



**MEASLES
& RUBELLA
INITIATIVE**

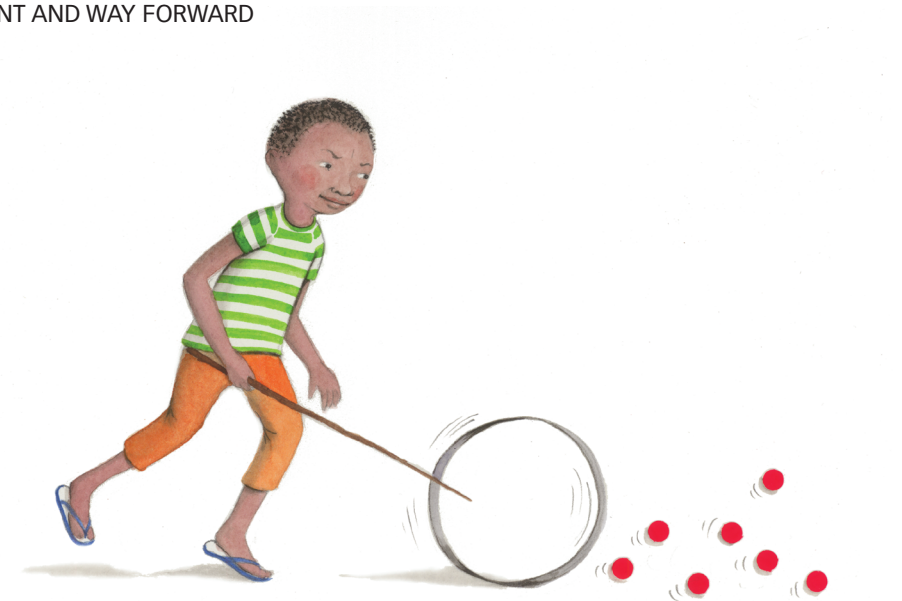
**FINANCIAL RESOURCE
REQUIREMENTS
2015-2020**

As of October 2015



TABLE OF CONTENTS

- 2 LIST OF ACRONYMS
- 5 EXECUTIVE SUMMARY
- 9 INTRODUCTION
- 13 BUDGET ASSUMPTIONS AND CATEGORIES
- 27 BUDGET PROCESS AND MONITORING
- 29 OVERVIEW OF FUND MOBILIZATION, ACHIEVEMENT AND WAY FORWARD
- 35 APPENDICES



LIST OF ACRONYMS

AD	Auto-Disable
AFP	Acute Flaccid Paralysis (surveillance)
AFR	WHO African Region
AMR	WHO Region of the Americas
ARC	American Red Cross
BMV	Bundled measles containing vaccine
CDC	US Centers for Disease Control and Prevention
CRS	Congenital rubella syndrome
DFID	UK Department for International Development
DRC	Democratic Republic of Congo
EPI	Expanded Program on Immunization
EMR	WHO Eastern Mediterranean Region
EUR	WHO European Region
FRR	Financial Resource Requirements
GAVI	Gavi, the Vaccine Alliance
GPEI	Global Polio Eradication Initiative
GVAP	Global Vaccine Action Plan
ICC	Interagency Coordinating Committee
LabNets	WHO Global Measles and Rubella Laboratory Network
M&RI	Measles and Rubella Initiative
M	Measles vaccine
MCV	Measles containing vaccine
MDG4	Millennium Development Goal 4
MMR	Measles-mumps-rubella vaccine
MR	Measles-rubella vaccine
ORF	Outbreak Response Fund
PoA	Plan of action
RI	Routine Immunization
RCV	Rubella containing vaccine
SEAR	WHO South-East Asia Region
SIA	Supplemental immunization activities
TA	Technical Assistance
TAG	Technical Advisory Group
UNDP	United Nations Development Programme
UNICEF	United Nations Children's Fund
UNF	United Nations Foundation
UNFIP	United Nations Fund for International Partnerships
WHA	World Health Assembly
WHO	World Health Organization

The Measles and Rubella Initiative (M&RI) is pleased to present the Financial Resources Requirements (FRR) for 2015-2020. This document provides an overview of the necessary projected costs to support M&RI's measles and rubella activities outlined in the Global Measles & Rubella Strategic Plan 2012-2020.



EXECUTIVE SUMMARY



The Measles & Rubella Initiative (M&RI) is a global public-private partnership founded in 2001 by the American Red Cross (ARC), the United States Centers for Disease Control and Prevention (CDC), the United Nations Foundation (UNF), the United Nations Children’s Fund (UNICEF) and the World Health Organization (WHO). M&RI is committed to ensuring that no child dies from measles or is born with congenital rubella syndrome. Working in partnership with ministries of health, donor governments, the private sector, and civil society, M&RI provides the technical and financial assistance to help countries achieve the measles and rubella goals outlined in the Global Vaccine Action Plan (GVAP) - adopted by the 194 Member States of the World Health Assembly in May 2012.¹ If the GVAP goals are realized, measles vaccinations are projected to avert more than 13 million deaths this decade.

M&RI, through a co-financing model that leverages domestic resources and donor support, has provided US\$1.2 billion for life-saving vaccinations that immunized 1.8 billion children in 88 countries since its inception in 2001. These efforts, in combination with the work of countries and global health partners, are credited with averting 15.6 million deaths from measles and its complications between 2000 and 2013. This represents a 75 percent decline in measles deaths and is the single-largest contribution to reduction in child mortality and overall progress on UN Millennium Development Goal 4.²

Despite these remarkable achievements, more than 20 million people are infected with measles and 100,000 infants are born with congenital rubella syndrome every year. And, the estimated number of global measles deaths remains at well over 100,000 —demonstrating the ability of the measles virus to spread and exploit gaps in population immunity. Over the same period, global measles-vaccine coverage has remained stagnant since 2009 at 84 percent. In 2014, large outbreaks were reported in the Democratic Republic of Congo (DRC), Ethiopia, Iraq, Sudan, Syria, the Philippines and in many European countries. These outbreaks are a direct result of failure to vaccinate children and adolescents through routine immunization or supplemental immunization activities (SIAs).



More than 20 million people are infected with measles and 100,000 infants are born with congenital rubella syndrome every year.



M&RI needs timely and sufficient funds in order to reach all targeted children through quality immunization activities that contribute to high-levels of population immunity required to prevent measles and rubella outbreaks. M&RI estimates that \$2.6 billion is required from 2015-2020 to further advance measles, rubella, and congenital rubella syndrome control activities in the 77 M&RI focus countries (See Appendix). The \$2.6 billion budget outlined in this FRR represents the means by which M&RI will support high quality immunization activities, technical assistance and surveillance to work towards achieving the GVAP targets.

The budget has seven main cost categories that each contribute towards the GVAP targets: 1) measles/measles rubella (M or MR) follow-up³ SIAs, 2) MR catch-up⁴ immunization activities, 3) surveillance and laboratory confirmation 4) outbreak preparedness and response, 5) communications, 6) research and innovation, and 7) operations and strategic support.⁵

The largest expenses to the overall budget are the combined MR vaccine catch-up campaigns in the 52 countries planning to introduce rubella-containing vaccine into their routine immunization systems between now and 2020. MR catch-up campaigns account for \$1.4 billion over the 2015-2020 period or 53 percent of total budget costs. It is important to note that India's catch-up campaigns will reach more than 400 million children, and account for 57 percent of the total cost of MR catch-up campaigns.



Of the total \$2.6 billion cost for M&RI's activities from 2015-2020, \$1 billion is expected to be covered by national governments. Co-financing demonstrates that countries around the world are committed to supporting measles and rubella control and elimination activities. M&RI donors are projected to commit \$266 million, and Gavi, the Vaccine Alliance has currently pledged \$800 million for measles and rubella activities in Gavi-eligible countries. This will leave an estimated \$431 million budget shortfall over the 2015-2020 period (see Table 1 and Figure 4).

If the \$431 million funding gap is not filled, it would force M&RI to scale back and/or cancel vaccination campaigns and essential operations. Should that happen, the consequences would be devastating. A new generation of children around the world would not receive life-saving and affordable vaccinations—resulting in needless suffering, death and permanent disability from preventable diseases.

At less than \$2 per child vaccinated in lower income countries, the measles and rubella vaccine is one of the most cost-effective investments in public health. Investments in M&RI help reduce child deaths, catalyze domestic resources for immunization programs, and contribute towards the global goals for measles and rubella control and elimination. M&RI can help reach every child with effective, safe, and affordable MR vaccines. These investments will ensure children are protected from measles and rubella so that no parent will experience the sorrow of a having a baby born with the debilitating birth defects of congenital rubella syndrome, or the grief that comes from watching a child suffer from the devastating impact of measles. This can be accomplished with an investment of less than \$2 per child.

- 1 The Global Vaccine Action Plan has targets to eliminate measles and rubella in at least five of the six WHO regions by 2020.
- 2 Millennium Development Goal 4 was to reduce the under-5 mortality rate by two-thirds between 1990 and 2015.
- 3 Measles/measles rubella follow-up supplemental immunization activities are large-scale immunization campaigns that present a second opportunity for measles or measles/rubella vaccination when countries have not reached the target 95% coverage with two doses of measles or measles/rubella vaccine.
- 4 Measles rubella catch-up activities are large-scale immunization campaigns that immunize a wide-age range before the introduction of rubella vaccine into the routine immunization program.
- 5 Operations and strategic support covers the cost of human resources and strategic support by M&RI for routine immunization.

INTRODUCTION

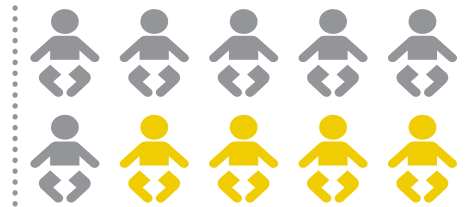


MEASLES AND RUBELLA

Measles is an airborne disease that spreads much more easily than Ebola or human immunodeficiency virus (HIV). On average, a person infected with Ebola will spread it to two new people; for every new person infected with HIV they will spread it to four others; but a person infected with measles can infect up to 18 people. In fact, measles is one of the most contagious human viruses. Over 20 million people worldwide are infected with measles each year, particularly in Africa and Asia. While in high-income countries many people view measles as a standard childhood illness, measles can have serious complications including pneumonia, diarrhea, and blindness, particularly in children under the age of five years old, who are malnourished, living in overcrowded conditions, or are immunocompromised. Measles outbreaks occur in communities with low vaccination coverage, and are devastating in emergency settings such as natural disasters and in refugee camps. Measles is still a leading cause of child deaths.

