

ELIVERING TOGETHER

on the 2011–2015 strategy

Mid-Term Review report, October 2013



As a co-founder of the GAVI Alliance, WHO is present at every stage of the global effort to ensure universal access to vaccines for people in all communities. This Mid-Term Review to assess the Alliance's progress in delivering our promise comes at a pivotal moment as we develop the Alliance's new strategic direction for the coming years. Dr Margaret Chan, Director-General, World Health Organization

GAVI-SUPPORTED VACCINE LAUNCHES AND NEW CAMPAIGNS, 2011–2013



Source: GAVI Alliance data as of 4 September 2013

Note: a more detailed version of this report is available at midtermreview.gavialliance.org.

The symbol 2 in the printed report indicates that more data points are available in the online report. Unless otherwise stated, reported data is as of 1 September 2013.

Cover photo: Sister Sofia Benti prepares vaccine for Hamed Dawd in Doho Kebele in the Afar region of Ethiopia. Photo by Jiro Ose.



GAVI continues to be a high performing institution providing a very cost-effective health intervention. United Kingdom Multilateral Aid Review Update, 2013

Welcome messages from the Mid-Term Review co-hosts

It is my pleasure to welcome you to Stockholm for the GAVI Mid-Term Review. The health and well-being of children are high on the agenda for the Swedish Government. Furthermore. vaccines are one of the best buys in public health. As well as saving lives, vaccines bring economic benefits. Healthy children are more likely to stay in school, secure gualifications and become productive members of society. Parents to healthy children are able to work for the upbringing of their families and contribute to economic development instead of nursing sick children and paying heavy expenses for health care. Investments in health are therefore a bed rock for economic growth and development.

GAVI is an exciting and innovative partner to us. The combination of research expertise, political engagement, strong private partnerships and advocates from the civil society that make up the GAVI Alliance is very encouraging and the new working methods that GAVI applies are exciting. It is only through effective ways of benefiting from each and everyone's strength and effective collaboration that we can make rapid progress. We need to continue to strive to reach all children with routine immunisation. I am impressed by the results achieved but we still have major work ahead of us.

Hillevi Engström, Minister for International Development Cooperation, Sweden I am delighted to welcome you to the GAVI Alliance's Mid-Term Review. Your presence here is a confirmation of your commitment to the Alliance's mission to save children's lives and protect people's health by increasing access to immunisation. Every child, no matter where he or she is born, has the right to a healthy life and vaccines are one of the best ways to assure this.

As I noted at the GAVI and Global Fund side event during the recent United Nations General Assembly in New York, the GAVI Alliance plays a very significant role in providing better conditions for our children. They have helped to keep our children healthy and given them the best chance to receive an education and go on to be productive members of their communities.

Support provided by GAVI will enable countries to immunise an additional 243 million children from 2011 to 2015, but there is still a long way to go to ensure that everyone has equal access to immunisation. GAVI deserves the support of all leaders desirous of building healthier communities. I pledge my unflinching support as an Immunisation Champion to enable GAVI to achieve its noble objectives.

His Excellency John Dramani Mahama, President, the Republic of Ghana

Foreword by the Chair of the GAVI Alliance Board

In June 2011, the GAVI Alliance (referred to as GAVI or the Alliance throughout this report) held its first ever pledging conference. At this historic meeting, all partners embraced the ambition of immunising an additional quarter of a billion children by 2015, thereby preventing four million future deaths.

Donors have shown their confidence in the Alliance by committing further funding towards this work, ensuring that US\$ 7.4 billion is available until 2015. Existing donors have more than doubled their previous commitments and new donors have joined the Alliance. Several private-sector donors have increased their commitments, while others have made pledges for the first time.

Other partners have also stepped up to the plate. The vast majority of developing countries are meeting their co-financing requirements, and their contributions are increasing as they introduce new vaccines. Price commitments from vaccine manufacturers have turned into signed agreements. GAVI's market shaping efforts have contributed to a one-third reduction in the total cost of fully immunising a child with pentavalent, pneumococcal and rotavirus vaccines since 2010. This means that more children can be immunised and that vaccine programmes can be sustained after GAVI support has ended.

GAVI's innovative public-private partnership approaches have been critical to its success. The International Finance Facility for Immunisation (IFFIm) has raised more than US\$ 4.5 billion since 2006. The Advance Market Commitment (AMC) for pneumococcal vaccines, to which donors committed US\$ 1.5 billion in 2009, has speeded up the introduction of pneumococcal vaccines in developing countries. Increased collaboration with the private sector is helping the Alliance to improve vaccine delivery and become more efficient. Just over two years after the successful pledging conference and midway through GAVI's current strategy period, the Alliance is reaching record numbers of children with life-saving vaccines. More countries than ever are introducing new vaccines, resulting in more deaths averted and increased health and well-being for millions of people. Now we look forward to reviewing both successes and challenges.

