide of rotavirus.
- 30% of cases worldwide of measles.
- 27% of cases worldwide of pneumococcal diseases.

VPD incidence for children under 5 years of age in 2015, Africa vs. rest of the world^{4, 5, 6, 7, 8 and 9}



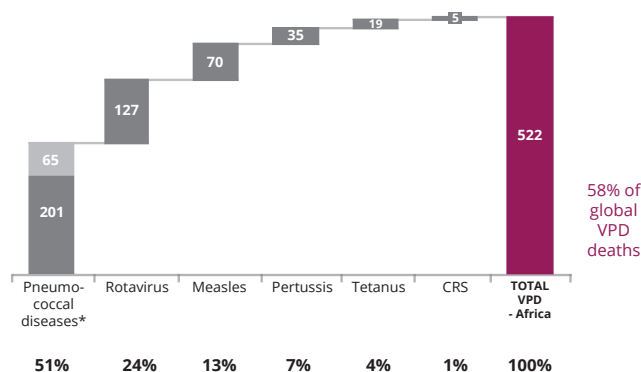
Africa accounts for 17% of cervical cancer cases worldwide (92 000 out of 528 000 globally) according to GLOBOCAN.

More than half a million children still die from VPDs every year on the African continent, accounting for 58% of global deaths.

Every year in Africa, six VPDs (pneumococcal diseases, rotavirus, measles, pertussis, tetanus and rubella) kill more than half a million children under five years of age, accounting for 58% of global deaths. Together, pneumococcal diseases and rotavirus account for more than 75% of these deaths.

Under-five deaths per vaccine-preventable disease in Africa, 2015^{4, 11, 12, 13 and 14}

(Thousands, % of total)



Pneumococcal mortality recomputed based on 2008 figures as proportion of acute respiratory infections deaths. Rotavirus mortality was based on 2013 data. CRS mortality was estimated using 2008 incidence and probability of live-birth death (figure extracted from a US publication, therefore most likely underestimating number of deaths in Africa).

Africa's overall under-five mortality rate (25.4 per 1,000 live births) is more than twice the global average mortality rate (12.4 per 1,000 live births).

In 2016, there were an estimated 194.5 million malaria cases and 407,000 deaths in Africa, most of them in children under 5. The first malaria vaccine (RTS,S/AS01) will be added as a complementary malaria control tool to the core package of WHO-recommended preventive measures.

Sources: 4) WHO-MCEE 2016 ; 5) Model - WHO 2016 ; 6) United Nations – Population Division 2017 ; 7) IHME statistics Global Health Data Exchange database; 8) Ibinda et al. 2015 ; 9) ; Maya va den Ent, et al. 2012; 11) WHO; 12) Martinez-Quintana et al. 2015 ; 13) Zhou et al. 14) WHO Department of Information, Evidence and Research 2017.

Note: Tetanus incidence for under-five computed based on fatality rate (~60%) and total number of deaths for under-five (i.e., 49,000) ; Rubella (CRS) estimates from 2008 using the medium interval.

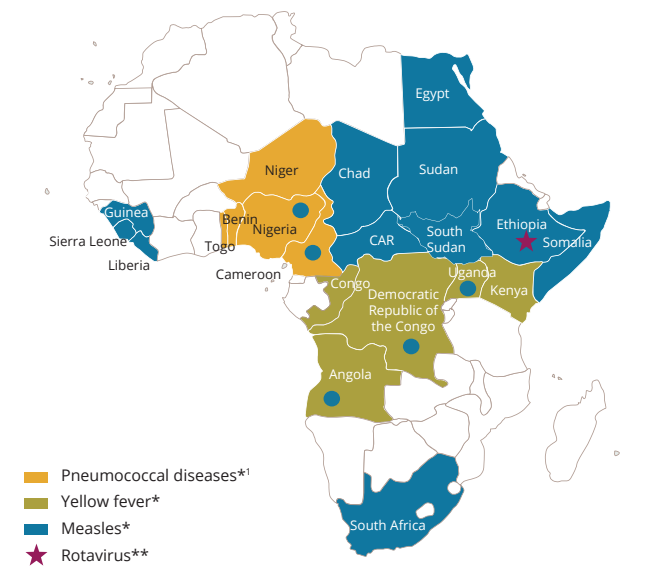
* Including meningitis & encephalitis

Recurrent VPD outbreaks persist in many countries.

VPD-related outbreaks tend to appear in areas where the immunization coverage rate is low, therefore enabling transmission. Outbreaks are a good indicator of an immunization programme's effectiveness, from both prevention and control perspectives.

From 2015 to 2017, many African countries were affected by pneumococcal diseases, yellow fever, measles and rotavirus outbreaks (see illustration).

Outbreaks of selected VPDs (2015-2017)¹⁰



1: including Meningitis * At least one outbreak between 2015-2017 ** At least one outbreak in 2017

Since 2000, significant progress has been achieved with ten new antigens successfully introduced into routine immunization programmes.

In the past seventeen years, African countries have introduced the following new vaccines:

- Hepatitis B (54 countries).
- Haemophilus influenzae b vaccine (Hib) (54 countries).
- Pneumococcal Conjugate Vaccine (PCV) (43 countries).
- Rotavirus vaccine (38 countries).
- Yellow fever vaccine (24 countries).
- 2nd dose of Measles Containing Vaccine (MCV2) (33 countries).
- Rubella Containing Vaccine (RCV) (17 countries).
- Human Papillomavirus Vaccine (HPV) (8 countries).

- Meningococcal A Conjugate Vaccine (MenAfriVac) (6 countries).
- Inactivated Polio Vaccine (IPV) (47 countries).

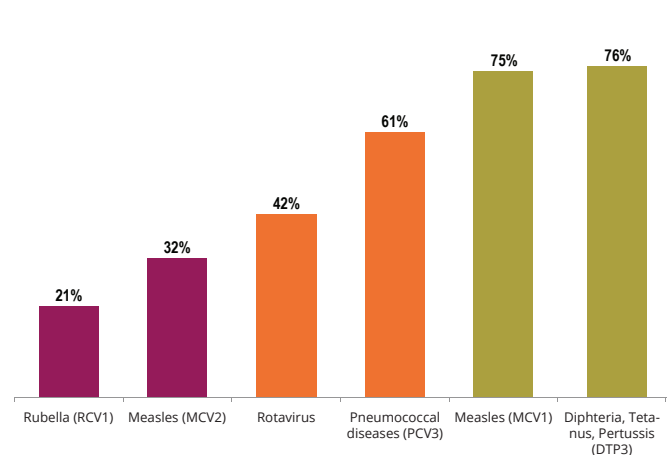
Significant progress has been made in the fight against meningitis. More than 300 million people received the MenAfriVac since 2010.

However, overall coverage rates remain low and need to be significantly improved to attain GVAP targets.

At the continental level, GVAP coverage targets are off track for all vaccines.

DTP3 and Measles coverage rates are respectively 76% and 75%. Pneumococcal contained vaccine (PCV) coverage rate is 61% while other VPD coverage rates remain below 50%.

Coverage rates of selected antigens for children ≤1¹⁵



Polio cases have been reduced by 99,9% globally since 1988. Only Nigeria remains endemic in Africa; however, the last reported case of WPV was in August 2016. The major threat for polio eradication in Africa is the sub-optimal Oral Poliovirus Vaccine (OPV) coverage leading to outbreaks of Vaccine Derived Poliovirus (VDPV).

The goal of elimination of Maternal and Neonatal Tetanus (MNT) has been postponed several times due to the inability to reach the most vulnerable and hard to reach populations. In Africa, 9 countries are yet to be validated for MNT elimination (Angola, Central African Republic (CAR), Chad, Democratic Republic of the Congo (DRC), Guinea, Mali, Nigeria, Somalia, South Sudan).

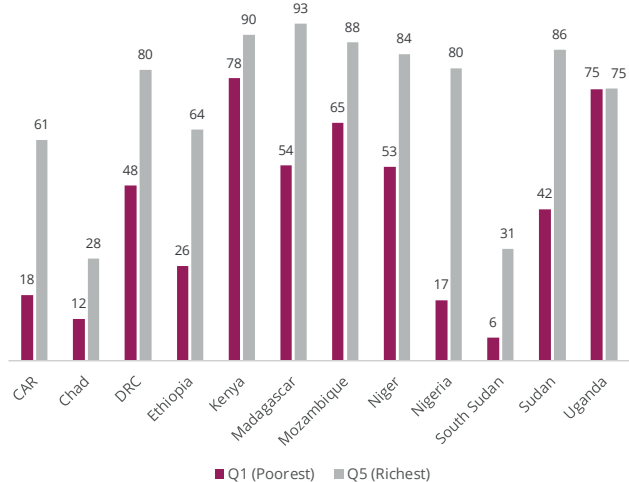
Sources: 10) WHO Website (Outbreaks), 15) WHO / UNICEF 2017 (updated on Q1 2017).

Note: Coverage estimates include Djibouti, Egypt, Libya, Morocco, Somalia, Sudan and Tunisia

Inequities in vaccine coverage persist between and within countries.

Four dimensions measure inequities: economic status, education, place of residence, and sex. Major discrepancies in vaccine coverage distribution persist between and within countries.