Rubella is a contagious, generally mild viral infection that occurs most often in children and young adults. However, if a pregnant woman gets rubella during her first three months of pregnancy, the results can be devastating. There is as much as a 90 percent chance that her baby will be born with congenital rubella syndrome which is characterized by blindness, deafness, heart defects and intellectual disabilities. Currently, 6 out of every 10 babies in the world are not vaccinated against rubella and the WHO estimates that over 100,000 babies are born with congenital rubella syndrome each year.

Measles and rubella also have tremendous social and economic impact. For example, in Ethiopia medical costs to care for a child with measles can equal one month of a family's entire income. Measles and rubella also have other significant costs to countries. When measles is introduced into a country that has eliminated the disease, the country can spend between US\$5,000 to 50,000 per case on treatment and outbreak investigation. For rubella, the lifetime costs for chronic care per case of congenital rubella syndrome range between \$11,300 in low income countries to as much as \$934,000⁶ in high income countries.



Currently, 6 out of every 10 babies in the world are not vaccinated against rubella and the WHO estimates that over 100,000 babies are born with congenital rubella syndrome each year.



In 2012, M&RI released its Global Strategic Plan 2012-2020, with GVAP goals of measles and rubella control and elimination in at least five WHO regions by 2020.



THE MEASLES AND RUBELLA INITIATIVE

The Measles & Rubella Initiative (M&RI) is a global public-private partnership founded in 2001 by the American Red Cross (ARC), the United States Centers for Disease Control and Prevention (CDC), the United Nations Foundation (UNF), the United Nations Children's Fund (UNICEF) and the World Health Organization (WHO). M&RI works to ensure no child dies from measles or is born with congenital rubella syndrome. M&RI works to achieve this goal through mobilizing resources and providing technical expertise for the planning and implementation of high quality immunization activities. In addition, M&RI also provides technical and financial support for surveillance, the global measles and rubella laboratory network, targeted measles and rubella outbreak response activities, strategic communications, and research and innovation.

While M&RI's mission and work is focused on measles and rubella, the impact extends well beyond measles and rubella vaccinations. For example, the Initiative is one of the biggest global distributors for vitamin A supplementation and has supported combined measles-polio campaigns through guidance and coordination with the Global Polio Eradication Initiative (GPEI). M&RI also supports key elements of strengthening routine immunization in the 77 M&RI focus countries (See appendix 1).⁷

In 2012, M&RI released its Global Strategic Plan 2012-2020, with GVAP goals of measles and rubella control and elimination in at least five WHO regions by 2020. To date, the main contributors to M&RI have been the American Red Cross, the Canadian Department of Foreign Affairs, Trade and Development (formerly the Canadian International Development Agency), CDC, the Bill & Melinda Gates Foundation, the United Kingdom's Department for International Trade and



Development, the Church of Jesus Christ of the Latter-day Saints, Lions Club International, the Norwegian Ministry of Foreign Affairs, UNICEF and UNF. In addition, there have been significant contributions from the public and private sectors in countries of operation. Figures 2 and 3 summarizes the past and present donors and their contributions to M&RI.

Since 2007, Gavi, the Vaccine Alliance has become a major source of country program financing. At the beginning of 2015, Gavi pledged \$800 million to support measles and rubella control activities in 40 of the Gavi-eligible countries over the 2015-2020 period. M&RI administers \$55 million of these funds for measles outbreak response and the rest of the funding is disbursed directly by Gavi to the recipient countries.

⁶ Thompson KM, Odahowski CL. The costs and valuation of health impacts of measles and rubella risk management policies. *Risk Analysis*, 2015; doi: 10.1111/risa. 12459 (Aug 6).

⁷ M&RI's 77 focus countries is based on measles/rubella burden and routine immunization coverage for measles/rubella vaccines. See Appendix 1 for a list of the 77 countries.



BUDGET ASSUMPTIONS & CATEGORIES

The \$2.6 billion budget reflected in this document will support all of M&RI's essential activities and ultimately help to immunize over 2.1 billion children over a six year period. The budget has seven major cost categories: 1) measles (M) or measles and rubella (MR) follow-up SIAs, 2) measles and rubella (MR) catch-up immunization activities in 51 countries, 3) surveillance and laboratory support, 4) outbreak preparedness and response, 5) communications, 6) research and innovation, and 7) operations and strategic support.

Vaccine costs are projected from information provided by UNICEF's Supply Division. Operational cost data is determined based on funding trends in the last ten years of working to support SIAs in 88 countries. Country population data is drawn from United Nations Development Programme (UNDP) population estimates. The information on types of vaccine (antigen) to be used is obtained from national governments' comprehensive multi-year plans (cMYPs) through UNICEF and WHO country offices.

The FRR is reviewed by M&RI Management Team and Financial Resource Requirements Working Group and is updated bi-annually to reflect changes in disease epidemiology, planned immunization activities, and other relevant factors. The estimates represent the best available data and information as of June 2015. It should be noted that several costing and epidemiologic studies to improve the current information are ongoing and could provide more robust estimates in future editions of the FRRs.



The \$2.6 billion budget reflected in this document will support all of M&RI's essential activities and ultimately help to immunize over 2.1 billion children over a six year period.



FIGURE 1: BUDGET BY MAJOR CATEGORY AND SUB CATEGORIES (US\$ MILLIONS)

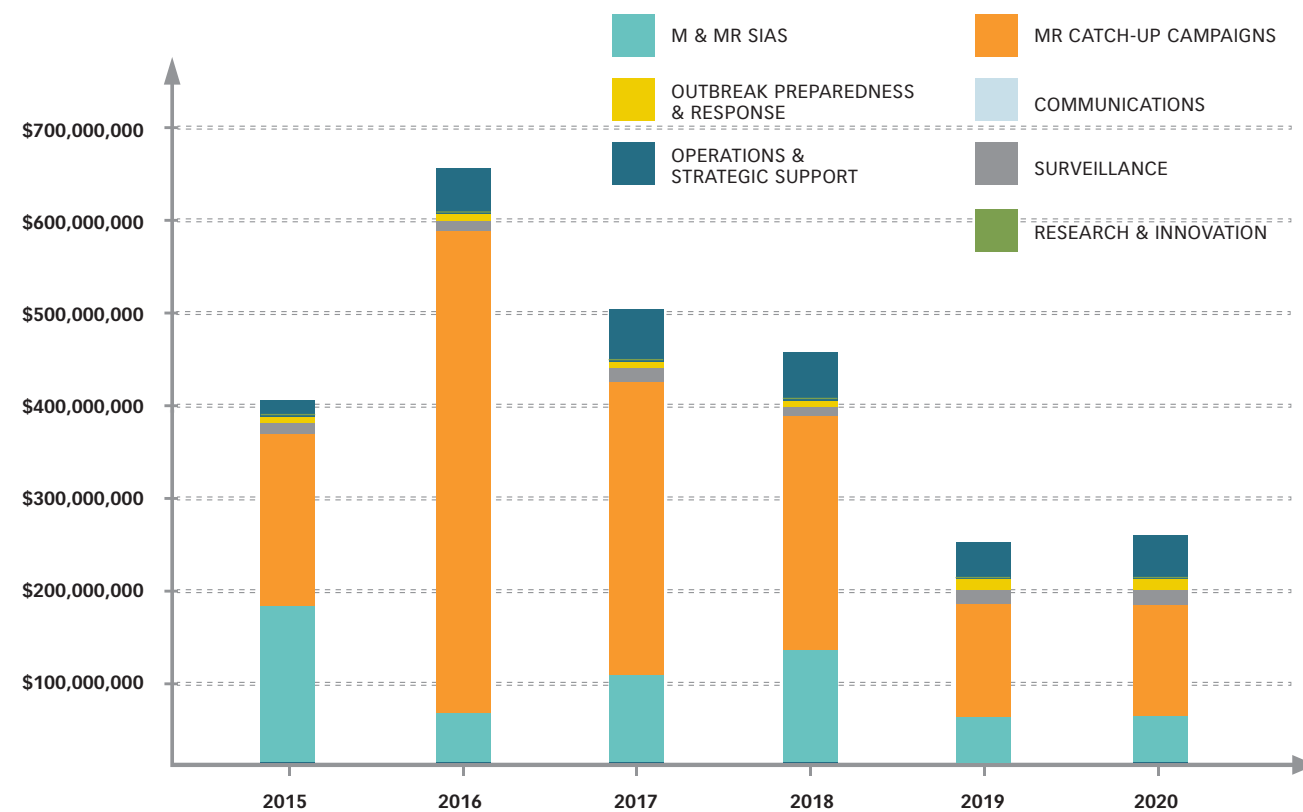


FIGURE 2: M&RI FUNDING REQUIREMENTS COMPARED TO PROJECTED FUNDING, 2015-2020 (US\$ MILLIONS)