There is much left to do. Some countries have postponed their introductions of new vaccines because of global supply constraints or local capacity issues. We need better systems for monitoring immunisation data, and for transporting and storing vaccines. And GAVI partners must continue to work together to make sure that our support to health systems is effective.

Most importantly, it is our collective responsibility as partners of the GAVI Alliance to make sure that no child is left behind. Every child has the right to grow up healthy. Together we can ensure that children everywhere get a better start to life.

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Dagfinn Høybråten Chair of the GAVI Alliance Board



The return on investment for many vaccines appears, conservatively, to be at least as high as the return on investment for spending on primary education.

David Bloom, Professor of Economics and Demography, Harvard University

Immunisation, health and development

The health and immunisation landscape in the developing world is changing at a faster rate than ever before. Some of the world's poorest countries have cut maternal and young child mortality rates by half or more since 2000.¹ Despite substantial population growth, global child mortality has almost halved from 12.6 million in 1990 to 6.6 million today.² Polio, which just 30 years ago crippled and killed hundreds of thousands of individuals every year, mainly children in developing countries, is close to being eradicated.

New vaccines against infectious diseases are coming to market at the fastest rate in history, and developing countries are adding them to their routine immunisation programmes just a few years after they were made available to children in rich countries.

The power of vaccines, combined with investments to strengthen the systems that deliver immunisation and other health services, provide benefits which accrue to all the Millennium Development Goals (MDGs) – particularly the three health goals, MDGs 4, 5 and 6. ^[2] Health is not only a fundamental goal of development, it is also a means to achieving the other development goals relating to poverty reduction.³

Immunisation comes closer to achieving universal coverage than most other health interventions.⁴ In many developing countries the routine immunisation programme is the backbone of health services, and it is often the first service to resume following conflict or natural disaster. Since the GAVI Alliance was launched in 2000, global immunisation coverage rates have increased from 73% to 83%, ^[2] an increase driven largely by dramatic improvements in coverage in developing countries.

There is still a long way to go. More than 22 million children worldwide currently do not have access even to the most basic package of childhood vaccines. This is despite the fact that immunisation is one of the most cost-effective investments in health and development.

Vaccines help people live longer and have healthier lives, but their impact does not end there. Research shows that spending on childhood vaccination programmes also promotes national economic growth and poverty reduction. ^[2] Healthy children attend school more regularly and for longer, and they learn more while they are there. Largely protected from the long-term consequences associated with childhood diseases, including learning disabilities, hearing loss and a variety of other physical disabilities, they tend to be more productive as adults. Parents and other caregivers are often healthier if the children they care for are healthy, and they have lower rates of absenteeism.⁵

Society as a whole also benefits. Through herd immunity, protection extends to those not immunised in a community. Other benefits include decreased antibiotic resistance.⁶ In addition, if children are healthy, families tend to have fewer children and invest more in each child's education, thus boosting economic productivity.⁷

Harvard University scientists estimated an expected return on investment in expanded vaccine coverage of 18% by 2020 – higher than for most other health interventions and similar to the investment return on primary education.⁸ In 2012, some of the leading experts on health economics ranked childhood immunisation as one of the three most cost-effective solutions to advance global welfare. They estimated that spending approximately US\$ 1 billion annually on expanded immunisation coverage would prevent 1 million child deaths per year. Put into economic terms, the benefits would be 20 times greater than the cost.⁹

GAVI was launched at the World Economic Forum in Davos in 2000 as a public-private partnership to address the urgent need to boost access to vaccines in the countries that need them the most. By combining the skills and expertise of the development community with those of the private sector, the Alliance partners – including the Bill & Melinda Gates Foundation, UNICEF, WHO and the World Bank – are helping to redress the global inequities in access to vaccines. By bringing together key players in immunisation from across public and private spheres, the GAVI Alliance is contributing to MDG 8, which aims to develop a global partnership for development.



GAVI has established a strong track record in delivering against its mandate. It has demonstrated impressive results against all its strategic objectives and in helping progress towards MDG 4 targets. Australian Multilateral Aid Assessment, 2012

At the centre of GAVI's work are the efforts and commitment of developing countries, which by the end of 2012 had immunised more than 390 million additional children through GAVI support to routine immunisation, and prevented more than 5 million future deaths. GAVI-supported vaccine campaigns have resulted in a further 100 million individuals being immunised against meningitis A and 68 million against yellow fever in the period 2000–2012. GAVI has also provided funding to strengthen health systems and immunisation services in more than 70 countries, 2 supporting more widespread and equitable access to immunisation and other health services.