DTP3 coverage among children ≤1 year of age by economic status in 12 countries²⁹



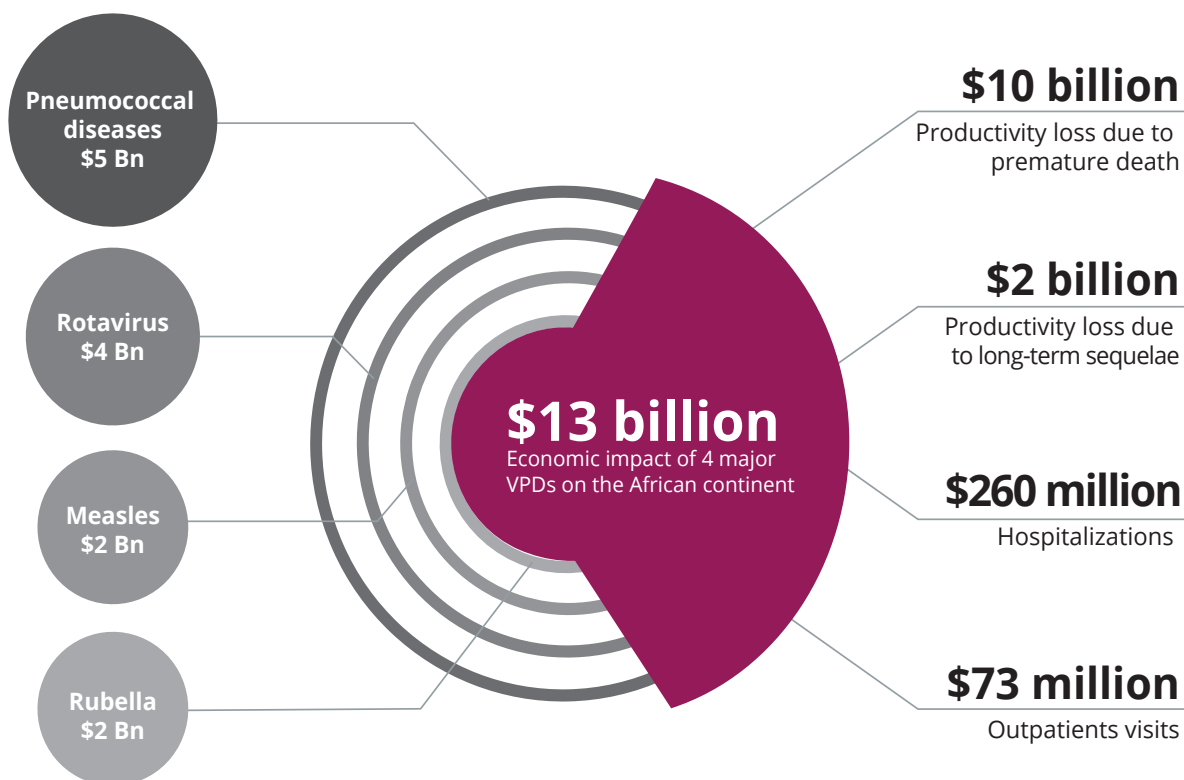
VPDs result in a significant annual economic burden estimated at \$13 billion.

Based on the Deloitte health-economics impact modeling (2017), pneumococcal diseases, rotavirus, rubella and measles alone result in significant economic impact with annual estimates above \$13 billion for the African continent.

The measure of this impact includes both the costs of productivity losses due to premature deaths (\$10 billion) and long-term sequelae (\$2 billion), hospitalizations (\$260 million) as well as outpatients visits (\$73 million).

Pneumococcal diseases alone represent 38.5% of the economic impact (\$5 billion), rotavirus (\$4 billion); measles and rubella account for \$2 billion each.

Economic burden of four major vaccine preventable diseases¹⁷



Sources: 17) Deloitte health-economic impact calculator, 2017; 29) WHO HEAT.

Note: the burden of disease includes immediate medical costs due to outpatient visits, hospitalization and indirect cost due to premature death, long-term sequelae and caregiver's productivity loss. It also includes benefits that will accrue in future years (sequelae and value of lives saved).

SECTION 2:

2030 AMBITION FOR IMMUNIZATION IN AFRICA



KEY MESSAGES

The 2030 ambition will save at least 1.9 million lives, avert 167 million cases and save up to \$58 billion over ten years. The return on investment is estimated to be 37 fold.

However, if current vaccination efforts are not maintained, there is a risk to reverse progress made, leading to more than 2.4 million deaths and a negative economic impact of \$59 billion over the next decade.

Despite the fact that all African countries have committed to universal immunization coverage, challenges and barriers still remain to achieve GVAP targets on the continent.

Therefore, African countries need to accelerate efforts toward GVAP targets and beyond.

This business case sets a new ambition for 2030 that relies on sustained control, elimination and eradication of key VPDs.

The 2030 ambition will ultimately help countries reach broader goals such as Universal Health Coverage and Sustainable Development Goals.

All African countries have committed to universal immunization coverage.

The GVAP serves as the overarching guidance for immunization by all Member States. Both AFRO and EMRO countries have developed frameworks for GVAP implementation, the Regional Strategic Plan for Immunization (RSPI) 2014-2020 and the Eastern Mediterranean Vaccine Action Plan (EMVAP) 2016-2020 respectively.

An unprecedented milestone was reached with the endorsement of the ADI by all Heads of State during the African Union Summit in January 2017. This Declaration incorporates specific commitments for universal and equitable access to immunization, as well as a road-map for implementation that includes advocacy activities, operational actions and an accountability framework.

The RSPI and EMVAP have defined four strategic objectives.

The RSPI's strategic objectives are:

- To improve immunization coverage beyond the current levels.
- To complete interruption of wild poliovirus transmission and ensure virus containment.
- To attain the elimination of measles and make progress in the elimination of rubella and congenital rubella syndrome.
- To attain and maintain elimination or control of other vaccine-preventable diseases.

The EMVAP's goals are:

- To meet regional routine vaccination coverage targets at all administrative levels.
- To meet regional disease elimination and control targets.
- To introduce new vaccines of regional and national priority.
- To attain interruption of wild polio virus transmission and sustain polio-free status.

Challenges and barriers still remain to achieve GVAP targets on the African continent.



National ownership of the immunization programme remains sub-optimal.



Inequities remain in the access of immunization.



Increasing number of **outbreaks and humanitarian emergencies**, which strains the health systems and ultimately immunization systems.



The evolving **demographic trends** in Africa with rapid urbanization.



Data quality and use remain limited at both local and national levels.



GPEI and Gavi transitions will significantly impact the effective implementation of immunization programmes in many countries.



Absence of coherent education and training plans for health workers negatively impacting the quality of service delivery.



Procurement and supply chain management systems remain inadequate, with unreliable demand forecasting.



Inadequate community engagement limiting the ability to consider immunization as a human right.

African countries need to accelerate efforts toward GVAP targets and beyond.

In order to meet RSPI and EMVAP targets for 2020, WHO will support Member States in deploying best practices and accelerating on-going initiatives:

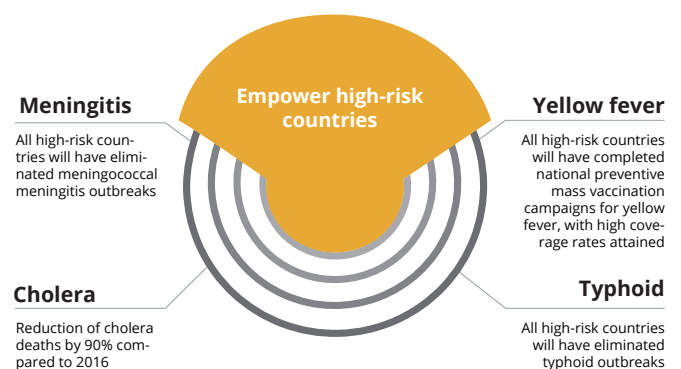
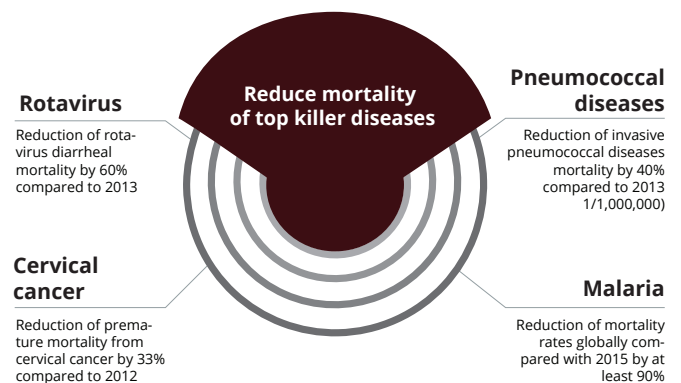
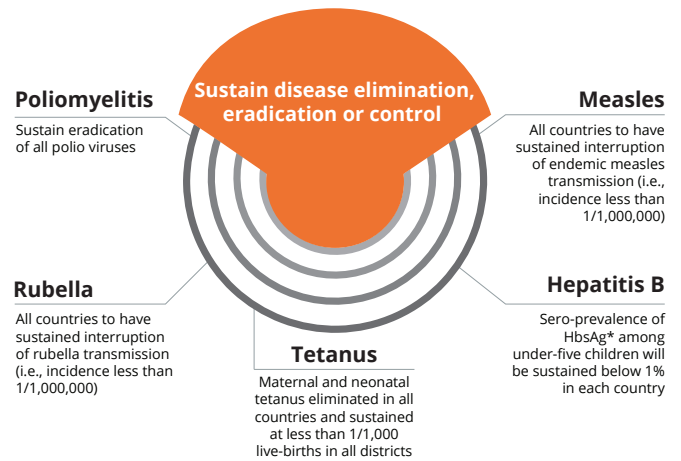
- Leverage ADI commitments to be the centerpiece of regional and local strategies as well as the main tool to ensure national ownership and accountability at country level.
- The Revitalized Reach Every District (RED) guide has put more emphasis on community-centered, country-specific and life-course approaches to improve equitable access to immunization.
- Foster a Universal Health Coverage approach that puts immunization at the core of primary care.
- Improve availability and use of appropriate quality data for decision-making, leveraging new technologies.
- Involve new players and use new approaches to enhance human resource capacity. Adequate levels of competency, strong managerial skills and well-defined individual performance framework are all prerequisites for well-performing health workforce.
- Employ innovative instruments to sustain immunization financing, in light of the imminent GPEI ramp-down and closure as well as Gavi transition.

This business case sets a new ambition for 2030 that relies on sustained control, elimination and eradication of key VPDs.

Although the 2020 GVAP targets are not yet due, African countries need to invest for the next decade beyond 2020. Therefore, the 2030 ambition relies on three strategies:

- Sustain VPDs control, elimination and/or eradication for poliomyelitis, measles, rubella, hepatitis B and tetanus.
- Reduce mortality from VPDs like rotavirus, pneumococcal diseases, cervical cancer and malaria.
- Empower high-risk countries to fight against meningitis, yellow fever, cholera and typhoid.