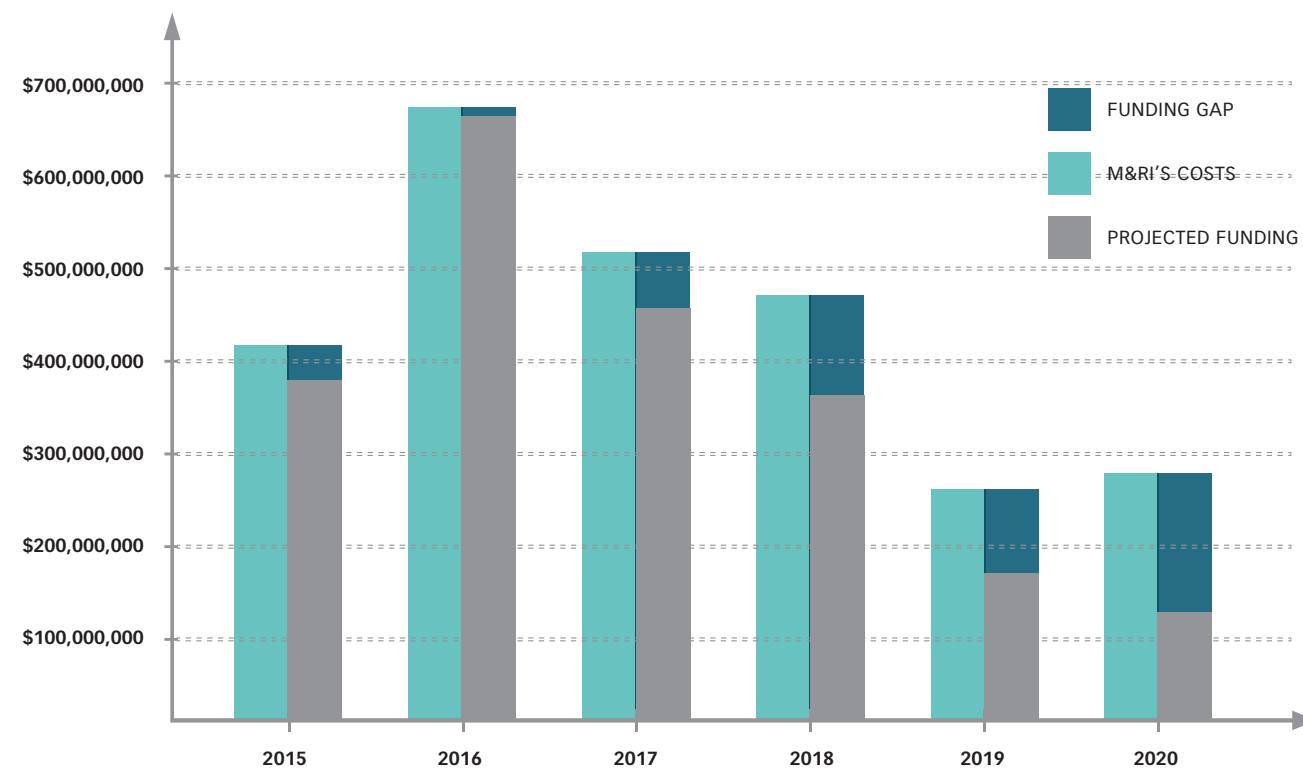


TABLE 1: SUMMARY OF RESOURCE REQUIREMENTS BY MAJOR CATEGORY OF ACTIVITY, 2015-2020 (ALL FIGURES IN US\$ MILLIONS)

	2015	2016	2017	2018	2019	2020	TOTAL
1. MEASLES (M) and MEASLES RUBELLA (MR) FOLLOW-UP CAMPAIGNS (23%)							
Bundled vaccine	61,113,457	14,170,501	33,393,888	54,100,365	27,824,632	31,418,658	222,021,501
Operational Costs	108,164,384	28,600,708.	70,246,110	69,286,386	35,414,396	39,742,994	351,454,979
Coverage Surveys	3,600,001	900,000	1,650,000	2,400,001	2,400,001	1,650,001	12,600,004
Technical Assistance "surge capacity"	1,884,000	724,000	980,000	1,100,000	910,280	995,120	6,593,400
SUB-TOTAL	174,761,841	44,395,209	106,269,998	126,886,752	66,549,309	73,806,773	592,669,884
2. MEASLES RUBELLA CATCH-UP CAMPAIGNS							
Bundled vaccine	85,180,849	237,812,014	140,598,353	109,967,198	45,786,729	45,148,510	664,493,653
Operational Costs	86,489,480	295,740,582	175,747,941	136,465,318	57,098,744	56,014,935	807,557,001
Coverage Surveys	1,650,000	1,950,001	1,500,001	1,800,001	600,000	450,000	7,950,003
Technical Assistance "surge capacity"	780,000	1,212,000	1,056,000	1,080,000	1,914,240	393,360	6,435,600
SUB-TOTAL	174,100,329	536,714,598	318,902,295	249,312,517	105,399,713	102,006,805	1,486,436,257
3. SURVEILLANCE							
Surveillance and Laboratory Costs	15,500,000	16,275,000	17,088,750	17,943,188	17,943,188	19,782,364	104,532,489
SUB-TOTAL	15,500,000	16,275,000	17,088,750	17,943,188	17,943,188	19,782,364	104,532,489
4. OUTBREAK PREPAREDNESS & RESPONSE							
Outbreak Response (Vaccines & OpCosts)	10,000,000	12,600,000	13,125,000	13,676,250	14,175,000	14,700,000	78,276,250
SUB-TOTAL	10,000,000	12,600,000	13,125,000	13,676,250	14,175,000	14,700,000	78,276,250
5. COMMUNICATION							
Build public confidence and demand for Immunization	1,000,000	1,050,000	1,102,500	1,157,625	1,157,625	1,276,281	6,744,032
SUB-TOTAL	1,000,000	1,050,000	1,102,500	1,157,625	1,157,625	1,276,281	6,744,033
6. RESEARCH & INNOVATION							
Support cost-effective operations & improve vaccination and diagnostic tools	1,500,000	1,575,000	1,653,750	1,736,438	1,736,438	1,914,422	10,116,047
SUB-TOTAL	1,500,000	1,575,000	1,653,750	1,736,438	1,736,438	1,914,422	10,116,047
7. OPERATIONS & STRATEGIC SUPPORT							
Routine Immunization Strengthening	5,000,000	5,250,000	5,512,500	5,788,125	5,788,125	6,381,408	33,720,158
Technical Assistance - staffing	20,291,262	36,842,547	38,158,133	39,436,228.	40,758,001	42,124,973	217,611,144
Sub-Total	25,291,262	42,092,547	43,670,633	45,224,353	46,546,126	48,506,381	251,331,302
Sub-Total Direct Costs	402,153,433	654,702,353	501,812,926	455,937,122,	253,507,398	261,993,028	2,530,106,261
Program Support Costs*	14,675,138	7,873,381	13,127,794	19,707,502	12,365,777	14,394,546	82,144,138
Grand Total *	416,828,570	662,575,735	514,940,721	475,644,625	265,873,175	276,387,574	2,612,250,399
PLEGGED / EXPECTED CONTRIBUTIONS							
GAVI	155,159,762	107,785,428	165,225,718	213,746,225	97,100,322	60,982,545	800,000,000
SELF FINANCING (Governments)	141,134,332	502,392,371	255,102,639	102,720,238	50,385,019	51,569,933	1,103,304,532
M&RI (various donors)	62,192,500	47,500,000	47,500,000	36,500,000	36,500,000	36,500,000	266,692,500
Carryover	10,829,549						10,829,549
Total Pledged/Expected Contributions	369,316,143	657,677,799	467,828,357	352,966,463	183,985,342	149,052,478.	2,180,826,581
ANTICIPATED Funding Gap	47,512,427	4,897,936	47,112,364	122,678,162	81,887,834	127,335,095	431,423,818

TABLE 2: ASSUMPTIONS BY MAJOR BUDGET CATEGORY AS DRIVERS OF M&RI ESTIMATES AND PROJECTIONS



BUDGET CATEGORY	ASSUMPTIONS
1. Measles or Measles-Rubella (MR) Follow-up Campaigns (SIAs)	<ul style="list-style-type: none"> UNICEF Supply Division costs for Bundled Measles (M) or Measles Rubella (MR) vaccine (vaccine vials, diluent, Auto-Disable (AD) and reconstitution syringes, safety boxes, plus freight and handling). A wastage rate of 10% is included. Costs are projected to rise by 3% per year. Operational costs include planning, training, communication and social mobilization, transport and logistics, waste management, human resources, monitoring, supervision and other associated costs. Cost of deploying technical assistance at surge capacity, which provides support to countries implementing SIAs. Cost of post-campaign coverage survey is \$150,000 for each campaign.
2. Measles-Rubella (MR) Catch-up Campaigns for the Introduction of Rubella Vaccine	<ul style="list-style-type: none"> UNICEF Supply Division costs for bundled MR vaccine (vaccine vials, diluent, AD and reconstitution syringes and safety boxes, plus freight and handling). A wastage rate of 10% is included. Costs are projected to rise by 3% per year. Operational costs include planning, training, communication and social mobilization, transport and logistics, waste management, human resources, monitoring, supervision and other associated costs. Cost of deploying technical assistance at surge capacity to support countries implementing follow-up SIAs. Cost of post-campaign coverage survey is \$150,000 for each campaign.
3. Surveillance	<ul style="list-style-type: none"> Costs reflect 2015 field surveillance and laboratory requirements through 2020 that are beyond government support and the support provided through the GPEI infrastructure. Costs in this category are projected to increase by 5% per year.
4. Outbreak Preparedness and Response	<ul style="list-style-type: none"> Costs reflect estimation to support outbreak preparedness and response including vaccination costs. Costs are projected to rise by 5% per year from the 2016 costs of \$12.6 million.
5. Communication	<p>This category represents the aggregated costs for global, regional, and country-level advocacy and promotion activities estimated at \$1.0 million in 2015, with 5% increase annually. This does not include in-country social mobilization.</p>
6. Research and Innovation	<p>This category includes research and innovation activities focused on capacity building and ensuring metrics for high quality technical assistance by WHO, UNICEF, CDC and partners.</p> <p>Estimated \$1.5 million will be required in 2015, with an annual increase of 5%.</p>
7. Operations and Strategic Support (Routine immunization and Human resources)	<ul style="list-style-type: none"> This budget category includes the cost of human resources (HR) and strategic support by M&RI for routine immunization. The HR costs are drawn from M&RI HR mapping and costing analyses. These include ongoing WHO, UNICEF and CDC staff positions at global, regional and selected country levels and technical support in the form of short-term consultants. The routine immunization costs represent key catalytic investments by M&RI in order to strengthening country level routine immunization systems. In 2015, M&RI contributed \$5 million, and projects increasing support by 5% annually.