The historic gap in access to immunisation between low- and high-income countries is starting to close. In 2000, virtually no low-income countries had introduced vaccines against hepatitis B and *Haemophilus influenzae* type b (Hib), even though these were widely available to children in highincome countries. By the end of 2012, all but one of the world's low-income countries had included the two vaccines in their national immunisation programmes. More recently, attention has shifted to new vaccines. Prior to the launch of GAVI it was common for 10 to 15 years to pass between the time a vaccine was developed and the time it was introduced in developing countries. In 2010, Nicaragua was the first GAVI-supported country to introduce a new pneumococcal vaccine – less than a year after the vaccine was first licensed. In 2019, Nicaragua will graduate from GAVI support and will thus be selffinancing its vaccines.

Similarly, GAVI support is accelerating access to vaccines against human papillomavirus (HPV), the main cause of cervical cancer, for adolescent girls in developing countries.

In 2010, GAVI set out to achieve a number of ambitious goals for the period between 2011 and 2015. The Mid-Term Review assesses GAVI's progress towards meeting those targets, and outlines some of the opportunities and challenges ahead.



GAVI is strongly promoting a corporate focus on the achievement of results.

Multilateral Organisation Performance Assessment Network (MOPAN) Organisational Effectiveness Assessment, 2012

Results

Delivering on the GAVI mission

GAVI's work is guided by a five-year strategy, which includes strategic goals, a series of programmatic targets and a range of indicators to monitor progress towards fulfilling the GAVI Alliance mission: to save children's lives and protect people's health by increasing access to immunisation in poor countries.

In 2011 and 2012, developing countries prevented an additional 1.1 million future deaths and immunised approximately 97 million children with GAVI-funded vaccines. In addition to the children reached with routine immunisation, GAVI-supported immunisation campaigns in 2011 and 2012 have protected 84 million individuals against meningitis A¹⁰ and 22 million against yellow fever.¹¹

Developing countries are on track to immunise an additional 243 million children through GAVI-supported immunisation programmes between 2011 and 2015, preventing close to 4 million future deaths.

Despite a challenging financial climate, developing countries are on track to immunise an additional 243 million children through GAVI-supported routine immunisation programmes between 2011 and 2015, preventing close to 4 million future deaths. A further estimated 300,000 future deaths will be averted through measles vaccine campaigns between 2013 and 2015.

Number of additional children fully immunised with GAVI support (millions)



Sources: WHO/UNICEF Estimates of National Immunization Coverage 2013; United Nations Population Division, World Population Prospects, the 2012 revision

Number of additional future deaths averted (millions)



Source: GAVI and Bill & Melinda Gates Foundation Joint Impact Modelling, 2013^{12}



Aid is only successful if it has a sell-by date. Countries need to match the generosity of donors like the GAVI Alliance. And over time, they should take over the financing altogether. Dr Donald Kaberuka, President, the African Development Bank

Progress towards the strategic goals

The GAVI mission is supported by four strategic goals:

Accelerate the uptake and use of underused and new vaccines by strengthening country decision-making and introduction.

2 Contribute to strengthening the capacity of integrated health systems to deliver immunisation.

Increase the predictability of global financing and improve the sustainability of national financing for immunisation.

Shape vaccine markets to ensure adequate supply of appropriate, quality vaccines at low and sustainable prices for developing countries.

Significant strides have been made and momentum has been built across all the strategic goals. However, the Alliance may fall short of fully achieving some of its ambitious targets for 2011–2015.

Progress towards fulfilling the **first strategic goal** has been strong. Since January 2011, GAVI has supported 67 new vaccine introductions and campaigns. All but one GAVI-supported country have introduced the pentavalent vaccine, ahead of the 2015 target. GAVI projects that all of its vaccine introduction targets will be met or surpassed by 2015. However, vaccine supply constraints and the fact that some countries have postponed introductions due to limited preparedness have jeopardised targets for pentavalent, pneumococcal and rotavirus vaccine coverage rates.

Strategic goal two A has been challenging in the first half of the strategy period. There has been little movement on coverage for the three doses of diphtheria-tetanus-pertussis vaccine (DTP3), drop-out rates and levels of in-country equity, and GAVI is currently not on track to meet its targets. As other providers of development assistance are also recognising, supporting health system strengthening (HSS) is challenging. GAVI's HSS programme has recently been revamped to ensure that investments are translated more clearly into improved immunisation outcomes, and levels of approvals and

disbursements are rapidly picking up speed. GAVI is putting in place intermediate indicators to enable it to track HSS outcomes in shorter time periods.