2030 ambition



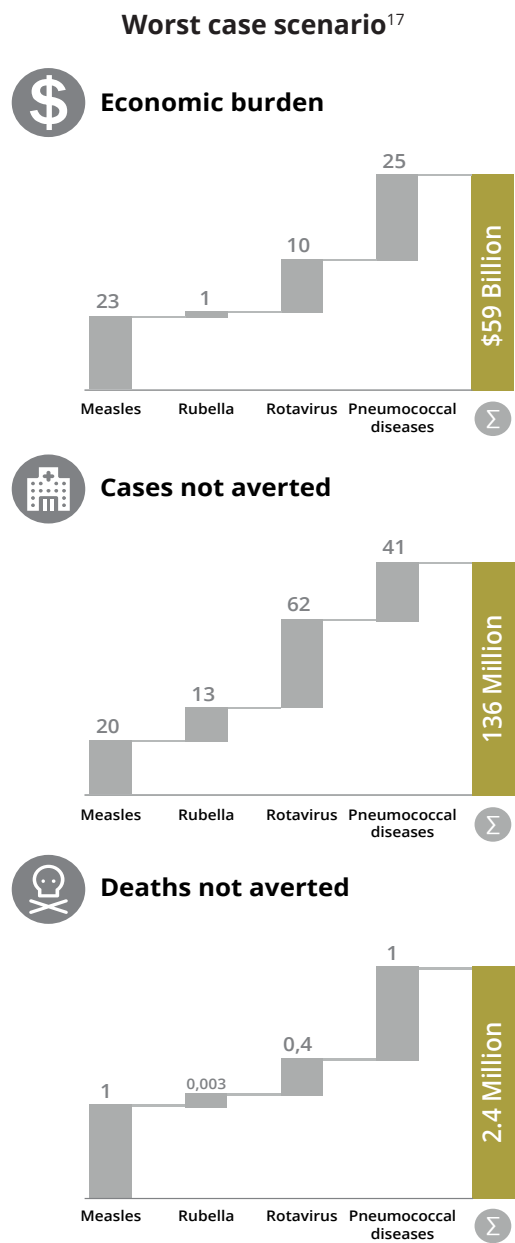
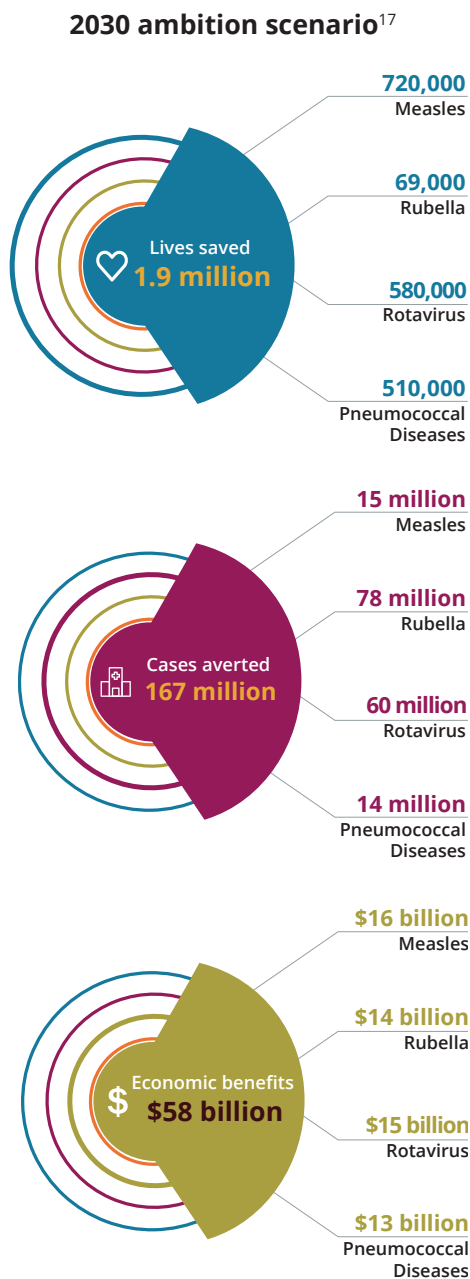
*Hepatitis B Surface Antigen

The 2030 ambition will save at least 1.9 million lives, avert 167 million cases and save up to \$58 billion over ten years. The return on investment is estimated to be 37 fold.

Based on the Deloitte health-economic impact modeling, reaching the 2030 ambition for four major VPDs (measles, rubella, rotavirus and pneumococcal diseases) will save more than 1.9 million lives over the next decade and it will generate \$58 billion of economic benefits with a multiplying factor of 37x as a return on investment. These returns go up to 93x for measles.

If current vaccination efforts are not maintained, there is a risk to reverse progress made, leading to more than 2.4 million deaths and a negative economic impact of \$59 billion.

In this worst case scenario, measles and pneumococcal related deaths would both reach the one million death threshold. Rotavirus related deaths would be estimated at 409,000 and rubella would account for 3,000 deaths.



Source: 17) Deloitte health-economic impact calculator, 2017 (outputs for under-five population)

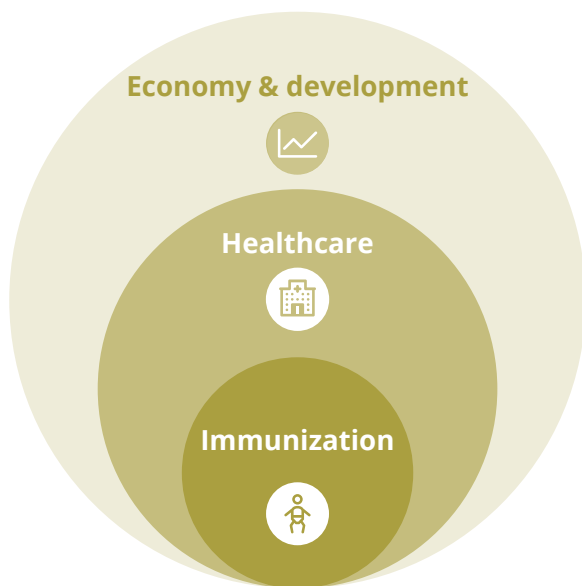
Note: Excluded Hepatitis B from the modeling due to natural history of the disease with chronic phase in adulthood (cirrhosis, liver cancer) implying more advance modeling (i.e., dynamic). Excluded Tetanus from the modeling as a high number of countries having already achieved the target at national level according to publicly available data. Excluded Meningitis & Yellow Fever due to lack of quantifiable target. Excluded Human Papilloma Virus infection from the modeling due to natural history of the cervical cancer disease (persistent infections, precancerous lesions and cancer) in adulthood and the importance of screening and treatment in addition to HPV vaccination that require more advanced modeling (i.e., dynamic)

The 2030 ambition will help countries reach broader goals such as Universal Health Coverage and Sustainable Development Goals.

Immunization not only results in significant benefits in terms of lives saved and economic impact, but it should be seen as the cornerstone of primary health care. National health systems will require reorganization and restructuring in order to better integrate immunization as a core element of the health care service.

Reaching the 2030 ambition is a critical step for countries to reach broader goals such as Universal Health Coverage and Sustainable Development Goals. This requires a strong, efficient and resilient health system.

Broader impact of 2030 ambition



Impact on economy and development goals



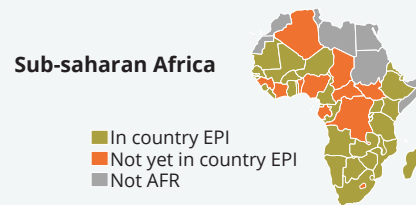
Impact on primary care and broader healthcare system



Benefits in terms of lives saved and economic savings

Sub-saharan Africa Progress on rotavirus vaccine introduction in Africa and impact of vaccination

Rotavirus is the leading cause of severe diarrhoea among children under 5 years of age worldwide. More than half of all global rotavirus deaths occur in Sub-saharan Africa.

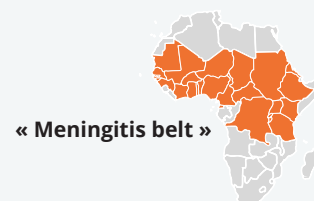


In 2009, WHO made a recommendation to introduce rotavirus vaccines in EPI in all countries. WHO supported countries to assess vaccines' impacts and document reduction in hospitalizations and deaths following vaccine introduction.

By the end of 2016, 33 African countries had introduced rotavirus vaccines into their national immunization programmes. 29 African countries have introduced rotavirus vaccination prior to 2015, thereby a total of 134,714 hospitalizations and 20,986 deaths were prevented in 2016. Further reductions are anticipated as the remaining countries introduce the vaccine and coverage improves.

Immunization has led to the control and near elimination of the deadly meningitis A disease on the African continent

For more than a century, meningitis swept across sub-Saharan Africa on dusty winds with unstoppable force. The disease decimated communities, killing one in ten infected people and leaving one-quarter of survivors severely debilitated. Meningitis epidemics in Africa are most prevalent in the "meningitis belt" where about 450 million people live.



WHO, PATH and BMGF joint efforts to introduce an affordable vaccine ...

Following a deadly meningitis outbreak in 1996, and in response to a call for help from African MoH, WHO formed a unique partnership with PATH & BMGF to lead the development, testing, licensure, and widespread introduction of an affordable conjugate vaccine.

... leading to a near-elimination of Meningitis in this area and the prevention of 150,000 deaths

- In 2013, only four laboratory-confirmed cases of meningitis A were reported by the 26 countries in the meningitis belt.
- By 2020, the MenAfriVac vaccine is expected to protect almost the entire population of the meningitis belt.
- Benefits include the prevention of 1 million cases of meningitis A, 150,000 deaths, and 250,000 cases of severe disability.

SECTION 3:

WHO'S VALUE PROPOSITION



KEY MESSAGES

WHO as a recognized health authority has a long-standing relationship with Member States and is well positioned to coordinate immunization stakeholders to deliver results in an efficient and transparent way.

With 70 years of experience, WHO has developed a unique set of assets, in terms of local footprint, surveillance and laboratory networks and breadth of expertise.

In order to maximize its impact, WHO will focus its efforts on three main roles as a: health authority, advisor and ecosystem coordinator thus complementing other stakeholders in their contribution to service delivery, financing and health transformation projects.

WHO will continue to support all countries by establishing norms and standards, developing evidence-based policies and guidance, monitoring the VPD situation and advocating with governments and partners.