1 Bundled measles containing vaccine costs include vaccine costs, auto-disable syringes, reconstitution syringes, diluent, and safety boxes, plus 10% wastage rate and freight& handling costs.

Each of the major budget categories and sub-categories is explained below.

1. SUPPLEMENTARY IMMUNIZATION ACTIVITIES

Measles (M) and/or Measles Rubella (MR) follow up SIAs typically targets children aged 9 months to 59 months and occur every 2-4 years. M&RI currently plans to support over 90 follow-up SIAs in 2015-2020. These are listed in Appendix 2 – by country, type of campaign and year. These timetables are projections based on the epidemiology.

M&RI covers up to 100 percent of bundled vaccine costs for measles follow up SIAs in low- and priority lower middle-income countries. Currently, Gavi has committed to cover all costs of one round of measles follow-up SIAs targeting children less than five years of age in the six highest burden countries: Afghanistan, Chad, DRC, Ethiopia, Nigeria, and Pakistan.

In total, this category will cover the four sub-categories: 1) vaccines and injection devices, 2) operational costs, 3) technical assistance, and 4) immunization coverage surveys. It will cost \$596 million to cover the four sub-categories over the six year period.

1.1. VACCINE AND INJECTION DEVICES COSTS \$222 MILLION OF THE TOTAL \$596 MILLION MEASLES AND MEASLES RUBELLA FOLLOW-UP CAMPAIGN COSTS

This sub-category represents the cost of procuring bundled M and MR vaccines: the cost of Auto Disable (AD) syringes, re-use prevention reconstitution syringes, and diluent — to ensure injection safety during mass campaigns. The cost also includes shipping and freight. UNICEF Supply Division procures vaccines and related items for M&RI, Gavi, and some self-financing countries. Measles and MR vaccine costs used in the projections are provided by UNICEF Supply Division for the 2015–2020 period. In 2015, the average bundled measles vaccine cost is US\$0.37 per dose, while the average cost of the MR vaccine is \$0.76 per dose.

1.2. OPERATIONAL COSTS \$351 MILLION OF THE TOTAL \$596 MILLION MEASLES AND MEASLES RUBELLA FOLLOW-UP CAMPAIGN COSTS

This sub-category represents costs associated with follow-up SIAs, including planning, training, communication and social mobilization, transport and logistics, waste management, human resources, monitoring and supervision. These activities are essential to ensure that campaigns are of high-quality and that children have access to safe and effective vaccines which their parents demand.

M&RI funds up to 50 percent of the operational costs for follow-up SIAs. M&RI requires that countries finance the other 50 percent of the operations costs. Countries are able to raise the balance from either government budget and/or in-country partner resources. For Gavi-supported SIAs, Gavi provides \$0.65 per target individual – equaling 69 percent of operational costs – and government and other partners are expected to cover the balance. Operational costs for M&RI in 2015 were calculated at \$0.94 per target individual. Operational costs are projected to increase by 3% annually.



1.3. TECHNICAL ASSISTANCE \$6.59 MILLION OF THE TOTAL \$596 MILLION MEASLES AND MEASLES RUBELLA FOLLOW-UP CAMPAIGN COSTS

This subcategory represents the cost of deploying technical experts that work to ensure high quality SIAs. Each year, WHO and CDC conduct trainings and orientations to maintain a cadre of available measles and rubella prevention experts. Examples of technical assistance activities include planning and coordination for campaigns, development of communication strategies, logistics management, and coverage surveys. WHO, UNICEF, and CDC deploy national and/or international experts based on country requirements. implementing follow-up M/MR SIAs. The estimated cost for this is \$2.26 million. The total requirement for this sub budget category from 2015 through 2020 is \$6.96 million.

1.4. POST-CAMPAIGN AND ROUTINE IMMUNIZATION COVERAGE SURVEYS \$12.6 MILLION OF THE TOTAL \$596 MILLION MEASLES (M) AND MEASLES RUBELLA (MR) FOLLOW-UP CAMPAIGN COSTS

This sub-category represents the cost of conducting surveys during and after the campaign. These surveys play a valuable role in assessing the effectiveness of communications strategies, identifying pockets of unimmunized children, understanding the reasons for non-vaccination, and addressing these immunization gaps. This information also helps determine the true effectiveness of the campaign in reaching previously unvaccinated children and serve as a method to determine if administrative campaign reports are accurate.





2. MEASLES AND RUBELLA CATCH-UP VACCINATION CAMPAIGNS \$1.4 BILLION (57% OF 2015-2020 FRR)

In this document, a catch-up campaign refers to a one time nationwide round of MR vaccine conducted before the introduction of rubella containing vaccines (RCVs) in a country's routine immunization schedule, as recommended by WHO. Catch-up campaigns typically target children from 9 months to under 14 years old, regardless of their history of measles disease or vaccination status.

Gavi covers the MR catch-up costs in Gavi-eligible countries. M&RI covers the costs for MR introduction in non Gavi-eligible countries, unless those countries are self-financing. This FRR projects support costs for 49 MR catch-up campaigns over the period 2015-2020. (See Appendix 2).

The \$1.4 billion projected for catch-up campaigns over a six year period covers vaccines and injection devices costs, operations, technical assistance and post-campaign immunization surveys.

2.1. VACCINES AND INJECTION DEVICES COSTS: \$664 MILLION OF THE TOTAL \$1.4 BILLION FOR MEASLES AND RUBELLA CATCH-UP VACCINATION CAMPAIGNS COSTS

This subcategory represents the cost of procuring bundled MR vaccines for catch-up SIAs. It also includes the cost of vaccines and diluent, AD and reconstitution syringes, and freight charges. MR vaccine costs used in the budget calculations were provided by UNICEF SD for the 2015-2020 period. In 2015, the average cost of bundled MR vaccine is \$ 0.76 per dose. UNICEF SD procures the vaccines and related items at negotiated rates.

2.2. OPERATIONAL COSTS: \$807 MILLION OF THE TOTAL \$1.4 BILLION FOR MEASLES AND RUBELLA CATCH-UP VACCINATION CAMPAIGNS COSTS

For details on this subcategory, please see above, section 1.2

2.3. TECHNICAL ASSISTANCE AND SURGE CAPACITY \$6.4 MILLION OF THE TOTAL \$1.4 BILLION FOR MEASLES AND RUBELLA CATCH-UP VACCINATION CAMPAIGNS COSTS

For details on this subcategory, please see above, section 1.3

2.4. POST-CAMPAIGN AND ROUTINE IMMUNIZATION COVERAGE SURVEYS \$7.95 MILLION OF THE TOTAL \$1.4 BILLION FOR MEASLES AND RUBELLA CATCH-UP VACCINATION CAMPAIGNS COSTS

For details on this subcategory, please see above, section 1.4

3. SURVEILLANCE \$104 MILLION (4% OF 2015-2020 FRR)

Disease surveillance systems are an essential part of an immunization program. Surveillance systems help to identify immunity gaps, determine if there are trends in cases, and inform where vaccination activities should be occurring. WHO coordinates the vast laboratory network that monitors the elimination of measles and rubella, confirms cases, and provides quality control activities. As of June 2015, there are 723 laboratories that serve the 194 WHO Member States. In 2014, this network processed over 160,000 measles specimens and more than 100,000 specimens for rubella.

4. OUTBREAK PREPAREDNESS AND RESPONSE \$78 MILLION (3% OF 2015-2020 FRR)

As one of the most contagious diseases known to humankind, measles can cause large outbreaks in communities with low immunity to the disease. For this reason, outbreak preparedness is a core elements of the Strategic Plan. In 2013, Gavi established a measles Outbreak Response Fund (ORF) to provide \$55 million from 2013-2017. The ORF, which is managed by M&RI, has been used to support short term outbreak response activities in Nigeria, Pakistan, DRC, Chad, Sudan, Uganda, Kenya, and Vietnam. While this fund is supported through 2017, a \$30 million shortfall is projected in 2018-2020.



5. COMMUNICATION \$6.74 MILLION (0.26% OF 2015-2020 FRR)

An essential part of the work of M&RI is to support country and regional disease control goals with effective communications to inform stakeholders about the impact that measles and rubella have on individuals, families, communities and countries. At the same time, there is a need to engage traditional and new partners to work together to ensure no child dies from measles or is born with congenital rubella syndrome. Both of these objectives must be supported with consistent, relevant and powerful messaging and products that are widely distributed to countries, partners and stakeholder organizations. A dedicated website and effective use of social media are vital in sharing measles and rubella technical information, news, advocacy materials and research and programmatic tools. M&RI communications work also requires effective outreach through media and advocacy activities that promote measles and rubella elimination particularly in regions where elimination goals are at risk. Lastly, communications work supports resource mobilization efforts at both domestic and international levels and ensures measles and rubella remain on the global health agenda to receive necessary attention and support. A total of \$6.74 million is required for M&RI communications activities over the 2015-2020 period. It should be noted that this figure does not include the costs of country-level social mobilization activities, which are budgeted for in immunization operations expenses.

6. RESEARCH AND INNOVATION \$10.1 MILLION (0.38% OF 2015-2020 FRR)

Research is an essential element in promoting technical and programmatic innovations and ensuring M&RI is using evidence-based policies and procedures that help to eliminate measles and rubella. M&RI's Research and Innovation Working Group collaborates with the WHO Strategic Advisory Group of Experts (SAGE) on Immunization to develop a robust research agenda. Investments in research and development can help refine innovations such as microneedle patches that will help deliver the MR vaccine in a more efficient manner.

7. OPERATIONS AND STRATEGIC SUPPORT \$251 MILLION (10% OF 2015-2020 FRR)

The operations and strategic support in this budget support the human resources needed to staff the work of M&RI. The operations and strategic support also support the catalytic investments in routine immunization that ensure there is integration between the work of SIAs and routine immunization activities in the 77 priority countries.