GAVI's **third strategic goal** ^[2], to ensure long-term predictability and sustainability of immunisation programmes, is realised not only by securing continued support from public- and private-sector donors, but also through country co-financing. GAVI is close to achieving its target of 100% timely co-financing payments. As of the end of August 2013, 64 out of the 67 co-financing countries had fulfilled all their commitments for 2012.*

VACCINE INTRODUCTIONS AND CAMPAIGNS 1 JANUARY 2011 – 1 SEPTEMBER 2013



SIA = supplementary immunisation activities



By reaching all children with the vaccines they need, we can achieve a world where a child in a poor country and a child in a rich country have an equal chance to live a healthy, productive life. Bill Gates, Co-Chair, Bill & Melinda Gates Foundation

Co-financing payments between January 2011 and August 2013 totalled US\$ 125 million, representing 8% of GAVI's total vaccine support to the cofinancing countries. Continued and new donor support has been secured, including from the private sector through the GAVI Matching Fund. Donors have honoured their commitments, with 91% of pledges for the 2011–2015 period already turned into signed agreements.

Strategic goal four ^[2] aims to create the market conditions needed for lower vaccine prices and sufficient supply of vaccines, and is an important factor in ensuring the long-term sustainability of vaccine programmes. One full year into the

implementation of GAVI's vaccine supply and procurement strategy, the GAVI Secretariat and Alliance partners – including the Bill & Melinda Gates Foundation and UNICEF – are making good progress in securing lower prices for key vaccines, as well as a more adequate supply.

* Of the three countries with outstanding payments, two had partially paid their commitments by the end of August 2013.





Africa can't withstand a cancer epidemic... This is why I am so happy that GAVI has invested in HPV vaccines, which are going to shift the burden of cervical cancer deaths away from developing countries. HE Dr Christine Kaseba Sata, First Lady of Zambia

Unprecedented acceleration in vaccine introductions

The period since January 2011 has seen an extraordinary surge in vaccine introductions and campaigns. 2013, in particular, is showing record growth for GAVI's programmes.^[2] From the beginning of 2011 until the end of 2012, the Alliance funded a total of 50 new vaccine introductions and campaigns. In 2013 alone, the number of GAVI-supported new introductions, campaigns and demonstration programmes is expected to reach an unprecedented 48. Many of these launches are taking place in countries facing severe challenges, such as Haiti, Pakistan and Somalia.

With 10 additional countries having introduced pentavalent vaccine since the beginning of 2011, 72 of the 73 GAVI-supported countries are now providing the vaccine as part of their routine programmes. By early 2014, all GAVI-supported countries will have introduced the vaccine – exceeding the end-2015 target of 69 countries.

GAVI has supported a record 27 pneumococcal vaccine launches and 10 rotavirus vaccine introductions since January 2011. 2012 saw the firstever dual introduction of pneumococcal and rotavirus vaccines in Ghana, followed by another dual launch in the United Republic of Tanzania. Joint vaccine introductions present unique opportunities and challenges related to planning and communication, and to ensuring adequate cold chain capacity and appropriate training of health workers. Eight countries have introduced a second dose of measles vaccine with GAVI support in the current strategy period.

In 2013, GAVI started providing funding for two of its newest vaccines: the human papillomavirus (HPV) vaccine and the combined measles-rubella vaccine.

Countries with demonstrated experience in reaching adolescent girls with vaccines can apply for GAVI funding to support nationwide introduction of the HPV vaccine. Others are eligible for support for smaller-scale demonstration projects, which allow them to gain the experience needed for a national introduction. GAVI is collaborating with a wide range of stakeholders in adolescent reproductive health, cancer prevention and treatment, education and other areas of benefit to adolescent girls to ensure that HPV programmes are successful and integrated with other interventions.

So far, 10 countries have been approved for support for HPV vaccine demonstration projects. A Kenya was the first country to introduce HPV vaccine through a GAVI-supported demonstration programme starting in May 2013. In March, Rwanda introduced measlesrubella vaccine, with four more countries scheduled to follow suit later in 2013.

GAVI also contributes to preventive vaccine campaigns against meningitis A and yellow fever. Since the beginning of 2011, seven countries have launched new campaigns against meningitis A, and two countries have initiated GAVI-funded vaccine campaigns against yellow fever. Seventeen countries are receiving support for routine immunisation against yellow fever.

