

Investing in Health for Africa

The Case for Strengthening Systems
for Better Health Outcomes



HHA | Harmonization for Health in Africa





INDEX

Executive summary	iii
1. Introduction and overview.....	2
1.1. Aim and purpose.....	2
1.2. Overview and structure	3
2. The African health context.....	6
2.1. Health in Africa today	6
2.2. Turning Africa's health challenges into investment opportunities	7
3. The wider investment case	14
3.1. Better health leads to greater wealth.....	14
3.2. Meeting our commitments to save human life and safeguard well-being	17
3.3. Noneconomic social and political benefits.....	17
3.4. Healthier people: a lower burden on health systems.....	18
4. What to invest in.....	20
4.1. Implementation of evidence-based policies towards national health systems.....	20
4.2. Investing in better demand and use of health services	20
4.3. Investing in the building blocks of service provision	22
4.4. Promoting cross-sectoral investment and action for health	28
5. Level of investment, results, and improving investment impact	30
5.1. Investing for results: level of required investment and results.....	30
5.2. Improving investment impact	34
6. Actions.....	40
Appendix 1: Contributing and supporting stakeholders.....	42
Appendix 2: Brief on the two costing methodologies	43
Appendix 3: List of interventions	45
Appendix 4: Adjustments to HLTF investment strategies	47
Endnotes	50
Acknowledgments.....	53



EXECUTIVE SUMMARY

Why an African Investment Case?

Investing in African health systems is an opportunity to accelerate economic development and growth, contribute to saving millions of lives and preventing life-long disabilities, and move countries closer to achieving objectives of national poverty reduction strategies and the Millennium Development Goals (MDGs).

To promote increased and improved health investment, the Africa Investment Case is developed by the Harmonization for Health in Africa to: (i) support African leaders, and their regional and global partners focus their attention and resources on health investment that works, (ii) provide an evidence base for Ministries of Health to make the case to Ministries of Finance, national Parliaments, and other key stakeholders that investing in health makes economic sense and will bring considerable returns, (iii) promote value for money by demonstrating how the efficiency with which existing and new resources are deployed in the health system can be increased through priority-setting processes based on demographic trends and the burden of disease, and (iv) to mobilize leadership at the national, regional, and global levels to support national health systems in Africa in their efforts to increase the pace and sustainability of achieving better health and economic development outcomes for the people of Africa

Healthier is wealthier: Why investing in health makes economic sense

Healthier is wealthier. In addition to the fact that there is an intrinsic value of health and that health is a human right, the economic case for investing in health is robust. Good health is not only an outcome of, but also a foundation for, development. Healthy individuals are more productive, earn more, save more, invest more, consume more, and work longer, all of which have a positive impact on the gross domestic product (GDP) of a nation. The findings of a study exploring the impact of health — as measured by life expectancy — on economic growth, suggest that one extra year of life raises GDP by 4 percent.

Better health also reduces the financial costs of health care for the family, the community, the private sector, and the government. There are several potential consequences for households related to the costs of health care. First, costs could be prohibitively expensive, which may mean that the individual has to forego treatment. Second, to pay for health care, households may sell productive assets or incur debt. Third, health care costs can have a catastrophic impact and push households into, or more deeply into, poverty. These challenges are especially relevant in Sub-Saharan Africa where the availability of risk pooling mechanisms such as health insurance is low. At the macro level, societies as a whole benefit from healthy populations, which reduce the cost to companies and the government of health care provision, lost productivity, high turnover rates, and unemployment benefits.

The African context

Globally, people are healthier and wealthier and live longer today than they did in 1990, the year of the MDG baseline values. Progress has, however, been unequal, and Africa's burden of disease is disproportionate to its population size. With 11 percent of the world's population, Sub-Saharan Africa accounts for 49 percent of maternal deaths, 50 percent of under five child deaths and 67 percent of HIV/AIDS cases.¹ Although some improvement in health outcomes has been achieved in Africa, progress

is still limited. Many factors contribute to the lack of progress: weak governance and accountability, political instability, natural disasters, underdeveloped infrastructure, health system weaknesses, and lack of harmonization and alignment of aid.