7.1. ROUTINE IMMUNIZATION SUPPORT \$33.7 MILLION OF THE TOTAL \$251 MILLION OF THE OPERATIONS AND STRATEGIC SUPPORT COSTS

M&RI recognizes that strong routine immunization systems are essential to achieving high levels of population immunity that are necessary to achieve measles and rubella elimination. Well planned SIAs can strengthen routine immunization systems and can also be used to deliver a range of other life saving measures— particularly in areas with limited access to health services. While M&RI is not the primary funder of routine immunization programs, the Initiative has identified and committed to supporting key investments in routine immunization systems. M&RI Routine Immunization Working Group has identified a list of activities that they plan to invest \$5 million in annually.

7.2 TECHNICAL ASSISTANCE: REGULAR STAFF AND SURGE CAPACITY \$217 MILLION OF THE TOTAL \$251 MILLION OF THE OPERATIONS AND STRATEGIC SUPPORT

Achieving immunization targets ultimately rests with national authorities. Nevertheless, partners play an essential role in providing technical assistance to national governments in planning and implementing programmatic activities. M&RI has accumulated a wealth of experience and expertise that can support ministries of health. M&RI, through WHO, UNICEF and CDC, provides qualified technical experts to partner with countries to ensure their immunization activities are of high-quality.

When a country does not have the required specific technical skills, M&RI deploys experts to support government and in-country partners in overall coordination, micro planning, guiding course adjustments in logistics, communications, vaccine and cold chain management, injection safety and training — anything that may be required to realize high quality vaccination activities. The deployment of technical support is determined on a case-by-case basis according to country requests.

Although M&RI has 77 focus countries (including all GAVI eligible countries), only 47 are scheduled to receive technical assistance from international or national staff and/or consultants. This determination is based on the experience and insights derived from GPEI. It is projected that when staff are deployed to



provide technical assistance, they will be in the countries of assignment over the full 2016-2020 period, mainly in WHO or UNICEF staff positions. Calculations are based on the following:

- 1 mid-level international staff per 20 million population (up to 2 maximum)
- 1 national staff (mid-level per 10 million population (up to 5 maximum)
- 1 international consultant per 20 million population (up to 4 maximum) for 4 months of deployment
- 1 national consultant per 10 million population (up to 10 maximum) for 4 months of deployment

It should be noted that surge technical assistance is covered under the budgets for SIAs, while non-surge technical assistance staffing is grouped under the budget for operations and strategic support.

M&RI has greatly benefitted from the GPEI platform and infrastructure. With GPEI activities winding down and in line with the polio legacy planning, further progress in measles and rubella control will mean that M&RI assumes more of the costs of the infrastructure and human resources for field support and supervision. As such, M&RI core partners would need personnel at their headquarters and regional offices, where applicable. (See Table 3)

TABLE 3: SUMMARY OF M&RI HUMAN RESOURCE REQUIREMENTS, 2016-2020

STAFF			INTERNATIONAL							NATIONAL						
WHO REGION	INTER-NATIONAL	NATIONAL	REGION	2016	2017	2018	2019	2020	TOTAL	WHO REGION	2016	2017	2018	2019	2020	TOTAL
AFRO	\$15,318,447	\$22,069,472	AFRO	\$2,827,541	\$2,941,484	\$3,059,143	\$3,181,509	\$3,308,769	\$15,318,446	AFRO	\$4,027,796	\$4,248,635	\$4,418,580	\$4,595,324	\$4,779,137	\$22,069,472
EMRO	\$6,838,859	\$9,475,010	EMRO	\$1,262,343	\$1,313,214	\$1,365,743	\$1,420,372	\$1,477,187	\$6,838,859	EMRO	\$1,740,946	\$1,821,295	\$1,894,147	\$1,969,913	\$2,048,709	\$9,475,010
EURO	\$1,247,844	\$1,268,052	EURO	\$230,332	\$239,614	\$249,199	\$259,167	\$269,533	\$1,247,845	EURO	\$234,696	\$243,345	\$253,097	\$263,202	\$273,730	\$1,268,070
SEARO	\$3,900,972	\$3,379,103	SEARO	\$720,056	\$749,074	\$779,037	\$810,198	\$842,606	\$3,900,971	SEARO	\$618,732	\$650,040	\$676,042	\$703,083	\$731,207	\$3,379,104
WPRO	\$3,328,971	\$2,542,980	WPRO	\$614,474	\$639,237	\$664,806	\$691,399	\$719,055	\$3,328,971	WPRO	\$465,631	\$489,195	\$508,763	\$529,113	\$550,278	\$2,542,980
Global	\$54,418,642		Global	\$10,250,000	\$10,557,500	\$10,874,225	\$11,200,452	\$11,536,465	\$54,418,642							
Regional Offices	\$73,531,531		Regional Offices	\$13,850,000	\$14,265,500	\$14,693,465	\$15,134,269	\$15,588,297	\$73,531,531							
TOTAL	\$158,585,266	\$38,734,617	TOTAL	\$29,754,746	\$30,705,623	\$31,685,618	\$32,697,366	\$33,741,912	\$158,585,265	Total	\$7,087,801	\$7,452,510	\$7,750,629	\$8,060,635	\$8,383,061	\$38,734,636
		\$197,319,883														

BUDGET PROCESS & MONITORING



The estimates summarized in this document reflect requirements to support activities to be implemented by national governments with both internal and external support. The FRR is based on national governments' measles and rubella control plans: information regarding routine immunization and SIAs, surveillance costs, current epidemiological data and birth rates. WHO and UNICEF work together to develop a harmonized global budget forecast.

M&RI is steered by the Management Team, which functions through five working groups, one of which is tasked with generating the FRR. The FRR Working Group closely monitors and updates the estimates based on the best available information. The FRR Working Group collaborates with the Resource Mobilization and Advocacy Working Group.

MONITORING AND PROGRAM IMPLEMENTATION

The tracking of progress, identifying obstacles, and the monitoring of the current global disease burden is essential to ensure M&RI is achieving its goals. Progress is monitored on an annual basis, with results reported in M&RI's Annual Report. Full versions of the Strategic Plan and the Annual Report can be accessed [here](#). A set of indicators to assist countries track progress is included in the Strategic Plan.

Program implementation is closely monitored by M&RI through regular teleconferences with WHO and UNICEF regional offices, CDC, and other partners. Countries that receive M&RI support are required to submit reports on their performance against defined targets and expenditures. M&RI also requires and supports countries to conduct and publish post-SIA coverage surveys to verify the immunization coverage. The final proof of M&RI's progress is through disease surveillance and reporting outcomes to WHO.



OVERVIEW OF RESOURCE MOBILIZATION, ACHIEVEMENTS AND WAY FORWARD



Between 2001 and 2014, M&RI raised and deployed \$1.2 billion for measles and rubella control/elimination globally

M&RI needs timely and sufficient funds to fully implement all of its activities. Between 2001 and 2014, M&RI raised and deployed \$1.2 billion for measles and rubella control/elimination globally (Figure 2). Over this same period, the main contributors were the American Red Cross, CDC, the Canadian Department of Foreign Affairs, Trade and Development (formerly CIDA), the Bill & Melinda Gates Foundation, The United Kingdom's Department for International Trade and Development, the International Finance Facility for Immunisation, the Church of Jesus Christ of the Latter-day Saints, Lions Club International, the Norwegian Ministry of Foreign Affairs, UNICEF and UNF. In addition, there have been significant financial contributions from other public and private sector partners.

M&RI projects a total of \$2.6 billion required to fully implement the 2015-2020 planned activities. National governments are expected to contribute \$1.1 billion of these funds – reflecting countries' commitment to ensuring that all children within their borders are vaccinated against measles and rubella. M&RI expects to raise an estimated \$266 million from its traditional partners, while Gavi has committed to finance approximately \$800 million – with the largest portion going to MR campaigns. These contributions leave an estimated shortfall of \$431 million over the 2015-2020 period.

If M&RI is not able to secure timely and sufficient funds, it will have to scale back activities, delay, or cancel immunization campaigns and other events – ultimately leaving children unvaccinated and therefore unprotected against measles and rubella. M&RI continues to engage traditional and new donors to partner on the global measles and rubella control and elimination goals. Through partnership, M&RI, countries, and donors can work together towards a world where parents will be spared the sorrow of a having a child born with congenital rubella syndrome, or watch helplessly as their child suffer from the devastating impact and possible death that comes from measles, while knowing that their children could have been protected with a vaccine that costs \$2 per child.

FIGURE 3: DONORS TO MEASLES & RUBELLA INITIATIVE, 2001 – 2015

CONTRIBUTION	
UNF	\$80,238,450
ARC	\$163,122,942
CDC	\$371,997,602
GAVI	\$74,646,500
IFFim	\$139,000,000
Gates	\$30,815,000
LDS	\$14,900,000
Merck	\$2,300,000
Norway	\$21,539,000
DFID	\$60,568,000
Lions	\$13,000,000
UNICEF	\$131,142,497
Japan	\$13,390,752
CIDA	\$45,300,000