The acceleration in vaccine introductions is rapidly translating into impact on the ground. The lack of adequate surveillance systems remains a challenge, but where data is available it shows immediate and real results. In the Kilifi district in Kenya, the annual number of hospital admissions of children due to pneumococcal disease from vaccine serotypes fell from 38 to 0 within less than three years of the launch of pneumococcal vaccine.¹³ Research on rotavirus vaccine has shown that children in Bolivia who were vaccinated were 70% less likely to be hospitalised for rotavirus diarrhoea compared with unvaccinated children.¹⁴

Within four years of Uganda's introduction of Hib vaccine, which forms part of the five-in-one pentavalent vaccine, the number of Hib meningitis cases was reduced by 85%. Five years after the introduction, the level of incidence had fallen to nearly zero.¹⁵ In Burkina Faso, Mali and Niger, where the meningococcal A vaccine was launched in 2010, the number of confirmed cases of meningitis A went down from a collective 1,512 in 2009 to 0 in 2012.¹⁶

New vaccine markets that serve the needs of developing countries

Increased investments in vaccines have revolutionised the global vaccine market, attracting new suppliers of quality vaccines at reduced prices and encouraging innovation. The availability of longterm, predictable funding for immunisation means vaccine manufacturers are increasingly considering developing countries as an important market.

Since the beginning of 2011, and equipped with a new strategy for supply and procurement from the end of that year, the Alliance has expanded the supplier base and secured significant price decreases for several vaccines. In 2001, 5 manufacturers were supplying vaccines to GAVI; by mid-2013 that number had increased to 12. The manufacturing base is also becoming more diversified, with half of the suppliers now based in Africa, Asia and Latin America.

From 2013, GAVI has been able to procure pentavalent vaccines from five manufacturers, thus improving supply security for a vaccine that has had issues with imbalances of supply and demand in recent years. Despite these challenges, countries have been protected from supply interruptions thanks to rapid switches to alternative sources of supply.

While the weighted average price for pentavalent vaccine has declined steadily, **2** a tender in early 2013 also resulted in a record low price for pentavalent vaccine of US\$ 1.19 per dose. This is a reduction of more than 60% compared with the 2010 weighted average price per dose of US\$ 2.98, and will have a potential impact of up to US\$ 150 million over the next four years compared with previous lowest-cost alternatives.

The price of HPV vaccine is also at an all-time low of US\$ 4.50 per dose. As more GAVI-supported countries introduce the vaccine and higher volumes are purchased, the price is expected to decrease even further. Rotavirus vaccine is another example of where successful price reductions have been achieved: in 2012 GAVI began buying the bulk of its rotavirus vaccine doses at the new, lower price of US\$ 2.50, in line with commitments made at the pledging conference in June 2011. This is a two-thirds reduction compared with the previous lowest price offer and will have an expected market impact valued at US\$ 650 million.

In 2013, GAVI secured supply of 500 million additional doses of pneumococcal vaccine for a period of 10 years. It also saw an important movement in the price of pneumococcal vaccine. The lowest price offer to GAVI is now US\$ 3.30 per dose from 2014 onwards.

Change in the total cost to fully immunise a child with pentavalent, pneumococcal and rotavirus vaccines Selected vaccine package price (US\$)



* Future targets are not publicised to avoid setting a minimum price.

Source: UNICEF Supply Division, 2013



GAVI has both attracted resources to and drawn attention to immunisation on a scale that would not have been possible without its presence in the international arena. GAVI's results are assessed as cost-efficient. Swedish Assessment of the GAVI Alliance, 2011

Donors delivering on the promise

Within two years of the GAVI Alliance pledging conference in June 2011, public and private donors had already committed 91% of the funding target of US\$ 7.4 billion for the 2011–2015 strategy period.^[2] Despite a challenging financial climate, donors have fully met their annual payment obligations, allowing GAVI to finance all of its planned country programme expenditures.

The number of public- and private-sector donors^[2] to GAVI grew from 25 in 2011 to 32 in 2013. Thanks to US\$ 200 million in challenge grants – pledges that are conditional upon GAVI raising new funding from other donors – GAVI is on track to double the number of core donors and build new partnerships with emerging and regional players.

Private-sector engagement has been particularly strong in the period. Through the GAVI Matching Fund, the Alliance is leveraging private-sector skills to address key business challenges as well as providing additional funding, advocacy and visibility for GAVI's work. The Matching Fund now has 10 partners and has raised more than US\$ 148 million to date. This includes the matches from the United Kingdom's Department for International Development (DFID) and the Bill & Melinda Gates Foundation.



2011–2015 donor contributions

Statoil 0.2 Prudential 0.2 Republic of Korea 1 **OPEC** Fund for International Development (OFID) 1 Vodafone (contribution in kind) 2 Other private donors 2 J.P. Morgan 2 Anglo American plc 3 Brazil 3 Absolute Return for Kids 3 (ARK) **Dutch Postcode Lottery** 3 LDS Charities 4 South Africa 5 Luxemboura 5 Children's Investment Fund Foundation (CIFF) 7 8 "la Caixa" Foundation Comic Relief 12 Ireland 12 Denmark 17 27 Japan HH Sheikh Mohamed 33 bin Zayed Al Nahyan **Russian Federation** 40 **European Commission** 51 Spain 60

Source: GAVI Alliance data as of 30 June 2013



The GAVI Alliance is a diverse international partnership that has had a transformational effect on the lives of poor children. The World Bank Group is proud to be a founding partner of GAVI. Jim Yong Kim, President, World Bank Group

A dynamic resource mobilisation model

The funding provided by donors – the vast majority in the form of multi-year agreements – has set in motion a dynamic resource mobilisation model. Long-term commitments channelled through the International Finance Facility for Immunisation (IFFIm) and the Advance Market Commitment (AMC)*, as well as direct support agreements, are at the core of the predictable funding required to support GAVI's programmes.