Other key factors explaining limited progress have to do with how health systems are financed. First, there have been insufficient resources to build and sustain health systems. Second, available resources have been used inefficiently, partly as a result of a lack of systematic use of processes and tools for setting priorities for using scarce resources. Third, additional resources have not been deployed in an efficient manner. Africa is not alone in using resources inefficiently. Globally, between 20 percent and 40 percent of health system spending is wasted, with poorer countries wasting an even higher proportion.² Using available and new resources efficiently has never been more important. Population growth and improved living standards are increasing demands on health services. Furthermore, other sectors, such as education, transport, and infrastructure, compete with the health sector for resources. This fact underscores the need for the health sector to be able to demonstrate to the Ministry of Finance that it can increase the impact of limited resources and receive more value for its money.

With five years to go before the MDGs' target date of 2015, African leaders and their international development partners have a great opportunity. Together they can improve the health of individuals, families, and societies and contribute to regional economic growth and social and political development and stability. There are encouraging processes to build on. Notable efforts have been undertaken to improve governance. There is a strong political will to strengthen health systems, increasing resources flowing to health, and there are some examples of successful reform of how health services are delivered, for example through community approaches.



Recommended investments in health systems in Africa

Careful and systematic priority-setting processes that consider factors such as demographic trends, the burden of diseases, and the financing of health services are needed to ensure that health system investments are deployed where they are most needed and will return the most value for money in terms of improving health outcomes. Policies to strengthen health systems should be developed in partnership with key stakeholders. New and existing resources should be invested in both the public and the private sectors, because of their respective comparative advantages; resources should also be invested in enabling the public and private sectors to serve as platforms for sustainable health improvements. Investment in the governance and stewardship functions of the government is also needed in order to translate policies into action on the ground and promote accountability in the health system.

Improving the quality and availability of health care services will require increasing the quantity and quality of the health workforce, ensuring availability and rational use of essential health commodities, upgrading equipment and health information management systems, and improving the construction, distribution, and maintenance of health infrastructure. Governments' investment plans should focus on building institutional capacity and governance and promoting equity in access to services by decentralizing health systems and empowering local authorities. New evidence supports the notion that an equity-focused approach could bring vastly improved returns on investment by averting far more child and maternal deaths and episodes of under nutrition and by markedly expanding effective coverage of key primary health and nutrition interventions.

The pathways to improved health are complex and multifaceted, and policies and investments in other sectors are of enormous importance to health outcomes. To name but a few, intersectoral dimensions critical to health include sanitation and hygiene, education, gender equality, better roads, transport, communication, and access to water. Establishing links with other sectors and identifying mechanisms to realize intersectoral synergies should be an integral component of any health planning and budgeting process.

Level of investment, results, and improving investment impact

There is robust evidence as to how much investment will be required to strengthen African health systems. The Africa Investment Case bases its recommendations on the work undertaken for the High Level Taskforce (HLTF) on Innovative International Financing for Health Systems, which estimated the levels of investment required to reach the health MDGs and suggested financing mechanisms to mobilize needed resources and ensure that these resources were channeled in an efficient manner. This investment case recognizes the need for country-led processes to tailor investment decisions to the country-specific context, as well as the fact that the process should be part of existing national health planning and budgeting processes.

The HLTF drew upon two approaches for developing investment strategies: Marginal Budgeting for Bottlenecks (MBB) Medium Scenario and WHO Normative. The estimates produced by the two investment strategies were adjusted for the Africa Investment Case. The two strategies identify the likely additional investment requirements in 2011–2015, over and above what is currently being invested, across low-income Sub-Saharan Africa countries in order to meet the health MDGs:

- **Annual per capita investment:** On average, an additional US\$21 (MBB Medium) to US\$36 (WHO Normative) per capita will be required each year over the next five-year period.

- **Total investment:** Over the whole five-year period, it is expected that the total level of additional investment required is between US\$84 billion (MBB Medium) and US\$140 billion (WHO Normative).
- **Total investment levels in 2015 alone:** Both strategies assume a comparable level of additional investment requirement in 2015 — around US\$28-30 billion.