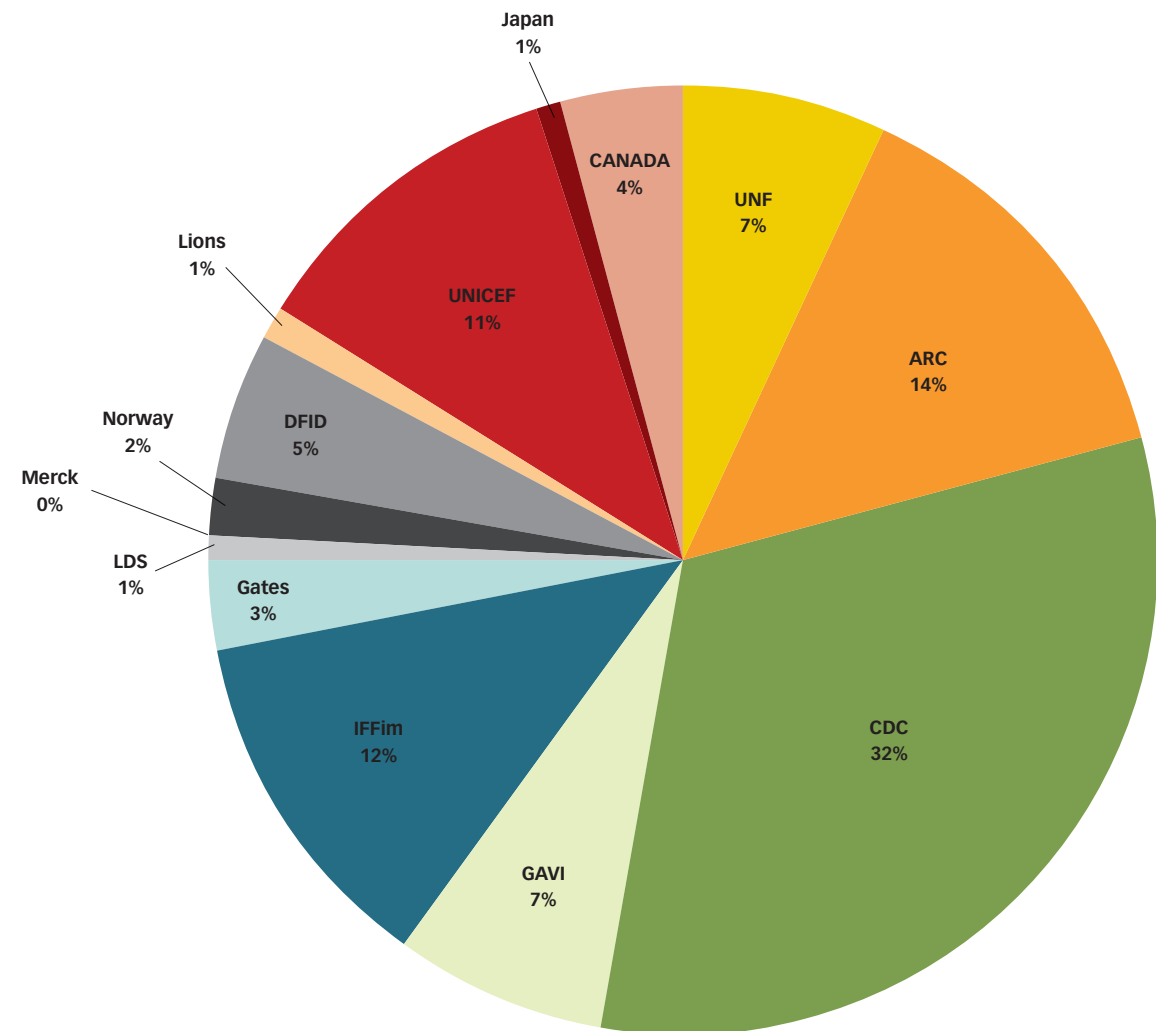


FIGURE 4. MEASLES & RUBELLA INITIATIVE CUMULATIVE CONTRIBUTIONS, 2001 - 2015

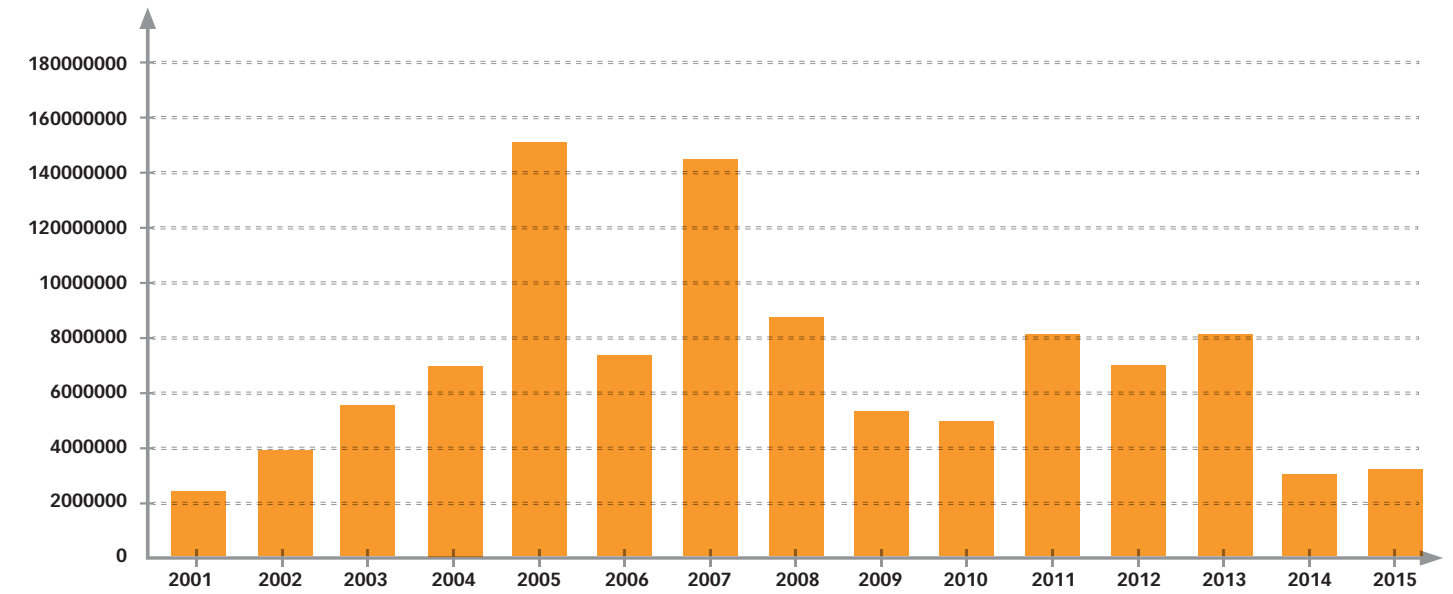
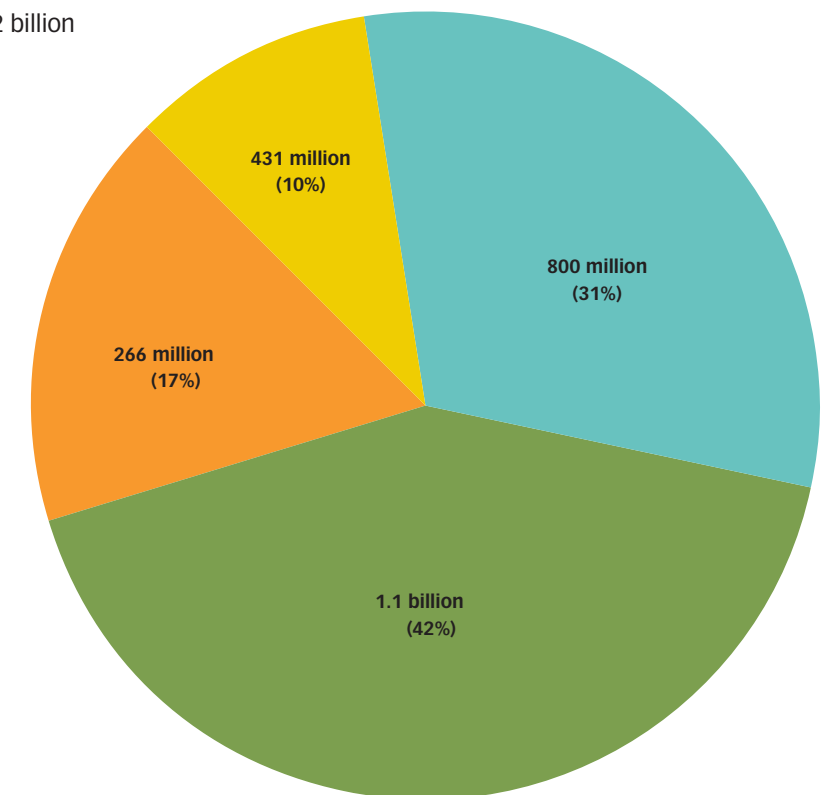


FIGURE 5: FUNDING REQUIREMENTS, EXPECTED CONTRIBUTIONS AND FUNDING GAP

Expected Contribution and Funding Gap, 2015- 2020
 Total Funding Requirement for 2015- 2020 is \$ 2.2 billion

Gavi	800,000,000.00
National Governments	1,103,304,532
M&RI Traditional Partners	266,692,500
Funding gap	431,423,818



APPENDIX 1: LIST OF 77 MEASLES AND RUBELLA FOCUS COUNTRIES

EAST AFRICAN REGION (AFR/ES)

1. Angola
2. Botswana
3. Burundi
4. Comoros
5. Eritrea
6. Ethiopia
7. Kenya
8. Lesotho
9. Madagascar
10. Malawi
11. Mozambique
12. Namibia
13. Rwanda
14. South Africa
15. South Sudan
16. Swaziland
17. Tanzania
18. Uganda
19. Zambia
20. Zimbabwe

WEST AFRICAN REGION (AFR/W)

21. Algeria
22. Benin
23. Burkina Faso
24. Cape Verde
25. Cote d'Ivoire
26. Gambia
27. Ghana
28. Guinea
29. Guinea-Bissau
30. Liberia
31. Mali
32. Mauritania
33. Niger
34. Nigeria
35. Senegal
36. Sierra Leone
37. Togo

CENTRAL AFRICAN REGION (AFR/C)

38. Cameroon
39. Central African Republic
40. Chad
41. Congo, Brazza
42. Congo, DR
43. Equatorial Guinea
44. Gabon
45. Sao Tome & Principe

SOUTH-EAST ASIA REGION (SEAR)

46. Bangladesh
47. India
48. Indonesia
49. Korea, DRP
50. Myanmar
51. Nepal
52. Timor Leste

WESTERN PACIFIC REGION (WPR)

53. Cambodia
54. Laos
55. Papua New Guinea
56. Philippines
57. Samoa
58. Solomon Islands
59. Vanuatu
60. Viet Nam
61. Kiribati
62. Micronesia
63. Tuvalu

EASTERN MEDITERRANEAN REGION (EMR)

64. Afghanistan
65. Djibouti
66. Iraq
67. Lebanon
68. Pakistan
69. Somalia
70. Sudan
71. Syria
72. Yemen

AMERICAS (AMR)