Thanks to the strong momentum built through donor support, implementing countries are able to embark on sustainable immunisation programmes. Their efforts are, in turn, translating into improved immunisation coverage and healthier and more productive populations. As countries become more prosperous they begin to graduate from GAVI support and move towards full national financing of their immunisation programmes. Country co-financing payments since January 2011 have already reached a collective US\$ 125 million – ahead of the US\$ 100 million mark originally foreseen by 2015. It is estimated that country co-financing contributions will continue to grow, amounting to approximately US\$ 1 billion for the 2016–2020 period.

Continued long-term donor funding coupled with sustained country co-financing will help to shape vaccine markets, ensuring adequate supply and helping to reduce prices.



*IFFIm has raised more than US\$ 4.5 billion through the sale of vaccine bonds since 2006, providing GAVI with long-term funding and financial flexibility. Donors have committed US\$ 1.5 billion to the AMC in incentive funding to accelerate the production and roll-out of pneumococcal vaccines. The World Bank provides the financial platform for both IFFIm and the AMC.

11



Healthy children can lead our nation towards economic prosperity. Our future generations will grow up healthy.

Sheikh Hasina, Honourable Prime Minister, Government of the People's Republic of Bangladesh

Strengthening health systems to deliver immunisation

Successful vaccine introductions and sustained and equitable immunisation coverage rely on robust health systems. Conversely, when immunisation services are strengthened, the entire health system benefits. While the global development community recognises the vital importance of strengthening health systems, it is keenly aware of the challenges involved.

GAVI has provided support for health system strengthening (HSS) since 2005. Examples of HSS support to date include civil society collaboration to target hard-to-reach populations in Afghanistan, development of a new cadre of female health workers providing immunisation services in Pakistan, and rehabilitation of cold chain systems in the Democratic People's Republic of Korea and Pakistan.

So far, the Alliance has committed US\$ 884 million to HSS. I Support to HSS accelerated in 2013, with US\$ 64 million disbursed in the first three quarters of the year – more than three times the spend level for the same period in 2012. HSS programmes represent a significant proportion of GAVI cashbased investments, which have a Board-agreed target of 15–25% as a three-year rolling average of total programme expenditures. Currently, it is estimated that this average will reach 13% by the end of 2013.

In the current strategy period, the Alliance partners have been working to ensure a stronger link between HSS and improved immunisation outcomes. In April 2013, the independent review committee for HSS approved all three (100%) of the submitted proposals for the first time in GAVI's history – a testament to their high quality, clear links to immunisation and measurable targets. Many early HSS grants have been reprogrammed to ensure a stronger focus on improved immunisation outcomes. Importantly, countries have also made significant strides in linking HSS more clearly to equity issues. A performance-based funding approach to HSS, whereby a portion of the support is determined by country performance against equity and immunisation coverage indicators, is being rolled out in the 18 countries approved for HSS support in 2012 and 2013. GAVI encourages countries with discrepancies between different sources of data to use HSS funding to strengthen data quality and routine information systems.

GAVI HSS support is multi-year and aligns with national health plans and strategies. The GAVI Alliance is a founding member of the International Health Partnership (IHP+) and actively engages with other agencies to harmonise and improve the effectiveness of its support. This partnership is critical for HSS: the GAVI HSS investment is substantial but represents an average of less than US\$ 0.1 per capita per year – less than 1% of countries' total health expenditures. GAVI's HSS support needs to be combined with other HSS investments for maximum impact.

Civil society is increasingly engaged in the development, implementation and monitoring of immunisation policy and programmes, contributing new perspectives and heightened accountability.

A Transparency and Accountability Policy governs the financial management of GAVI's cash-based support, including HSS and civil society support. As of 1 September 2013, GAVI had performed financial management assessments – a requirement under the policy – in 55 of the countries that receive this type of support. This will help to reduce delays in disbursements.



GAVI's innovative development model is delivering on the promise made in London – together we are ensuring that children in the world's poorest countries have access to healthy lives. Jens Stoltenberg, Former Prime Minister, Norway

Delivering beyond the 2011–2015 business plan

Through its flexible and innovative business model, GAVI is able to respond to new developments in health and immunisation in developing countries. As a result, GAVI's impact has extended beyond the plans set out in 2011. The two main areas in which GAVI is providing or preparing for additional support are measles and polio vaccines.