These investments could save the lives of around 3.1 million people and prevent 3.8-5.1 million children from stunting in 2015 alone. In 2011-2015, there would be an increase in the number of health workers from 2.0 million to 2.8 million and an additional 58,000 to 77,000 health facilities.

The economic benefits in the year 2015 alone could be as much as US\$100 billion. With both strategies assuming additional investment requirements of around US\$28-30 billion in 2015, investing in health in Africa has the potential for significant returns on investment — the benefit-cost ratio is almost four times to one.

Increases in funding, however, will not be sufficient. The efficiency and impact of the use of existing resources need to be improved before new funding is disbursed into the health system. This improvement can be achieved through a range of approaches targeting the level and source of health spending, where resources are invested, approaches to investing, and mechanisms for channeling funds. In terms of health spending levels and sources, the Africa Investment Case recommends an increase in funding allocations to health by national governments and concurrent policies to strengthen financial risk protection mechanisms, such as health insurance, to reduce out-of-pocket payments. Because some countries do not have sufficient resources to finance the required investments, an increase in Official Development Assistance is encouraged in the short to medium term, with a view to reduce, and ultimately eliminate, donor aid in the long term. It is also very important that governments and their international development partners work together in the spirit of the Paris Declaration on Aid Effectiveness and Ghana Agenda for Action to align policies and support with the approach of One Budget, One Plan, and One Results Framework.

Looking forward

Investments in the health sector are likely to have considerable benefits—both from the perspective of economic gain and lives saved. These benefits justify the investment levels suggested by this investment case, which are proposed to be an average of additional US\$21 to US\$36 of annual per capita investment over and above what is currently being invested across the years 2011 to 2015. Increases in investment must go hand in hand with using existing and any new investments with better effectiveness and greater efficiency.

Overall, the Africa Investment Case recommends that governments and international donors: (i) improve engagement in policy dialogue among national, regional, and global stakeholders about how to use the Africa Investment Case in existing process and (ii) use recommendations from the Africa Investment Case to improve the case of existing national health planning and budgeting processes.

The Harmonization for Health in Africa will support governments in the development of national or subnational investment cases and related advocacy and policy documents through the provision of technical support in the development of: analyses to support policy dialogue, evidence-based analytical papers, policy dialogue processes, and plans and policies. It will also support countries in reviewing, monitoring, and evaluating existing processes for tracking performance and commitments.





1. INTRODUCTION AND OVERVIEW

Investing in African health systems is an opportunity to drive economic development and growth forward, move countries closer to achieving objectives of national poverty reduction strategies (the Millennium Development Goals, or MDGs), and ensure social and political stability by saving millions of lives and preventing life-long disabilities. Existing evidence provides us with clear guidance on what to invest in, how much to invest, and what can be achieved with this level of investment.

This document brings this information together to present the case for Investing in Health for Africa: the case for strengthening systems for better health outcomes. It has been prepared by the Harmonization for Health in Africa³ (HHA) group, working in close collaboration with The Partnership for Maternal, Newborn and Child Health; National Ministries of Health on the continent, and focuses on countries of Sub-Saharan Africa (SSA).⁴ It is also based on a recognition that this investment case needs to support the ongoing work within the health sectors already underway in individual countries.

1.1. Aim and purpose

The Africa Investment Case aims to:

- Support African leaders and their regional and global partners, to focus their attention and resources on health investment that works, in the context of *More Money for Health, and More Health for the Money*, as called upon by the High Level Taskforce (HLTF) on Innovative International Financing for Health Systems.⁵
- Promote value for money by demonstrating how the efficiency with which existing and new resources are deployed in the health system can be increased through priority-setting processes based on demographic trends and the burden of disease.
- Provide an evidence base for Ministries of Health to make the case to Ministries of Finance, national Parliaments, and other key stakeholders for investment in the public and private health sector.
- Mobilize leadership at the national, regional, and global levels to support national health systems in the efforts to increase the pace and sustainability of achieving better health and economic development outcomes for the people of Africa.