73. Bolivia
74. Dominican Republic
75. Haiti

EUROPE (EUR)

76. Azerbaijan
77. Tajikistan



ANNEX



TABLE 1: DETAILED SUMMARY OF RESOURCE REQUIREMENTS FOR 2015 (ALL FIGURES IN US\$ MILLIONS)

SER. #	COUNTRY	WHO REGION	TYPE OF CAMPAIGN	FINANCING SOURCE	TARGET AGE GROUP	TARGET POPULATION	TOTAL
1	Eritrea	AFRO/ES	M follow-up	M&RI	9m-59m	485,133	\$673,944
2	Namibia	AFRO/ES	MR Catch-up	SELF	9m-39y	1,801,766	\$2,798,596
3	Zimbabwe	AFRO/ES	MR Catch-up	GAVI	9m-14y	5,264,856	\$7,965,338
4	Uganda	AFRO/ES	M follow-up	M&RI	9m-59m	7,246,432	\$8,076,147
5	Ethiopia	AFRO/ES	M follow-up	GAVI	9m-59m	11,777,083	\$12,719,250
6	Ethiopia	AFRO/ES	M follow-up	M&RI	6y-14y	28,414,550	\$31,177,714
7	Kenya	AFRO/ES	MR Catch-up	GAVI	9m-59m	18,972,922	\$20,728,756
8	Cameroon	AFRO/C	MR catch-up	GAVI	9m-14y	8,966,158	\$13,418,252
9	Central African Republic	AFRO/C	M follow-up	M&RI	9m-59m	770,205	\$1,069,821
10	Benin	AFRO/W	M follow-up	M&RI	9m-9y	399,844	\$581,832
11	Togo	AFRO/W	M follow-up	M&RI	9m-9y	832,159	\$1,048,732
12	Mali	AFRO/W	M follow-up	M&RI	9m-14y	8,308,320	\$9,198,986
13	Liberia	AFRO/W	M follow-up	SELF	9m-59m	551,364	\$745,474
14	Sierra Leone	AFRO/W	M follow-up	SELF	9m-59m	1,344,407	\$1,677,960
15	Gambia	AFRO/W	MR Catch-up	GAVI	9m-14y	899,917	\$1,472,878
16	Nigeria	AFRO/W	M follow-up	GAVI	9m-59m	28,248,759	\$31,034,660
17	Niger	AFRO/W	M follow-up	M&RI	9m-59m	3,334,387	\$3,827,138
18	Gabon	AFRO/W	M follow-up	SELF	10m-59m	264,458	\$435,615
19	Guinea	AFRO/W	M follow-up	SELF	6m-59m	2,209,624	\$2,612,394
20	Equatorial Guinea	AFRO/W	M follow-up	SELF	9m-59 m	116,686	\$276,021
21	Guinea-Bissau	AFRO/W	M follow-up	M&RI	9m-59m	302,517	\$476,718
22	Pakistan	EMR	M follow-up	GAVI	9m-9y	35,477,945	\$38,842,181
23	Iraq	EMR	M follow-up	SELF	19y-25y	3,000,000	\$3,414,000
24	Afghanistan	EMR	M follow-up	GAVI	9m-59m	5,498,739	\$6,425,605
25	Syria	EMR	MMR follow-up	SELF	9m-59m	2,560,400	\$4,758,720
26	Somalia	EMR	M follow-up	M&RI	9m-14y	4,366,200	\$4,965,496
27	Myanmar	SEAR	MR catch-up	GAVI	9m-14y	13,101,238	\$19,496,820
28	Timor Leste	SEAR	MR catch-up	M&RI	9m-14y	490,419	\$870,916
29	India	SEAR	MR catch-up	GAVI	9m-14y	62,910,735	\$93,004,780
30	Nepal	SEAR	MR follow-up	M&RI	9m-59m	2,807,403	\$4,352,882
31	Viet Nam	WPR	MR catch-up	GAVI	9m-14y	6,315,567	\$9,433,883
32	Papua New Guinea	WPR	MR catch-up	GAVI	6m-14y	3,003,922	\$4,629,765
33	Vanuatu	WPR	MR catch-up	M&RI	9m-14y	88,669	\$280,343
34	Dominican Republic (the)	AMR	MR Follow-up	SELF	9m-59m	1,576,627	\$2,467,642
35	Bolivia	AMR	MR Follow-up	SELF	9m-59 m	1,200,000	\$1,914,000
35	Haiti	AMR	MR follow-up	M&RI	9m-59m	1,250,961	\$1,988,913
SUB-TOTAL SIAS (PROGRAMMABLE)							348,862,171

TABLE 2: DETAILED SUMMARY OF RESOURCE REQUIREMENTS FOR 2016 (ALL FIGURES IN US\$ MILLIONS)

SER. #	COUNTRY	WHO REGION	TYPE OF CAMPAIGN	FINANCING SOURCE	TYPE OF VACCINE	TARGET AGE GROUP	TARGET POPULATION	TOTAL
1	Botswana	AFRO/ES	MR Catch-up	SELF	MR	9m-14y	680,399	\$1,340,698
2	Comoros	AFRO/ES	MR Catch-up	GAVI	MR	9m-14y	326,363	\$721,135
3	Lesotho	AFRO/ES	MR Catch-up	GAVI	MR	9m-14y	758,368	\$1,489,144
4	Madagascar	AFRO/ES	MR Catch-up	GAVI	MR	9m-14y	10,583,643	\$18,402,960
5	Malawi	AFRO/ES	MR Catch-up	GAVI	MR	9m-14y	7,093,967	\$14,215,159
6	Mozambique	AFRO/ES	MR Catch-up	GAVI	MR	9m-14y	12,474,375	\$22,164,156
7	South Africa	AFRO/ES	MR Catch-up	SELF	MR	9m-14y	15,678,943	\$27,588,150
8	South Sudan	AFRO/ES	M follow-up	M&RI	M	6m-59m	1,931,748	\$2,933,860
9	Swaziland	AFRO/ES	MR Catch-up	M&RI	MR	9m-14y	483,937	\$996,890
10	Zambia	AFRO/ES	MR Catch-up	GAVI	MR	9m-14y	7,415,249	\$13,310,686
11	Chad	AFRO/C	M follow-up	GAVI	M	9m-59m	2,619,606	\$3,762,468
12	Congo, Republic	AFRO/C	MR catch-up	SELF	MR	9m-14y	2,033,514	\$3,784,651
13	Congo, DR (50%)	AFRO/C	M follow-up	GAVI	M	6m-59m	6,318,004	\$8,867,305
14	Togo	AFRO/W	MR catch-up	GAVI	MR	9m-14y	3,046,365	\$5,493,139
15	Somalia	EMRO	CHD	M&RI	M	9 m-59 m	1,245,218	\$1,931,044
16	Sudan	EMRO	MR catch-up	GAVI	MR	9m-14y	16,041,653	\$28,406,893
17	Korea, DRP	SEAR	MR Catch-up	GAVI	MR	9m-14y	10,617,262	\$18,730,209
18	India (30%)	SEAR	MR Catch-up	SELF	MR	9m-14y	224,488,808	\$393,381,414
19	Indonesia (45%)	SEAR	M follow-up	SELF	MR	6m - 59m	9,955,441	\$13,589,845
SUB-TOTAL SIAS (PROGRAMMABLE)								\$581,109,806

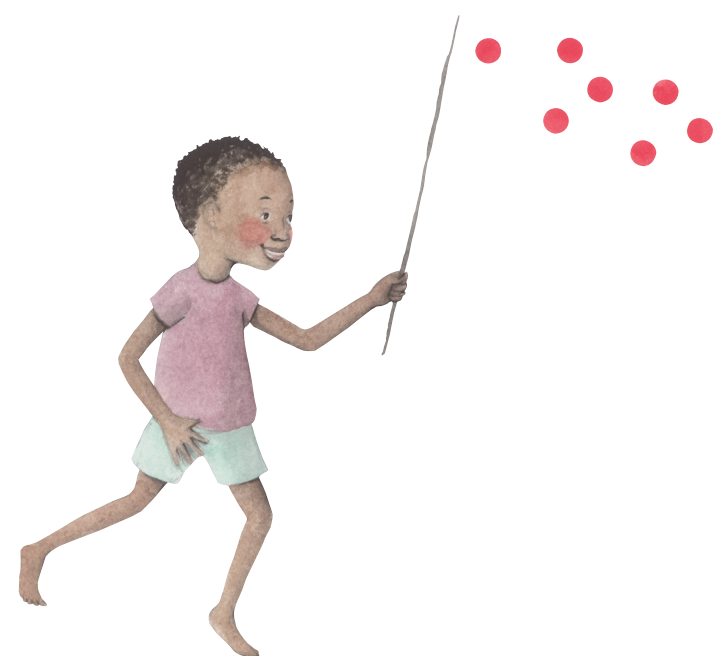


TABLE 3 DETAILED SUMMARY OF RESOURCE REQUIREMENTS FOR 2017 (ALL FIGURES IN US\$ MILLIONS)