GAVI's support for rubella vaccine, which was identified as a priority in the 2008 Vaccine Investment Strategy, is delivered through a catalytic programme. Countries receive support with large-scale catch-up campaigns for the combined measles-rubella vaccine, provided that the vaccine is concurrently introduced into the routine national programme at their own expense. Given that the vaccine is relatively inexpensive and that delivery through the routine immunisation programme is the most sustainable and cost-effective approach, GAVI deemed this to be the most efficient way forward.

Following a resurgence of measles outbreaks in the last few years, GAVI has also stepped up its efforts to prevent the disease in other ways. Working with the Measles-Rubella Initiative, the Alliance has identified six countries at particular risk of measles outbreaks and made targeted support for measles vaccine available to them. The recent success of the Global Polio Eradication Initiative (GPEI) in ensuring a dramatic reduction in the number of polio cases has sparked a global push to design and implement a "polio endgame". This entails a shift from largely campaignbased approaches to a strengthening of routine immunisation programmes, as well as a switch from oral vaccines to injectable inactivated polio vaccines (IPV). GAVI is set to play a complementary role to the GPEI in the polio endgame, and will likely lead the introduction of IPV into routine immunisation systems in the Alliance's partner countries.

The GAVI Alliance is playing a leading role in bringing more coherence to historically vertical and often campaign-based immunisation programmes. GAVI's interaction with the GPEI, the Measles-Rubella Initiative and other partners helps to remove silos and strengthen the entire routine immunisation system, and thus has a positive effect on all immunisation services.



GAVI's support is allowing us to invest in the health and development of our children, who are the foundation of a peaceful and prosperous Somalia.

HE Dr Maryan Qasim, Minister for Human Development and Public Services, Somalia

Addressing the challenges

Since 2011, the Alliance has developed new approaches and taken a number of measures to adapt to the changing global context, respond to challenges and become more efficient.

The unprecedented demand for new vaccines, especially those protecting against pneumococcal disease and rotavirus diarrhoea, has led to supply constraints for particular products and formulations, and has highlighted issues related to country preparedness. GAVI Alliance partners are working together with manufacturers to secure sufficient supply and coordinating technical assistance to identify and resolve implementation issues.

To make these new vaccines available and ensure their safety and efficacy, countries need well-functioning refrigerated supply systems. Studies have shown that the cold chains in many developing countries are unreliable, and that vaccines are at risk of exposure to damaging temperatures.¹⁷ Discussions with companies and foundations that are interested in providing private-sector expertise and funding are informing a cross-Alliance supply chain strategy, which will be brought to the Board at the end of 2013.

Ensuring sufficient quantity and quality of immunisation data is another key challenge for the Alliance. In January 2013, GAVI held a data summit to explore ways to improve the quality of coverage data. GAVI is working with WHO, UNICEF, the Institute for Health Metrics and Evaluation, the Global Fund and other partners to help countries better assess and strengthen data quality, as well as to reduce gaps between surveys and address discrepancies between different coverage estimates.

GAVI is also enhancing its ability to adapt to local contexts in a more efficient and transparent way. A new policy, which enables GAVI to adopt a more flexible approach to funding in the case of fragile states and those in short-term emergency situations, was adopted in 2012. Tailored approaches for Afghanistan, the Democratic Republic of the Congo, Nigeria and Pakistan are under way, with Chad, Haiti and South Sudan following in the second phase.

In Pakistan, GAVI Alliance partners will provide technical support to strengthen the routine immunisation system, as well as to enhance the system for monitoring and evaluation to ensure betterquality data. Together with the government and partners in the Democratic Republic of the Congo, GAVI will help to support routine immunisation, increase demand for immunisation, strengthen vaccine management and the supply system, and ensure sustainable immunisation financing. Support to Nigeria will focus on supply chain management and outreach services at the local level.

One of the factors that determine if a country qualifies for tailored support is whether there are immunisation inequities, including those related to gender, income or geographic location. As reaching the unreached remains a challenge, the Alliance is strengthening its support to countries where inequities in coverage are most severe and in those where immunisation coverage is below 70%. Although all partners are involved, WHO is taking the lead in working with low-coverage countries and UNICEF with countries facing inequities in access. Furthermore, a portion of GAVI HSS support is contingent upon countries meeting specific equity targets.

Ensuring that programmes are sustainable has been a priority for the Alliance since its inception. Commencing in 2012, GAVI's revised co-financing policy requires all countries to contribute a portion of the cost of their vaccines. ⁽²⁾ This helps to help build country ownership and long-term sustainability, and to ensure that vaccine procurement is included in national budgets.