The document:

- Encourages **national** Ministries of Health and other relevant stakeholders to use this investment case to support their already existing national health policies, strategies, and plans — in particular, in making the case to the Ministries of Finance and Parliaments for the necessity of investing in the health sector as a means of achieving development outcomes and stimulating economic growth.
- Provides a platform for **regional** bodies such as the African Union and regional economic communities (such as ECOWAS, COMESA, and SADC) to reach consensus on what member countries should do to address ill health on the continent.
- Advocates **globally** for more Official Development Assistance to African countries, and for that assistance to be in line with the Principles of the Paris Declaration on Aid Effectiveness and the Accra Agenda.⁶

HHA, together with its national partners, looks forward to facilitating and providing technical support on demand to the stakeholders involved in the existing national, regional, and global processes aimed at making better health in Africa a reality.

1.2. Overview and structure

The Africa Investment Case is evidence-based and has the support of sector experts and practitioners. Organizations that have contributed to the development and are supporting this investment case are listed in Appendix 1.

A key theme throughout is that resources directed toward improving health in Africa are an investment and not only a current cost or expense, as health is a productive sector. By reducing illness, preventing disability, and saving lives, these investments can lead to significant economic returns as well as economic growth and development more generally. Another important theme is that although the African Investment Case states that additional resources are needed, it also acknowledges that existing resources can be used much more efficiently. At a global level, the World Health Report 2010 recently estimated that as much as 20-40 percent of financial resources for health are wasted.⁷

The document is structured as follows:

- **Section 2: The African health context** describes the current African health context and the significant opportunities for investment in the health sector to achieve high economic and social returns. Weak health systems and the resulting disproportionate burden of ill health in Africa offer the chance for relatively small investments to yield high returns. These opportunities are seen in the context of a strong and growing political commitment that is underpinning the efforts to achieve the health MDGs⁸ in Africa.
- **Section 3: The wider investment case** brings together the arguments and available evidence for the case that improving health in Africa can be an essential driver for long-term economic growth and development. In addition to making good economic sense, these investments will help African countries fulfill their commitments to the fundamental values of safeguarding human health and life.
- **Section 4: What to invest in.** This section advocates for strengthening national health systems as platforms for sustained, long-term health improvements, based on sound national health policies developed through rigorous analysis, dialogue, and evidence-based planning in the context of better governance and accountability, with a special focus on measures to address sources of inefficiencies in health system spending. This focus will require measures to create awareness and demand for those services, investment to extend and improve the building blocks of effective health service provision, and an increase in intersectoral engagement targeting an improvement of the social determinants of health.
- **Section 5: Level of investment, results, and improving investment impact.** This section estimates how much investment will be required in the African health systems, including expected returns for the level of investment in terms of morbidity and mortality reductions. These investments should result in significant health outcomes and real economic returns on investment. It is also recognized that an increase in funding will not be sufficient. Existing and new resources must be used in a more efficient manner, and we suggest a number of approaches as guiding principles.

- **Section 6: Action.** This final section summarizes recommendations and suggestions on the process for going forward.

Appendix 1 provides a list of organizations that have contributed and supported the development and conclusions of the Africa Investment Case, Appendix 2 provides a brief overview of the costing methodologies, Appendix 3 lists the high-impact interventions included in estimating the cost of scaling up and the return in terms of morbidity and mortality reductions, and Appendix 4 sets out the adjustments that were made to the HLTF investment strategies to conform to the scope and objectives of the Africa Investment Case.



2. THE AFRICAN HEALTH CONTEXT

Globally, people are healthier and wealthier and live longer today than 30 years ago. This fact has been made possible by economic growth and development, but also by improvements in health technologies and systems of care.

Some policy makers are convinced that high returns on health care investments are achievable, which explains an increase of 35 percent in the world's expenditures in this sector over a five-year period from 2000 to 2005.⁹

These improvements and investment levels have, however, been unequal. Africa's progress has been hindered by both inefficient use of the available resources and a lack of resources for health care as well. At the same time, rapid population growth has placed increasing demands on health services. The result has been that Africa's burden of ill health, as compared with that of other areas of the world, has remained disproportionately high.

The global experience shows that progress is possible, even in low- and medium-income countries, and that results can be achieved with investment in the right areas. Despite the health challenges on the continent, we believe that there are many opportunities for Africa to achieve the same progress.