WHO as a recognized health authority has a long-standing relationship with Member States and is well positioned to coordinate immunization stakeholders to deliver results in an efficient and transparent way.

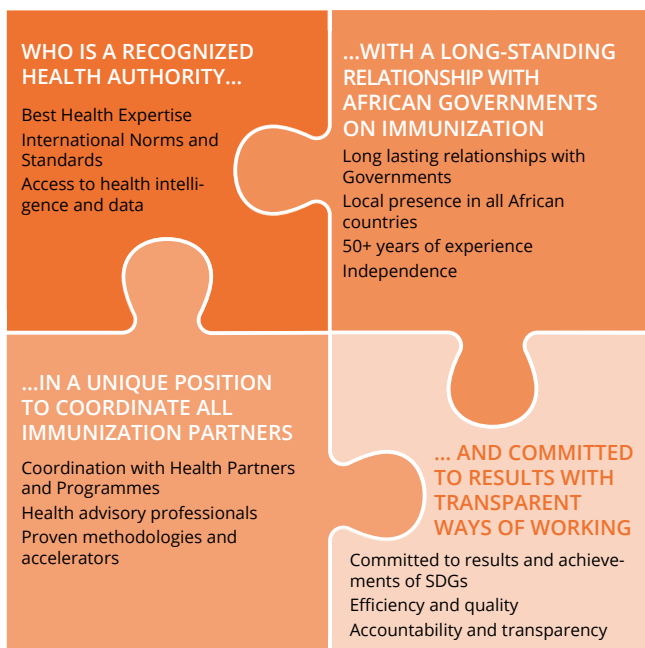
WHO defines international health norms and standards and supports Member States to domesticate them. It maintains unique access to health data and intelligence.

In addition, WHO has a long-standing relationship with Member States, with a presence in all African countries. Furthermore, experience working on immunization for more than 50 years allows WHO to serve as a credible, trusted advisor of Ministries of Health.

WHO is therefore uniquely positioned to coordinate immunization stakeholders within countries. To achieve the 2030 ambition, particularly after the polio eradication, WHO will tailor its workforce to better suit country needs.

WHO is committed to delivering results in an efficient and transparent manner, as well as supporting countries in reaching Universal Health Coverage and subsequently the Sustainable Development Goals.

WHO value proposition



With 70 years of experience, WHO has developed a unique set of assets, in terms of local footprint, surveillance and laboratory networks and breadth of expertise.

Created in 1948, WHO celebrates 70 years of existence. WHO has an unrivaled presence, covering all African countries, thanks to a network of 54 country offices and 78 sub-national offices. The WHO regional office for Africa (AFRO) is located in the Republic of Congo, covering 47 countries with three sub-regional offices (Burkina, Gabon and Zimbabwe). The WHO regional office for Eastern Mediterranean (EMRO) is located in Egypt, covering a total of 21 countries, of which 7 countries are located on the African continent (Djibouti, Egypt, Libya, Morocco, Somalia, Sudan and Tunisia).

WHO has a strong network of experts in immunization, including epidemiologists, data analysts, physicians, logisticians, health economists and diverse technical officers. More than 1,000 skilled professionals and consultants are deployed to support immunization activities over the African continent. The vast majority of this network is currently heavily reliant on the polio infrastructure.

WHO supports a strong VPD surveillance system which includes an extensive network of laboratories. WHO has set up a robust regional and national data management systems, with focal points in countries, that allow for proper monitoring and evaluation of country performance. Access to quality and timely data is essential for efficient decision making.

WHO is involved in leadership and coordination roles of key international committees:

- Strategic Advisory Group of Experts (SAGE) on immunization.
- Regional Immunization Technical Advisory Groups (RITAG).
- African Regional Immunization Stakeholders' Meeting (ARISM).
- African Vaccine Regulatory Forum (AVAREF).

In order to maximize its impact, WHO will focus its efforts on three main roles as a: health authority, advisor and ecosystem coordinator.

As GPEI ramps down and closes on the continent, the WHO Immunization programme has embarked upon transforming itself to match country needs and priorities. WHO will gradually reduce its role in implementation activities (except in emergency situations) and focus its efforts on capacity building in countries.

Subsequently, WHO will focus its efforts on three main roles:

- Health authority.
- Health advisor.
- Health ecosystem coordinator.

Other immunization stakeholders will contribute to service delivery, financing and health transformation projects.

WHO is cognizant of the fact that no single actor operating alone can achieve the 2030 ambition. Member States should leverage the comparative advantages of various stakeholders and build upon partnerships for the success of their immunization systems.

Therefore, WHO will continue to serve as an advisor and coordinator of the various stakeholders, de-prioritizing its roles in:

- Health service delivery (except in emergency situations).
- Health financing.
- Health transformation projects.

WHO roles



SECTION 4:

WHO'S TAILORED SUPPORT TO COUNTRIES



KEY MESSAGES

WHO identified six major components for immunization on which the development of the immunization maturity grid was based. These components are:

- Programme management and financing.
- Immunization service delivery and new vaccine introduction.
- Disease surveillance and VPD outbreak management.
- Data management and analytics.
- Vaccine quality, safety and regulation.
- Community engagement.

All African countries were assessed using the immunization maturity grid and grouped into four categories on a scale of 1 (low maturity) to 4 (high maturity).

By 2030, WHO aims to bring all African countries to a satisfactory level of immunization maturity.

In an effort to optimize its support to countries in building maturity, WHO will focus on its core functions.

At country level, WHO will prioritize its support to address specific gaps in the national immunization system.

Over time, WHO will re-purpose its efforts as countries advance in the maturity scale, to ensure country ownership and sustainability.


Milestones have been defined to serve as intermediary objectives toward 2030 targets.

WHO will define key performance indicators to monitor and evaluate countries' progress.


Governance mechanisms will be implemented to facilitate monitoring, evaluation, formulate recommendations and inform decision making.

WHO identified six major components for immunization.


WHO identified six major immunization components linked to the health system building blocks. These are:

 **Programme management & financing**


- Governance, leadership & coordination
- Financing
- Monitoring & evaluation
- Operational research
- Capacity building

 **Immunization service delivery & new vaccine introduction**


- Immunization infrastructure & workforce
- Strong routine immunization service
- New vaccine introduction and impact evaluation

 **Disease surveillance & VPD outbreak management**


- Surveillance system quality
- Lab systems
- Response to outbreaks

 **Data management & analytics**

- Data collection & analysis
- Data quality
- Use of data in decision making

 **Vaccine quality, safety & regulation**

- Forecasting & procurement
- Quality & safety
- Logistics & supply chain
- Regulation

 **Community engagement**

- Communication & social mobilization
- Advocacy

Libya Prioritizing Immunization in the face of conflict

Conflict situations can negatively affect health systems and routine immunization programmes. Following the Libyan revolution in 2011, additional demand for health services left the system unable to cope and in near collapse. With support from WHO, the Libyan Ministry of Health sought to rebuild and strengthen its public health programme by focusing on the fundamental building blocks of a strong health system.

As a middle-income country, Libya is not eligible for Gavi support and therefore must fully fund its vaccines and immunization system. The high cost of the new vaccines introduced and the need to improve immunization delivery systems posed additional challenges.



During times of conflict and shifting financial priorities, maintaining high immunization coverage and introducing new vaccines require concerted political effort with strong support from global development partners.

Thanks to the support of WHO and other partners, Libya introduced successfully the following vaccines (i) PCV and rotavirus vaccine in October 2013; (ii) IPV in 2014; (iii) HPV vaccine in 2015; and (iii) varicella vaccine and combined meningococcal vaccine that protects against four strains of meningococcus, including group A.

Despite numerous challenges, Libya maintained high immunization coverage rates. DTP3 vaccine coverage rate remained above 94% during the conflict.



Despite the challenges faced, including extremely limited funding for the health sector, WHO and partners continue to ensure that urgently needed basic health care services are provided in Libya