SER. #	COUNTRY	WHO REGION	TYPE OF CAMPAIGN	FINANCING SOURCE	TARGET AGE GROUP	TARGET POPULATION	TOTAL
1	Angola	AFRO/ES	MR Catch-up	SELF	9m - 14y	11,274,518	\$20,532,132
2	Burundi	AFRO/ES	MR Catch-up	GAVI	9m - 14y	2,148,031	\$4,028,456
3	Ethiopia	AFRO/ES	MR Catch-up	GAVI	9m - 14y	41,888,428	\$75,889,171
4	Rwanda	AFRO/ES	MR follow-up	M&RI	9m - 59m	1,952,581	\$3,664,646
5	Benin	AFRO/W	MR Catch-up	GAVI	9m - 14y	4,763,249	\$8,735,848
6	Cape Verde	AFRO/W	MR Catch-up	SELF	9m - 59m	47,880	\$236,184
7	Cote d'Ivoire	AFRO/W	MR Catch-up	GAVI	9m - 14y	9,097,628	\$16,601,730
8	Congo, DR (50%)	AFRO/W	M follow-up	GAVI	6m - 59m	6,440,902	\$9,290,854
9	Ghana	AFRO/W	MR follow-up	M&RI	9m - 59m	3,777,915	\$6,950,247
10	Mauritania	AFRO/W	MR Catch-up	GAVI	9m - 14y	1,678,455	\$3,247,219
11	Nigeria	AFRO/W	M follow-up	GAVI	9m - 9y	34,299,079	\$48,201,720
12	Senegal	AFRO/W	MR follow-up	M&RI	9m - 59m	2,590,563	\$4,889,013
13	Sierra Leone	AFRO/W	MR Catch-up	GAVI	9m - 14y	2,582,592	\$4,874,666
14	Central African Republic	AFRO/C	M follow-up	M&RI	6m - 59m	720,221	\$1,303,107
15	Sao Tome & Principe	AFRO/C	MR Catch-up	GAVI	9m - 14y	86,936	\$306,485
16	Somalia	EMRO	CHD	M&RI	9 m -59 m	2,121,665	\$3,199,114
17	Yemen	EMRO	MR follow-up	M&RI	9m - 59m	3,634,049	\$6,779,288
18	India (33%)	SEARO	MR Catch-up	SELF	9m - 14y	119,856,250	\$184,450,403
19	Indonesia (55%)	SEARO	M follow-up	SELF	9m - 59m	12,035,205	\$16,878,935
20	Cambodia	WPRO	M follow-up	M&RI	9m - 59m	1,823,698	\$3,432,656
21	Laos	WPRO	M follow-up	M&RI	9m - 59m	850,232	\$1,680,418
SUB-TOTAL SIAS (PROGRAMMABLE)							\$425,172,293

TABLE 4 DETAILED SUMMARY OF RESOURCE REQUIREMENTS FOR 2018 (ALL FIGURES IN US\$ MILLIONS)

SER. #	COUNTRY	WHO REGION	TYPE OF CAMPAIGN	FINANCING SOURCE	TARGET AGE GROUP	TARGET POPULATION	TOTAL
1	Kenya	AFRO/ES	MR follow-up	M&RI	9m - 59m	7,464,953	\$14,134,813
2	South Sudan	AFRO/ES	MR catch-up	GAVI	9m - 14y	5,377,500	\$10,328,150
3	Uganda	AFRO/ES	MR catch-up	GAVI	9m - 14y	20,875,824	\$39,067,034
4	Tanzania	AFRO/ES	MR follow-up	M&RI	9m - 59m	9,322,380	\$17,513,627
5	Zimbabwe	AFRO/ES	MR follow-up	M&RI	9m - 59m	2,233,496	\$4,380,303
6	Namibia	AFRO/ES	MR follow-up	SELF	9m - 59m	295,029	\$710,754
7	Burkina Faso	AFRO/W	MR follow-up	M&RI	9m - 59m	3,261,126	\$6,303,694
8	Cameroon	AFRO/W	MR follow-up	M&RI	9m - 59m	3,921,339	\$7,531,691
9	Guinea	AFRO/W	MR catch-up	GAVI	9m - 14y	5,461,895	\$10,397,125
10	Guinea-Bissau	AFRO/W	MR catch-up	GAVI	9m - 14y	776,232	\$1,593,792
11	Liberia	AFRO/W	MR catch-up	GAVI	9m - 14y	2,001,982	\$3,949,687
12	Mali	AFRO/W	MR catch-up	GAVI	9m - 14y	8,515,073	\$16,064,036
13	Niger	AFRO/W	MR catch-up	GAVI	9m - 14y	10,871,717	\$20,447,394
14	Chad	AFRO/C	M follow-up	GAVI	9m - 59m	2,725,595	\$4,135,601
15	Equatorial Guinea	AFRO/C	MR catch-up	SELF	9m - 14y	330,253	\$764,271
16	Gabon	AFRO/C	MR catch-up	SELF	9m - 14y	684,578	\$1,447,315
17	Bangladesh	SEARO	MR follow-up	M&RI	9m - 59m	15,103,746	\$28,342,968
18	Myanmar	SEARO	MR follow-up	M&RI	9m - 59m	4,266,210	\$8,173,151
19	Nepal	SEARO	MR follow-up	M&RI	9m - 59m	2,770,552	\$5,379,227
20	Timor Leste	SEARO	MR follow-up	M&RI	9m - 59m	199,802	\$521,632
21	Afghanistan	EMRO	MR catch-up	GAVI	9m - 14y	14,412,635	\$27,057,501
22	Djibouti	EMRO	MR catch-up	GAVI	9m - 14y	313,249	\$732,643
23	Pakistan	EMRO	MR catch-up	GAVI	9m - 14y	62,869,662	\$117,463,571
24	Somalia	EMRO	CHD	M&RI	9m - 59m	1,303,134	\$2,113,482
25	Papua New Guinea	WPRO	MR follow-up	M&RI	9m - 59m	1,022,013	\$2,126,944
26	Solomon Islands	WPRO	MR follow-up	M&RI	9m - 59m	82,834	\$304,071
27	Philippines	WPRO	MR follow-up	SELF	9m - 59m	12,044,467	\$22,736,710
28	Haiti	PAHO	MR follow-up	M&RI	9m - 59m	1,251,660	\$2,478,088
SUB-TOTAL SIAS (PROGRAMMABLE)							\$376,199,269



TABLE 5 DETAILED SUMMARY OF RESOURCE REQUIREMENTS FOR 2019 (ALL FIGURES IN US\$ MILLIONS)

SER. #	COUNTRY	WHO REGION	TYPE OF CAMPAIGN	FINANCING SOURCE	TARGET AGE GROUP	TARGET POPULATION	TOTAL
1	Comoros	AFRO/ES	MR follow-up	M&RI	9m - 59m	122,069	\$383,152
2	Eritrea	AFRO/ES	MR catch-up	GAVI	9m - 14y	3,172,626	\$6,209,716
3	Lesotho	AFRO/ES	MR follow-up	M&RI	9m - 59m	269,020	\$677,268
4	Madagascar	AFRO/ES	MR follow-up	M&RI	9m - 59m	4,121,778	\$8,175,556
5	Malawi	AFRO/ES	MR follow-up	M&RI	9m - 59m	3,164,937	\$6,305,110
6	Mozambique	AFRO/ES	MR follow-up	M&RI	9m - 59m	4,834,403	\$9,550,110
7	Zambia	AFRO/ES	MR follow-up	M&RI	9m - 59m	3,174,223	\$6,310,046
8	Botswana	AFRO/ES	MR follow-up	SELF	9m - 59m	229,773	\$588,866
9	South Africa	AFRO/ES	MR follow-up	SELF	9m - 59m	5,122,997	\$9,934,924
10	Swaziland	AFRO/ES	MR follow-up	SELF	9m - 59m	174,268	\$482,852
11	Gambia	AFRO/W	MR follow-up	M&RI	9m - 59m	395,140	\$904,717
12	Nigeria	AFRO/W	MR catch-up	GAVI	9m - 14y	34,875,924	\$67,893,895
13	Sierra Leone	AFRO/W	MR follow-up	M&RI	9m - 59m	973,509	\$2,049,082
14	Togo	AFRO/W	MR follow-up	M&RI	9m - 59m	1,184,405	\$2,457,014
15	Central African Republic	AFRO/C	MR catch-up	GAVI	9m - 14y	1,974,730	\$4,260,934
16	Congo, DR	AFRO/C	MR catch-up	GAVI	9m - 14y	13,843,460	\$27,035,169
17	Congo, Republic	AFRO/C	MR follow-up	SELF	9m - 59m	802,663	\$1,712,527
18	Somalia	EMRO	CHD	M&RI	9m - 59m	1,334,198	\$2,224,613
19	Sudan	EMRO	MR follow-up	M&RI	9m - 59m	6,160,432	\$12,072,625
20	Bolivia	PAHO	MR follow-up	SELF	9m - 59m	1,345,993	\$2,720,847
SUB-TOTAL SIAS (PROGRAMMABLE)							\$171,949,023

TABLE 6 DETAILED SUMMARY OF RESOURCE REQUIREMENTS FOR 2020 (ALL FIGURES IN US\$ MILLIONS)

SER. #	COUNTRY	WHO REGION	TYPE OF CAMPAIGN	FINANCING SOURCE	TARGET AGE GROUP	TARGET POPULATION	TOTAL
1	Angola	AFRO/ES	MR follow-up	SELF	9m - 59m	4,592,259	\$9,302,256
2	Burundi	AFRO/ES	MR follow-up	M&RI	9m - 59m	2,220,623	\$4,540,624
3	Ethiopia	AFRO/ES	MR follow-up	M&RI	9m - 59m	15,365,417	\$30,787,529
4	South Sudan	AFRO/ES	MR follow-up	M&RI	9m - 59m	2,061,639	\$4,391,141
5	Benin	AFRO/W	MR follow-up	M&RI	9m - 59m	1,839,006	\$3,822,792
6	Cote d'Ivoire	AFRO/W	MR follow-up	M&RI	9m - 59m	3,624,260	\$7,396,636
7	Mauritania	AFRO/W	MR follow-up	M&RI	9m - 59m	640,608	\$1,428,551
8	Chad	AFRO/C	MR catch-up	GAVI	9m - 14y	7,334,699	\$14,700,559
9	Congo, DR	AFRO/C	MR catch-up	GAVI	9m - 14y	21,869,440	\$43,577,522
10	Equatorial Guinea	AFRO/C	MR follow-up	SELF	9m - 59m	128,352	\$403,084
11	Somalia	EMRO	CHD	M&RI	9m - 59m	1,365,622	\$2,328,204
12	Yemen	EMRO	MR follow-up	M&RI	9m - 59m	3,689,547	\$7,532,569
13	Laos	WPRO	MR follow-up	M&RI	9m - 59m	874,017	\$1,873,387
14	Indonesia	SEAR	MR catch-up	SELF	9m - 14y	22,100,986	\$43,728,724
SUB-TOTAL SIAS (PROGRAMMABLE)							\$175,813,579