The political will exists to strengthen health systems at national, regional,¹⁰ and global levels. This situation has recently been reflected in greater flows of resources for health in Africa and encouraging progress made in a number of health outcomes (such as reduction in child mortality) by many African countries. These efforts, many of which have focused on community-led service provision, have been supported by the strong sense of community and extended families in African cultures.

2.1. Health in Africa today

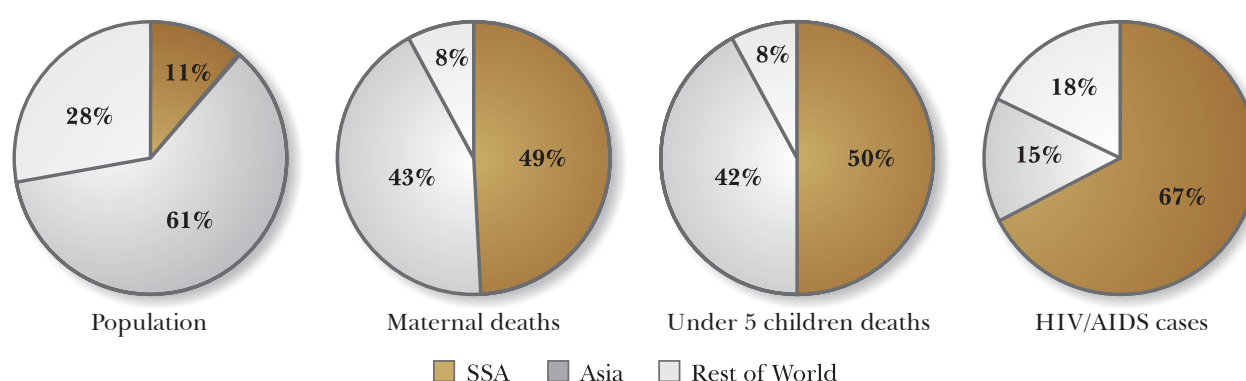
Low levels of investment in the past have meant that national health systems on the continent are weak. Although increasing, the proportion of national budgets allocated to health care is still low¹¹ and is not generally sufficient to provide, maintain, and improve, quality and access to health services.

The impact of this low level of investment is borne out by the following statistics:

- Life expectancy in Sub-Saharan Africa (SSA), at 47 years, is the lowest in the world.¹²
- With only 11 percent of the world's population, SSA accounts for 49 percent of maternal deaths, 50 percent of deaths of children under the age of five, and 67 percent of HIV/AIDS cases (figure 2.1).
- In addition to the burden of infectious diseases, there is an ever-increasing prevalence of noncommunicable diseases.



Figure 2.1: Sub-Saharan Africa's disproportionate burden of ill health



Source: Eds Kinney MV, Lawn JE, Kerber KJ, ASADI 2009.¹³

The same picture emerges when morbidity and disability are considered. For example, in maternal and newborn health: ¹⁴

- For every woman who dies from a pregnancy-related cause, around 20 women experience injury, infection, disease, and disabilities from the experience.
- For every newborn that dies, another 20 face illness or disability from conditions such as birth injury, infection, and the complications of premature birth.

The problems are compounded by the unmet demand for effective family planning services in many countries on the continent. This leads to a greater number of pregnancies, including, in particular, shorter spacing between pregnancies and therefore more scope for potential complications.

2.2. Turning Africa's health challenges into investment opportunities

The many health challenges faced by the African continent are well known. These have been studied and documented extensively, as summarized below. However, the HHA's response to the burden of disease and the challenges in Africa is a positive one.

African leaders and their international development partners have a great opportunity. Together they can improve the health and well-being of individuals, families, and societies and thus contribute to economic development and growth in the region. Starting from a low base offers the possibility of achieving higher returns on health investments, in terms of healthier people and lives saved, as well as significant economic benefits. The abundant opportunities offered by the current African health context offers are discussed below.

2.2.1. Key challenges in the African health context

(i) Weak governance and accountability

Weak governance continues to be a significant challenge impeding the work to improve health system efficiency and operational effectiveness, and health outcomes more generally. This includes weaknesses in setting strategic direction for system development, designing its management, and ensuring accountability in its implementation. Weak management capacity of existing resources has also resulted in allocative and technical inefficiencies.