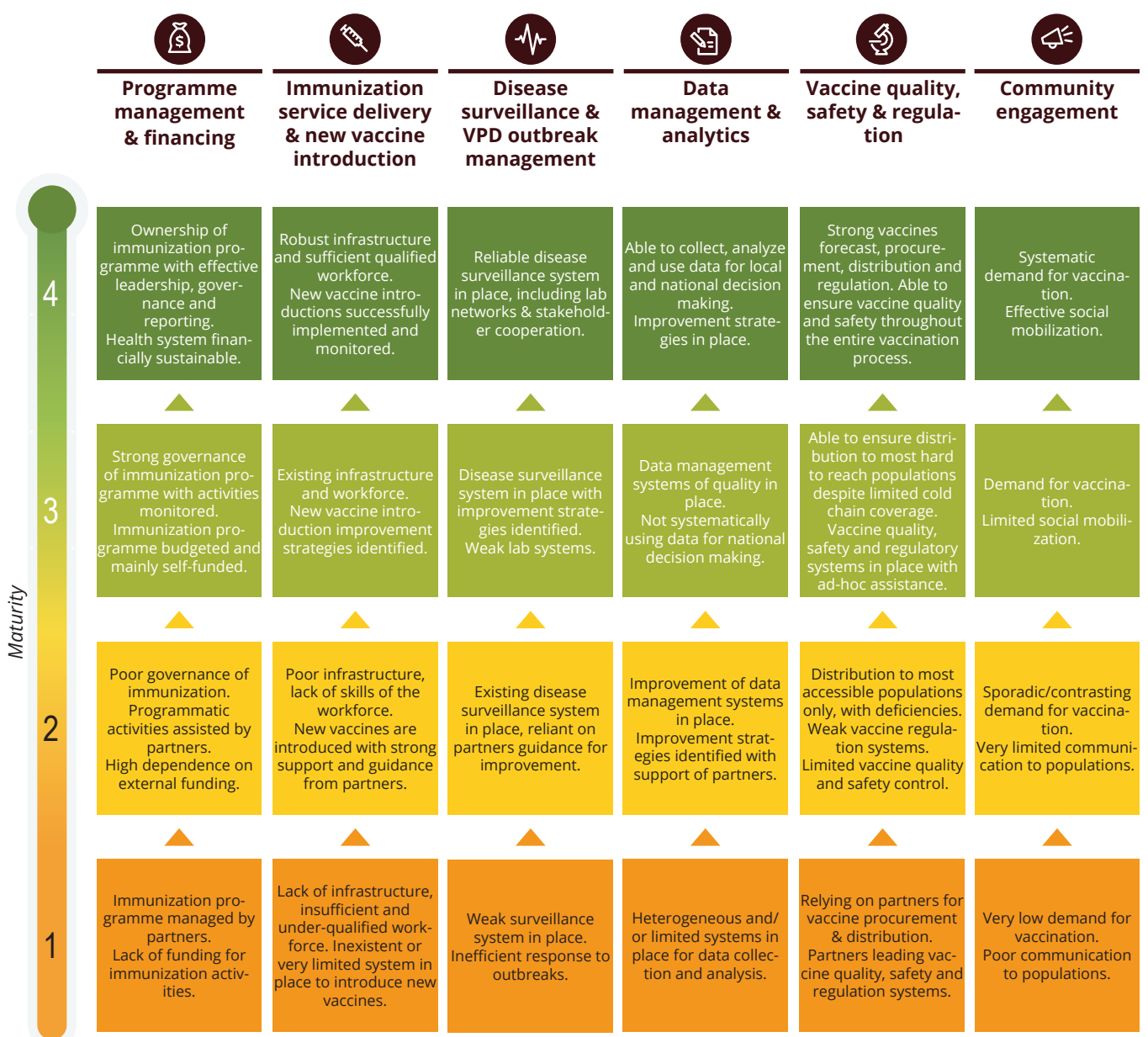
Dr Hussain
WHO Representative for Libya

WHO has developed an immunization maturity grid based on the six identified immunization components.

In order to assess countries' immunization systems maturity and performance, a four level scale maturity grid was developed for the six key components. Each component's level of maturity is defined and rated from 1 to 4 with level 1 referring to low maturity and level 4 to highest level of maturity. Levels 2 and 3 indicate the path toward high maturity.

The maturity grid defines the ability of a country to efficiently plan, implement, monitor and evaluate its immunization programme. A thorough assessment across all six components of the immunization system was done to gauge the capacity of countries to move from a weak to a strong functioning level.

WHO immunization maturity grid



All African countries were assessed using the immunization maturity grid and grouped into four categories on a scale of 1 (low maturity) to 4 (high maturity).

Based on this assessment, countries have been grouped into four categories, highlighting the level of effort needed to achieve robust immunization systems all over the continent.

Category One refers to countries with a very weak immunization system with major gaps.

Category Two refers to countries with significant deficiencies in immunization service delivery. These countries have deficiencies in several immunization components, including the immunization service delivery.

Category Three refers to countries with targeted areas for improvement. These countries have deficiencies in some dimensions and intermediary capabilities on immunization service delivery.

Category Four refers to countries with strong and robust immunization systems across most dimensions. These have the ability to plan, implement, monitor and evaluate immunization programmes autonomously, with continuous improvement plans.

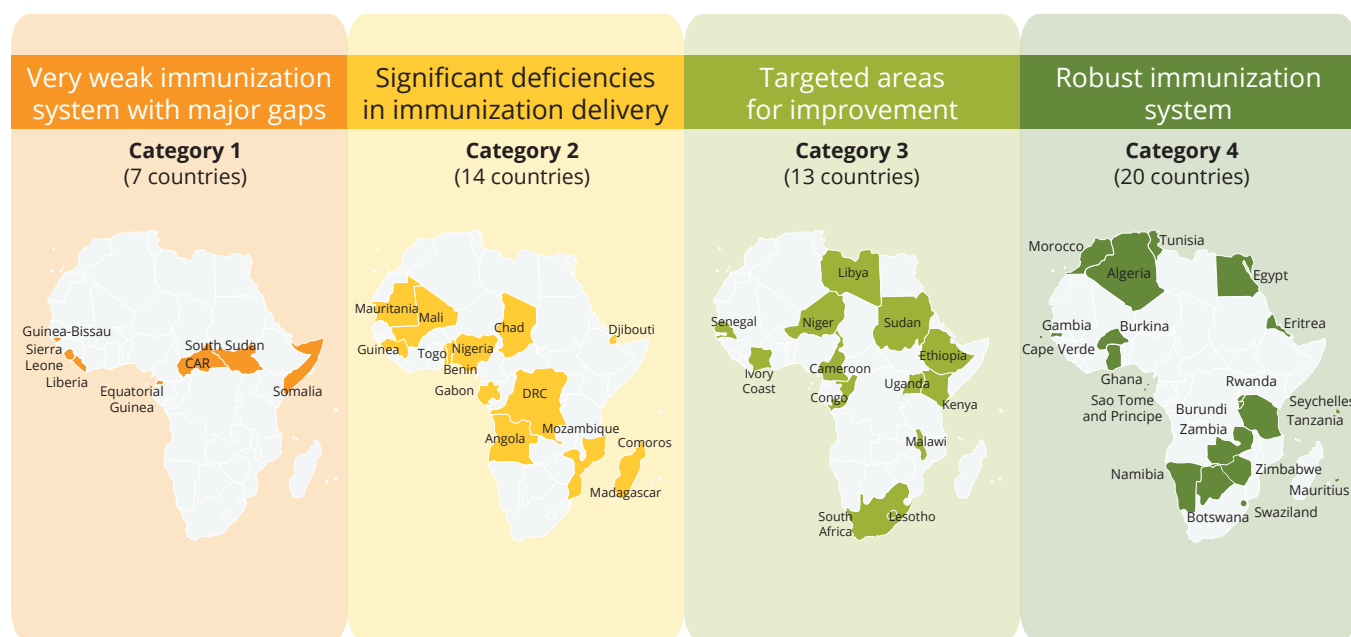
By 2030, WHO aims to bring all African countries to a satisfactory level of immunization maturity.

As of end 2017, based on the immunization maturity grid, 21 African countries had weak health systems (categories 1 and 2), with persistent deficiencies across several dimensions, including service delivery.

For each component, WHO defined a clear target for 2030. These targets will be communicated with Member States, to serve as a common platform to inform technical support for all immunization stakeholders in countries.

These targets will promote the empowerment of countries to develop sustainable, effective, cost-efficient and quality-oriented immunization systems.

Country categorization



Note: WHO analysis based on internal expertise

In an effort to optimize its support to countries in building maturity, WHO will focus on its core functions.

WHO will continue to establish norms and standards for vaccines and immunization as well as promote the harmonization and implementation of international norms and standards across all countries.

WHO will continue to develop evidence-based policies and guidance to support countries achieve global, regional and country goals as well as monitor the endorsement process of these policies at country level.

WHO will continue to engage and advocate with governments and stakeholders by convening regional meetings, working groups and health platforms. WHO will also advocate with governments and partners to ensure immunization is a priority.

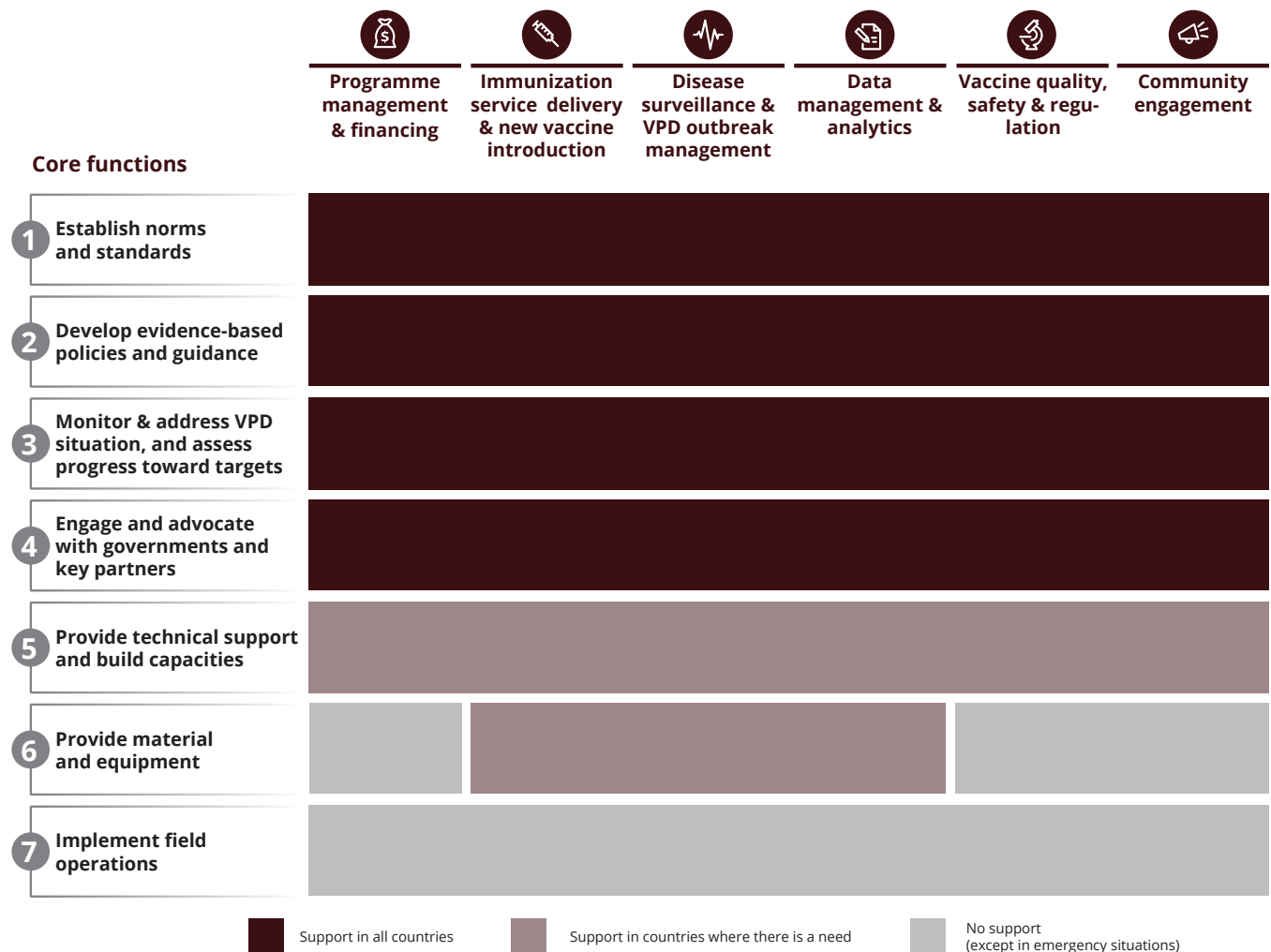
WHO will continue to address the VPD situation and assess progress toward targets by monitoring performance, identifying and addressing issues faced by countries while coordinating additional support required during crises and emergencies.