To ensure a smooth transition to full national financing, Alliance partners are providing assistance to countries that will graduate in the coming years. For example, graduating countries continue to be eligible for certain negotiated vaccine prices. All 17 graduating countries² are on track in terms of fulfilling their co-financing requirements, and it is expected that the 7 countries graduating in 2015 will be able to sustain the vaccines they have introduced with GAVI support. On current projections, 30 of the 73 currently GAVI-supported countries will either have graduated or be in the process of graduating by 2020.

Since January 2011 GAVI has finalised eight evaluations, focusing on topics such as the gender policy, civil society support, and the process and design of the AMC. In addition, the Alliance is launching five full country evaluations in partnership with in-country institutes, the Institute for Health Metrics Evaluation and PATH to identify barriers to and drivers of immunisation programmes, as well as to further assess the impact of vaccines.



It is crucial that we continue to have access to the same high-quality vaccines at affordable prices after graduation from GAVI support. We need to build on the results we have achieved together. Andrei Usatii, Minister of Health, Republic of Moldova

Looking ahead

Strong momentum has been built towards the fulfilment of GAVI's strategy. All GAVI Alliance partners are working together to ensure that countries are able to immunise an additional quarter of a billion children and prevent close to four million future deaths in the 2011–2015 period. This is laying the foundation for a lasting impact for generations to come.

There are tremendous opportunities for multiplying this impact in the future. GAVI is currently developing a new vaccine investment strategy, which assesses and prioritises existing and prospective vaccines for support. While some progress has been made in the development of new vaccines against HIV and tuberculosis, these will still take time to come to fruition.

There is, however, a very real prospect of a first malaria vaccine being available within the next five years. Provided it successfully passes the final trials in 2014, this vaccine could significantly boost the impact of malaria control programmes. The Board will consider what role the Alliance will play in ensuring the vaccine is introduced in developing countries. In the more immediate future, GAVI is preparing for the introduction of inactivated polio vaccine into the routine immunisation systems in its partner countries.

Discussions are currently under way to shape the post-2015 development agenda. The highlevel panel report on the post-2015 development agenda underlined the value of vaccines and called for a target to increase the number of people fully immunised. GAVI is proposing that such an indicator measure the full course of the 11 antigens recommended by WHO for universal use. That would address not only the reach of vaccines and the strength of health and immunisation systems, but also equity and human rights.

Preliminary estimates indicate that less than 5% of children globally are currently receiving all the required doses of the 11 antigens. By 2030, this figure is expected to reach approximately 50%. By contrast, if all countries in the world were to introduce all the recommended vaccines and take them to scale, while at the same time strengthening their routine immunisation systems, 9 out of every 10 children could be fully immunised.

Without faster progress on reducing preventable diseases, the world will only meet the Millennium Development Goal for child survival (MDG 4) in 2028 – 13 years after the deadline.¹⁸ If GAVI is to sustain its achievements and further expand access to vaccines, all partners need to work together to secure adequate resources for immunisation and to develop supportive health systems and infrastructure. GAVI foresees increased use of technology to modernise and support supply chains and boost immunisation coverage. Other areas that GAVI will continue to invest in include improving data quality to better measure immunisation rates, and building private-sector approaches into GAVI operations.

Continued investments in GAVI and immunisation have the potential to yield substantial returns. Using methods based on a study published in *Health Affairs*, it is estimated that expanded immunisation in GAVIsupported countries in 2011–2020 could help save more than 10 million lives, prevent more than 200 million cases of illness and avert more than US\$ 200 billion in illness-related costs.¹⁹

In the period since January 2011, GAVI has supported a record number of vaccine introductions and campaigns. However, vaccine launches and campaigns are only the start of the journey. As more and more countries are introducing powerful new vaccines, the challenge shifts to increasing and sustaining immunisation coverage and making it more equitable. The growing Alliance partnership cannot rest until all children, regardless of where they live, have access to the best possible protection against vaccine-preventable disease. Every child deserves a healthy future.

Expanded immunisation in GAVIsupported countries in 2011–2020 could help save more than 10 million lives, prevent more than 200 million cases of illness and avert more than US\$ 200 billion in illness-related costs.

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Today, millions more children than ever before survive preventable diseases. That is thanks, in no small part, to the GAVI Alliance, a partnership that shields mothers from cervical cancer... protects babies from pneumonia... and so many other childhood killers. We at UNICEF look forward to building healthier communities – and a healthier world together. Anthony Lake, Executive Director, UNICEF



GAVI-SUPPORTED VACCINE LAUNCHES AND NEW CAMPAIGNS, 2011–2013 (continued)

Source: GAVI Alliance data as of 4 September 2013



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