(ii) Health system weaknesses

As a result of inadequate use of evidence in setting priorities and weak governance, the African continent faces considerable challenges in the development and implementation of effective national health policies. These challenges have led to system weaknesses that are often characterized by critical shortages of health workers, low motivation levels of existing staff, inadequate training, insufficient access to quality essential commodities, and poorly maintained health infrastructure, among others.

Improvements in health care systems are hindered at times by the lack of absorption capacity. This is closely linked to the institutional and human resource development needs and also to processes that encourage programming and resource silos in particular diseases or areas, and can undermine the sharing of ideas, experience, and resources across the system.

(iii) Underdeveloped infrastructure and adverse social determinants of health

Compared with many other parts of the world, large proportions of the SSA population are resource poor and have low access to:

- Safe water and sanitation, leading to many water-borne diseases.
- Education, lack of which is often associated with lower and less effective use of health services (such as family planning) and greater gender inequality in opportunities for girls and women.
- Food security and nutritional quality, resulting in undernourishment and child growth stunting, as well as severe anemia in women.
- Safe housing, the lack of which is responsible for exacerbating many communicable and noncommunicable diseases, as well as environment-related impacts on health and well-being.



(iv) High rates of out-of-pocket health care expenditures

Lack of sustainable health financing arrangements (including prepayment arrangements in the form of insurance or taxes) to raise and pool funds resulted in direct out-of-pocket payment at the time of use of services. These payments are often made to unregulated private providers, some of whom may provide potentially ineffective and unsafe care. Overall, the dependency on out-of-pocket payments can lead to catastrophic health expenditures, which occur when health care costs exceed a household's ability to pay, further aggravating the level of poverty.¹⁵

(v) Lack of harmonization and alignment of aid

Health aid and health service delivery are often very fragmented, largely due to the implementation of silo programs by a large number of different public, private, donor, and nongovernmental organizations, often with limited coordination. This is driven, in part, by the development partners' preference for providing funding for specific programs, but not through national budgets, as a result of real and perceived weaknesses in public sector financial management systems and practices.

(vi) Political crises

Conflict, political crises, and related abrupt changes in policies all affect the ability of the systems to be established, developed, and maintained for the purpose of delivering sustained and high-quality health services. Of course, the catastrophic effects of conflicts are particularly destructive of people's safety and well-being, as well as of economic and social systems, more generally.

(vii) Natural disasters

Africa has been strongly affected by natural disasters, including severe floods, droughts, and pest infestations. These problems reduce the resilience of people, economies, and health systems and are compounded by resulting inadequacies in terms of shelter, nutrition, security, water, sanitation, and disease control. Humanitarian responses often take considerable resources away from long-term system development.

2.2.2. Key opportunities in the African health context

(i) Strong political will to strengthen health systems

Nationally, regionally, and globally there have been growing political will and commitment for delivering more resources to the health sectors in Africa and for improving the way these are used.

At the national level, governments have expressed strong political commitment to improving health care for their populations. Over half of African countries recorded increases in the proportion of their national budget allocated to health between 2001 and 2007;¹⁶ they introduced homegrown innovative approaches and increased coverage of relevant and high-impact interventions.

The government of Rwanda is one example of where political commitment to improve health care has translated into real results. Family planning, for example, has been a priority that the government pursues vigorously (box 2.1).

At the regional level, a number of initiatives, such as the HHA, are making concerted efforts with their country colleagues to raise awareness and support policy development at the regional level. In April 2001, the leaders of 46 World Health Organization (WHO) Africa Region Member States signed the Abuja Declaration, agreeing to commit at least 15 percent of their annual national budget on health care. The African Union (AU)

Box 2.1 - Rwanda: family planning

The Government of Rwanda has shown deep commitment to tackling its millennium development challenge by prioritizing access to family planning. Although the level of commitment to family planning in official documents is similar in many developing countries, what sets Rwanda apart from other countries is the fact that champions at the highest levels have demonstrated their desire to translate these policy statements into actions:

- The President of the Republic and the Minister for Health have repeatedly publicly recognized the key role family planning plays in reducing infant and maternal mortality rates, combating poverty, and fighting HIV and AIDS and have emphasized the need to see results in contraceptive prevalence rates without delay.
- The Family Planning Technical Working Group, led by the Minister of Health, has worked tirelessly to elevate this issue over the years. This working group includes members from governmental and nongovernmental institutions, the private sector, and partner agencies.