WHO will continue to provide technical support and capacity building in countries where there is a need. It will provide medical and technical expertise, training and knowledge transfer to governments and health workers.

When appropriate, WHO will provide material and equipment in countries where there is a need.

Governments, health workers and local communities will support field operations, with the support of implementing stakeholders. WHO will only implement field operations in emergency situations.

WHO core functions



WHO will adapt its support to the maturity level of each country.

WHO will adopt a tailored approach to technical support and capacity building, adapted to the maturity level of each country.

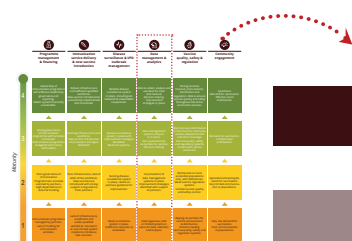
For each component, WHO has defined specific activities required per maturity level.

The example below illustrates this approach, using the component "Data management & analytics".

For a country assessed as level 1 (low maturity) on the data management and analytics component, WHO suggests a focus on the implementation of an integrated data management system, the design of data collection, processes and procedures, the set-up of data governance structures, etc.

For a country assessed as level 4 (high maturity) on the data management and analytics component, WHO will be more likely to provide support for periodic in-depth data quality checks and information audits, support the development of analytics and preventive data management, as well as promote innovative solutions and new technologies.

WHO activities per maturity level



Illustrative Example

Data management & analytics

Activities are specific for each immunization component

| Level 1 | Level 2 | Level 3 | Level 4 |
|---------|---------|---------|---------|
|---------|---------|---------|---------|

Provide technical support and build capacity

- | | | | |
|--|--|---|---|
| <ul style="list-style-type: none"> • Implementation of an integrated data management system • Design of data collection processes and procedures • Set-up of data governance • Support recruitments of data analysts • Support to data quality management (quality checks, cross checks, audits and independent evaluations) • Support JRF preparation • Support submission of an annual data desk review • Advise on IT systems and infrastructure (servers, databases, systems and workstations) | <ul style="list-style-type: none"> • Diagnostic and recommendations on existing data management systems • Architecture • Integration • Processes • Data scope • Data quality • Governance • Data management trainings • Data collection • Data management • Data analysis | <ul style="list-style-type: none"> • Enlarge data scope and coverage (national, sub-national, districts and communities) • Improve data collection frequency and process automation • Strengthen business intelligence, key performance indicators, dashboards and reporting • Support an optimum integration between EPI related information and HMIS (health management information system) | <ul style="list-style-type: none"> • Support periodic in-depth data quality and information system audits • Develop analytics and preventive data management • Promote innovative solutions and new technologies |
|--|--|---|---|

At country level, WHO will prioritize its support to address specific gaps in the national immunization system.

The example below illustrates this approach, using the case of Country A.

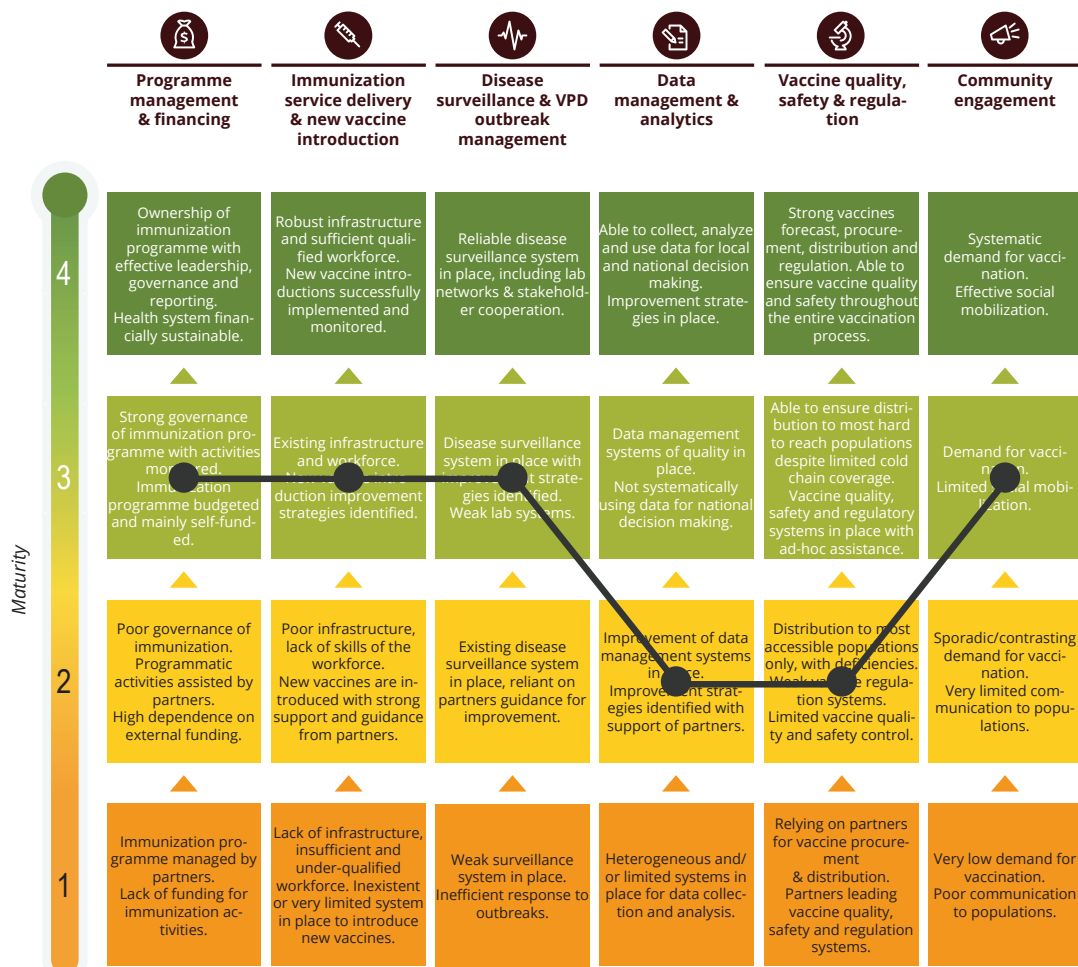
Country A has been assessed as a category 3 country and has a strong maturity on several immunization components, but has gaps in data management and analytics as well as vaccine quality, safety and regulation.

As a result, WHO will adapt its support and deploy activities to address these specific shortfalls.

In this example, WHO will engage in the following activities: (i) improve data management system and immunization data quality; (ii) support the implementation of cold chain equipment and efficient vaccine management; (iii) review periodically measles surveillance data for early detection of outbreaks; (iv) develop micro-plans with focus on addressing missed opportunities, improve vaccine management and cold chain management capacity; (v) support rubella vaccine introduction; and (vi) monthly surveillance reports on Rota and Invasive Bacterial Diseases (IBD) are available.

Country maturity levels per component

Illustrative Example: Country A



Over time, WHO will re-purpose its efforts as countries advance in the maturity scale, to ensure country ownership and sustainability.

The example below illustrates this approach, using the case of Country B.

Country B has been assessed as a category 2 country. WHO's objective is to support Country B to gradually advance from category 2 to category 3 and 4. As the country progresses along the immunization maturity grid, WHO will adapt its support and re-purpose its efforts to ensure country ownership and sustainability.

As a **category 2 country**, Country B will be supported to implement a data management system, complete a vaccine wastage study, prepare for high quality measles SIAs and introduce MenAfriVac.

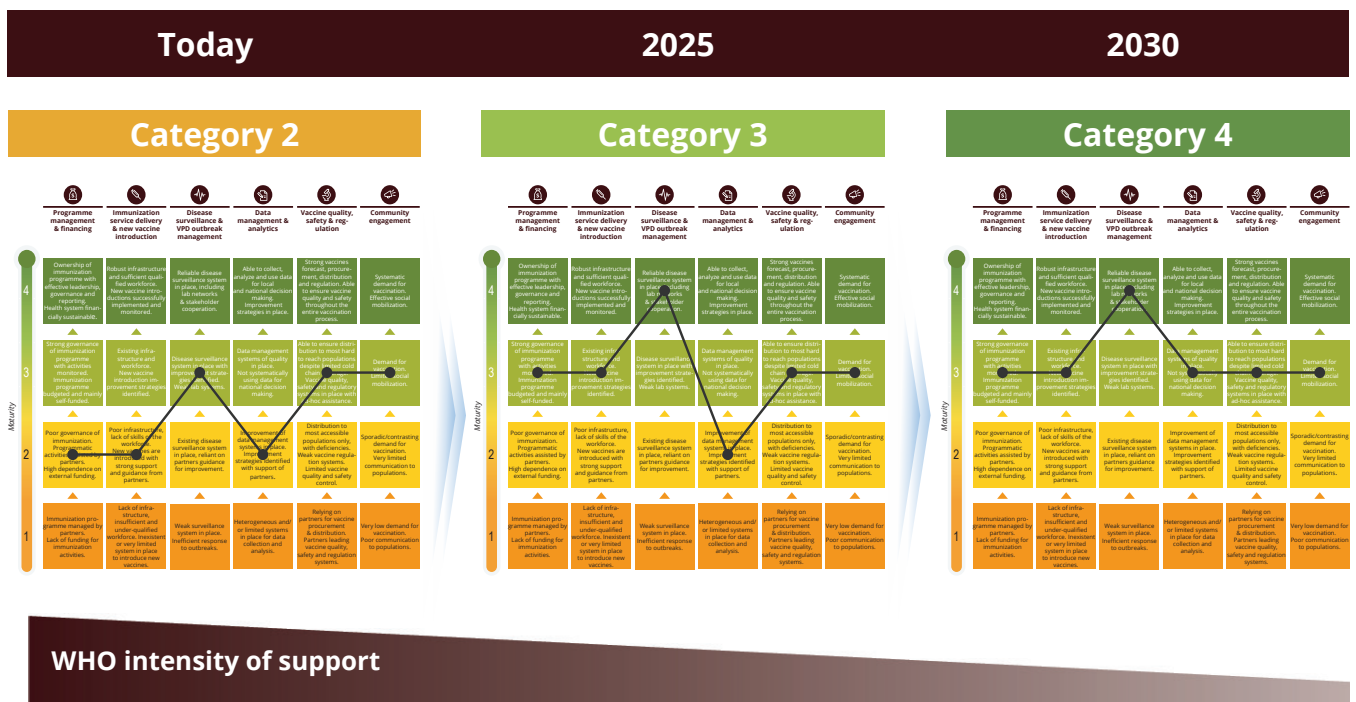
As Country B **progresses to category 3**, it will be

supported to adopt and improve its data monitoring system, organize data quality workshops, develop a waste disposal mentoring system and/or conduct an impact assessment of rotavirus vaccine, following introduction in pilot districts and discussion for its national roll-out.

As Country B **progresses to category 4**, WHO will focus on logistics and cold chain management improvement, development of a business case and increased focus on resource mobilization or auditing governance and operations.

Evolution of country maturity levels

Illustrative Example: Country B



Milestones have been defined to serve as intermediary objectives toward 2030 targets.

With the assumption that external factors (e.g. protracted emergencies, conflicts, natural disasters, etc.) will not negatively impact national health systems, all countries will reach either categories 3 or 4 by 2030.

By 2030, 80% of countries will reach category 4, with only 20% of countries remaining in category 3.

For this to be accomplished, countries will have to progress on all immunization components, with continuous support and advocacy of WHO and other immunization partners.

2030 targets and milestones

| | 2018 | 2021 | 2024 | 2027 | 2030 |
|------------|------|------|------|------|------|
| Category 1 | 7 | 5 | 3 | - | - |
| Category 2 | 14 | 13 | 8 | 4 | - |
| Category 3 | 13 | 13 | 13 | 13 | 10 |
| Category 4 | 20 | 23 | 30 | 37 | 44 |

All countries will move up to categories 3 and 4

WHO will define key performance indicators to monitor and evaluate countries' progress.

Key Performance Indicators (KPI) will be defined for WHO and its partners to accurately track countries' progress toward 2030 targets and evaluate the impact of their activities. The ultimate measure of this success will be the ability of countries to move to either category 3 or 4 by 2030. Below is an illustration of KPIs that will be discussed with countries.



Programme management and financing

- Number of countries that have legislative mechanisms in place to secure budget for immunization.



Service delivery and new vaccine introduction

- Number of countries that have reached 90% coverage nationally and 80% in all districts for all antigens in the vaccination schedule.
- Number of countries that have reported on impacts of new vaccines (PCV and rotavirus) on diarrhoea, pneumonia and meningitis disease (data and trends).



Disease surveillance and VPD outbreak management

- Number of countries that are regularly communicating in a timely manner their surveillance results.



Data management and analytics

- Number of countries that developed training platforms for their data management workforce.



Vaccine quality, safety and regulation

- Number of countries that have access to quality and safe vaccines.



Community engagement

- Number of countries that are regularly running social mobilization activities.

Governance mechanisms will be implemented to facilitate monitoring, evaluation, formulate recommendations and inform decision making.

Governance mechanisms are essential to monitor progress, conduct evaluations, formulate recommendations, inform decision making, mitigate regressions and plan for continuous improvement.

Two governance mechanisms are suggested: (i) the RITAGs; and (ii) the NITAGs as they already exist but functionality of NITAGs will need to be strengthened

RITAGs will be responsible for periodically assessing countries' maturity and progress. The groups will assess the progress made by each country on the immunization maturity grid and the publication of the updated categorization of countries as well as the definition of priorities for the next biennium.

NITAGs will be responsible for defining WHO and immunization stakeholders' priorities at country level. Their role will be to evaluate past actions and define stakeholders' action plan on an annual basis.

WHO immunization teams from both regional offices (AFRO and EMRO), sub-regional offices and country offices will plan, implement and monitor immunization activities on a day-to-day basis. They will report progress and escalate issues to RITAGs.

SECTION 5:

WHO'S TRANSFORMATION AND REQUIRED RESOURCES



KEY MESSAGES

WHO is committed to transformation and has defined clear guiding principles.

The transformation journey will be structured around three phases: internal transformation, country maturity strengthening and phasing down.

The internal transformation phase will encompass six initiatives.

WHO is introducing major organizational changes.

The roles and responsibilities of different levels are clarified to avoid overlaps and inefficiencies.

WHO's sub-regional offices will be re-organized in accordance with four country offerings.

WHO requires a complementary \$53.4 million to secure its 2018-2019 budget.

WHO is committed to transformation and has defined clear guiding principles.

In order to achieve the 2030 ambition and to implement its new approach for immunization, WHO has engaged in an unprecedented transformation, in line with the WHO Transformation Agenda and GPW13 priorities.

WHO is committed to work more efficiently and transparently under the following guiding principles.



WHO will place countries at the centre of its approach and work in close collaboration with government and local stakeholders to address the strategic priorities of each country. WHO will re-purpose its efforts to better address country needs.



WHO will set priorities according to the new immunization value proposition, by focusing its efforts on its core functions and legitimate roles. WHO will leverage its comparative advantages and assets to better serve Member States.



WHO will focus on outcomes and impact on the health of African populations, in order to help countries achieve Universal Health Coverage and ultimately the Sustainable Development Goals.



WHO will achieve “value for money” through cost-efficient operations and streamlining its internal processes.



WHO will become more results-driven at all levels and strengthen its operational planning and management skills.



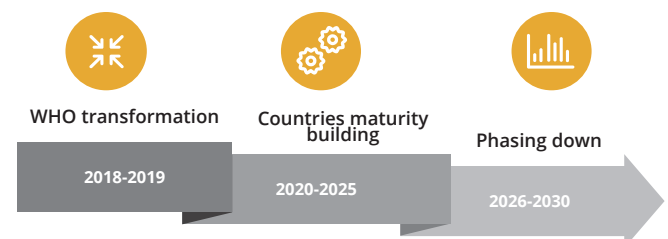
WHO will reinforce coordination of the health ecosystem within countries and build partnerships with immunization stakeholders at country and regional levels.

WHO's transformation journey will be structured around three phases: internal transformation, country maturity strengthening and phasing down.

In 2018 and 2019, WHO will start by transforming itself to become more efficient and results-driven. During this phase, internal transformation initiatives will be conducted. In parallel, GPEI programme will continue to ramp-down and resources traditionally allocated for implementation activities will decrease toward the closure by 2020. As some polio-essential functions will be transitioned to the immunization programme in the post-polio eradication era, there will be a need during that first phase of the transformation for alternatives funding to sustain such functions.

Between 2020 and 2025, the new WHO will increase focus on building countries' maturity. WHO will adjust its presence within countries to support strategic priorities, and ensure progress in the immunization maturity grid. All African countries will start transitioning toward categories 3 or 4.

Between 2025 and 2030, WHO will gradually scale-back its immunization resources as countries build stronger immunization capacities and move up the immunization maturity grid – while ensuring no countries are left behind and support is readily available as required.



WHO's internal transformation phase for immunization will encompass six initiatives.

This Business Case has been developed in alignment with the WHO Transformation Agenda and GPW13.

WHO's internal transformation phase for immunization will encompass six initiatives:

Organization transformation and workforce alignment

WHO will adjust its presence within countries according with the country categorization and the internal WHO country functional review process. The regional and sub-regional offices will be reinforced to better support country offices. An alignment of skills and workforce will be done at all levels.

Simplicity and efficiency

WHO is currently streamlining its internal processes for greater efficiency, developing management and leadership best practices, reinforcing staff training in management and developing knowledge management tools.

Operational planning strengthening

This includes the definition of milestones, activities, working units, deliverables, sourcing strategy and capacity planning in all country offices.

Accountability framework deployment

This includes the definition of individual objectives, key performance indicators, milestones and deliverables in line with WHO's individual performance management and development system (PMDS). Satisfaction surveys will be implemented. Internal controls and independent evaluations will be reinforced.

Communication and relationships with partners

WHO will define a new communication strategy for immunization, build coordination mechanisms with all stakeholders and ensure proximity of partners.

Innovation and data management

WHO will foster innovation in immunization and develop an integrated data platform, data analytics and health intelligence system.



WHO is introducing major organizational changes.

WHO is introducing the following organizational changes:

- Reinforce WHO country offices by conducting functional reviews.
- Re-purpose regional and sub-regional offices to better meet country needs.
- Open WHO workforce to non-medical and private sector profiles.
- Optimize sourcing by leveraging consulting firms and outsourcing activities.
- Enhance leadership and partners' relationships.

These changes will lead to an optimized utilization of resources, with a greater cost-efficiency and accountability. Likewise, productivity should increase as well as results and impact toward UHC and SDGs. Moreover, these changes will foster synergies between emergencies, immunization and health systems. Synergies should also emerge from operating in close proximity and wherever possible in same locations with immunization partners. With the imminent closure of the GPEI, it is imperative for WHO to identify alternative funding sources to continue to provide the necessary technical support for immunization.

The roles and responsibilities of different levels are clarified to avoid overlaps and inefficiencies.

At **regional level**, WHO will provide enhanced leadership, public health and technical support back-stopping and manage relationships with partners. Regional offices require recognized leaders with strong networks and influence associated with resource mobilization skills. These leaders will work in close collaboration with partners and key immunization stakeholders. They will display technical expertise to cover all immunization components. They will focus on strengthening WHO reputation and mobilizing resources. Regional offices' staff will be mainly composed of senior medical and technical officers with relevant international experience.

At **sub-regional level**, WHO will focus on delivering concrete results for Member States and WHO country offices.

Sub-regional offices require experienced project managers, complemented by international and national consultants to achieve quality results in a more efficient and cost effective way. Sub-regional offices will develop methodologies, templates, assets and accelerators that will be available for all African countries. Sub-regional offices' staff will be composed of medical officers and non-medical staff (masters' degree), with relevant experience in public health and project management.

At **country level**, WHO will solely focus on managing relations with governments, coordinating the local immunization ecosystem, and supporting countries to bolster the immunization programme as well as liaising with both sub-regional and regional offices. WHO presence in all African countries will be aligned with the country categorization. Country offices will require a mix of national and international medical officers as well as junior profiles.

WHO's sub-regional offices will be re-organized in accordance with four country offerings.

Sub-regional offices will be organized to deliver clear offerings and services based on requests from WHO country offices.

Based on WHO country office requests received in 2016 and 2017, WHO has grouped these into four offerings:

- Strategic planning.
- Surveillance, laboratory and data management.
- Organization and human capital.
- Project management and technology.



Sub-regional staff will be allocated according to these offerings and trained accordingly. Experienced professionals will be recruited in order to reinforce existing teams.

Strategic planning encompasses immunization planning and programming, new vaccine introduction, roadmaps, business cases, resource mobilization and financial strategies, governance and health diagnostics, EPI reviews and evaluations. These activities will require specialized skills in strategy, management consulting and health expertise.

Surveillance, laboratory and data management encompasses disease surveillance and laboratory support, and strategic health information management. WHO will also contribute to the monitoring of health trends and provide input using health economics methods and findings. These activities will require epidemiologists, data analysts and business intelligence consultants.

Organization and human capital encompasses operating model transformations (organization, processes, tools and accountability), supply chain optimization, health workforce assessment and capacity building. These activities will require skills in organization, human resource management and training facilitation.

Project management and technology encompasses project management, IT systems implementation, software selection, technology advisory and project reporting. This offering will showcase innovative solutions and link Member States with start-up companies. These activities will require skills in project management and information technology.

| | Strategic planning | Surveillance, laboratory and data management | Organization and human capital | Project management and technology |
|--|--|---|---|---|
| Activities  | <ul style="list-style-type: none"> • Immunization planning and programming • New vaccine introduction • Roadmaps • Business cases • Resource mobilization • Financial strategy • Governance diagnostics • Health diagnostics • EPI reviews • Evaluations | <ul style="list-style-type: none"> • Disease surveillance • Laboratory support • Health economics • Impact assessment • Monitoring of health trends • Data collection, analysis & reporting • Data quality • Reporting assistance | <ul style="list-style-type: none"> • Operating model transformation • Organization • Processes • Tools • Accountability • Supply chain optimization • Health workforce assessment • Capacity building | <ul style="list-style-type: none"> • Project management • IT systems implementation • Software selection • Technology advisory • Innovative solutions • Project reporting |
| Profiles  | <ul style="list-style-type: none"> • Strategy consultants • Health consultants | <ul style="list-style-type: none"> • Epidemiologists • Data analysts • Business Intelligence consultants | <ul style="list-style-type: none"> • Organization consultants • Human Resource consultants • Training facilitators | <ul style="list-style-type: none"> • Project managers • Technology consultants |

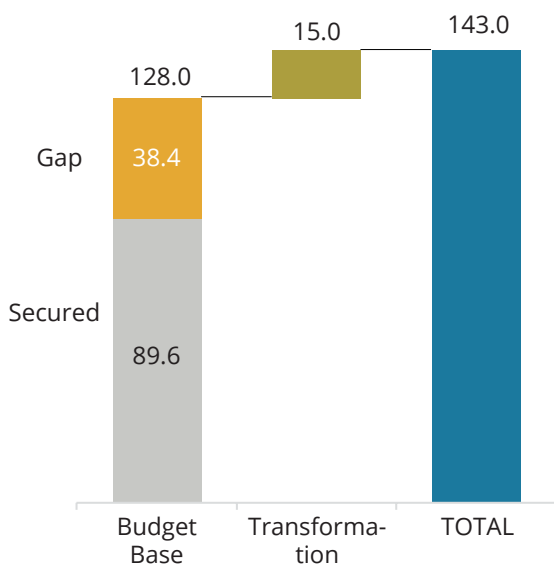
WHO requires a complementary \$53.4 million to secure its 2018-2019 budget.

For 2018-2019, WHO needs \$53.4 million to cover the funding gap (\$38.4 million) and transformation (\$15 million).

The WHO immunization budget base for both AFRO and EMRO for the current biennium is \$128 million. WHO has already secured \$89.6 million, the remaining funding gap is \$38.4 million.

The transformation budget is \$15 million. This includes major initiatives: organization transformation and workforce alignment, simplicity and efficiency, operational planning strengthening, accountability framework deployment, communication and relationships with partners, and innovation and data management.

WHO Immunization programme budget (AFRO+EMRO for 2018-2019)



For the next two biennium, 2020-2021 and 2022-2023, the budget is aligned with the GPW13.

With the GPEI ramp-down and anticipated closure by 2020, the assumption is that approximately 70% of polio essential functions will be absorbed by the immunization programme.

Polio essential functions are:

- Containment.
- Immunization policy and OPV withdrawal.
- Surveillance, laboratory and data management.
- Outbreak preparedness.
- Vaccine management.
- Research.

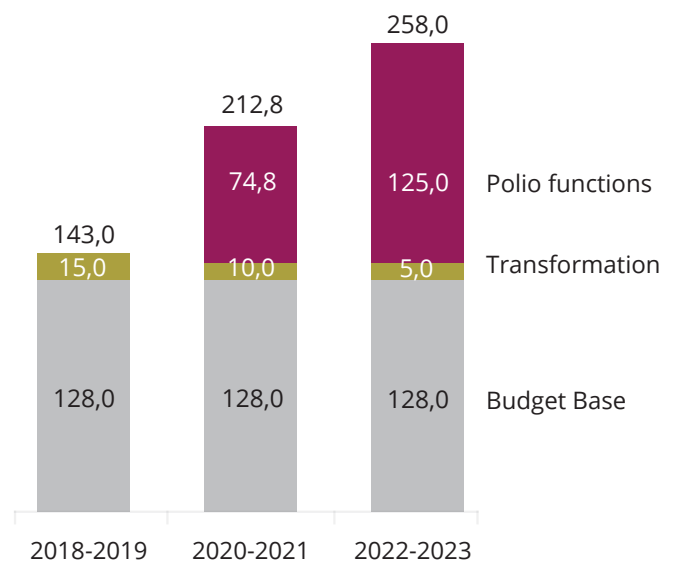
For 2020-2021, WHO immunization programme will need to mobilize \$212.8 million, including:

- Budget base: \$128 million.
- Budget to absorb polio essential functions (excluding Nigeria): \$74.8 million.
- Budget for transformation initiatives: \$10 million.

For 2022-2023, WHO immunization programme will need to mobilize \$258 million, including:

- Budget base: \$128 million.
- Budget to absorb polio essential functions (including Nigeria): \$125 million.
- Budget for transformation initiatives: \$5 million.

WHO Immunization programme budget (AFRO+EMRO for 2018-2023)



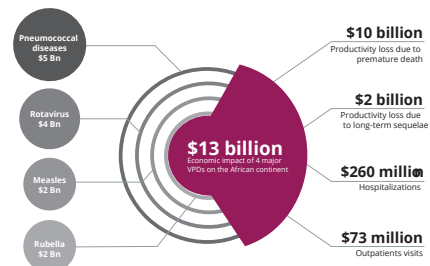
CONCLUSION

With this Business Case, WHO communicates a bold vision and ambition for 2030 for immunization on the African continent. WHO is committed to change by engaging in an unprecedented transformation.

This Business Case highlights:

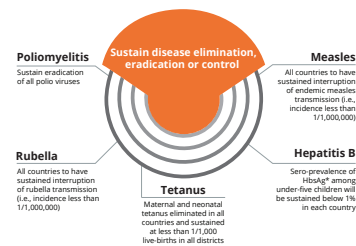
Situation analysis of vaccine-preventable diseases:

- VPDs kill half a million children per year in Africa
- Africa accounts for 58% of global deaths from VPDs
- Economic burden estimated at \$13 billion every year
- 30 million children suffer from VPDs every year
- Coverage rates remain below the target of 90%
- Strong inequities are observed in districts



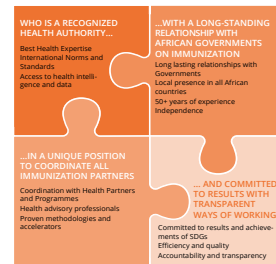
2030 ambition and its impact in terms of number of lives saved, cases averted & economic benefits:

- Sustained control of VPDs
- Major decrease of mortality due to measles, rubella, rotavirus and pneumococcal diseases
- 1.9 million lives saved
- 167 million cases averted
- \$58 billion saved
- A 37 fold of estimated return on investment.



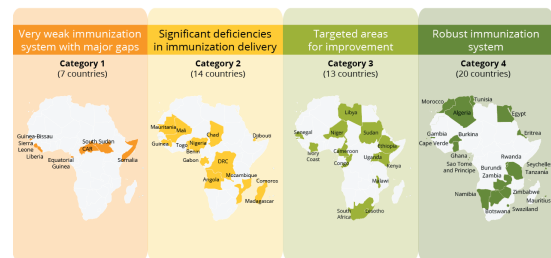
WHO value proposition for immunization:

- Unique set of assets (presence, expertise, networks, access to country public health data)
- Focus on health authority, advisory and ecosystem coordination roles
- Reinforcement of core functions and progressive withdrawal from field operations



Tailored approach to countries based on:

- Country categorization based on immunization maturity grid
- Tailored support per country and per component
- KPIs, milestones, targets and governance



WHO commitment to engage in an unprecedented transformation:

- Guiding principles
- Transformation phases
- Transformation initiatives
- Organization change and clarification of responsibilities
- Country offerings

WHO immunization programme requires:

- \$53.4 million for 2018-2019
- \$212.8 million for 2020-2021
- \$258 million for 2022-2023



**Your support and active contribution will be key for
the success of WHO's immunization
programme transformation on the African continent**

WHO heard the voices and feedback coming from its Member States, Partners and Staff

WHO is committed to change by engaging in an unprecedented transformation

Your support is needed to transform WHO's immunization programme on the African continent

**TOGETHER,
let's re-purpose WHO to save the
lives of African children and attain
Universal Health Coverage**

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