Rwanda is one of the few countries to commit its own internally generated funds toward the procurement of contraceptives. As of 2008, the Government of Rwanda executed US\$500,000 for the procurement of contraceptives and intends to increase this amount to US\$2 million in coming years. The Minister for Health also reports to the Minister of Finance, strengthening accountability of financing in relation to results.

has provided strong leadership through its Continental Policy Framework for Sexual and Reproductive Health and Rights, operationalized by the Maputo Plan of Action 2007–2010. The AU 2009 Addis Ababa Declaration committed its member states to launch the Campaign on Accelerated Reduction of Maternal Mortality in Africa, which recognizes the need to meet the daunting challenges of maternal mortality in most African countries. The AU has also developed an Africa Health Strategy 2007-2015, which aims to complement existing national and regional strategies. The July 2010 African Union Assembly of Heads of State produced a declaration on action for maternal, newborn, and child health.

At the global level, in September 2000, world leaders came together to adopt the United Nations Millennium Declaration, committing their nations to a global partnership to reduce extreme poverty and improve, among others, health outcomes for the world's population. Aid effectiveness became a focus in 2005, when ministers and heads of development agencies signed onto the Paris Declaration and committed themselves to increased efforts to harmonize and align aid for better results. The 2008 Accra Agenda for Action builds on the principles of the Paris Declaration and reinstated commitment to effective aid. In 2006, a Political Declaration on HIV/AIDS was adopted unanimously by all UN member states. Maternal and child health has also seen a surge in political commitment. In September 2007, the International Health Partnership and related initiatives (IHP+) launched aims to better harmonize donor funding commitments and improve the way international agencies, donors, and developing countries work together to develop and implement national health plans. In September 2009, a New Global Consensus on Maternal, Newborn, and Child Health to save more than 10 million lives was agreed by a broad range of governments, nongovernmental organizations, international health agencies, and individuals.¹⁷ Maternal, newborn, and child health was a development priority for the G8 Summit in June 2010, and the UN Secretary General developed and launched a Global Strategy for Women's and Children's Health. In September 2010, during the launch of this Global Strategy, commitments totaling more than US\$40 billion were made for the advancement of maternal and child health issues.¹⁸

(ii) Increasing resources flowing to health care

In the last decade, total net official development assistance from the OECD/DAC countries has been increasing. Official development assistance flows reached their highest level ever at US\$121.5 billion in 2008, a significant increase of more than 126 percent from the US\$53.7 billion provided in 2000.¹⁹ However, the impact of the global financial crisis may mean that this trend might not continue to hold over the next few years.

Disaggregating overall official development assistance figures by sector reveals that expenditures on Development Assistance for Health (DAH) as a proportion of total DAH have also increased in recent years. SSA has benefited significantly from this increase in DAH. By 2008, net bilateral official development assistance to SSA countries had risen to US\$22.5 billion, with SSA's share of total DAH growing from 33 percent in 1990 to more than 50 percent in 2007.²⁰

The proportion of health budgets, funded from national budgets, is also increasing in some countries: for example, Benin, Burkina Faso, Djibouti, Malawi, Mali, Rwanda, and Tanzania have consistently allocated, on average, above 12 percent of total government expenditures to health.²¹

Similarly, although some countries continue to receive considerable resources for health sector development from international development partners, in other countries — such as Angola, Cameroon, Côte d'Ivoire, Democratic Republic of Congo, Equatorial Guinea, Mauritius, Nigeria, and Sudan — external resources for health as a percentage of total expenditures on health in 2007 were less than 10 percent.²²

(iii) Encouraging progress by many African countries

Some resource-constrained African countries are making encouraging progress in moving toward achieving the health MDGs.²³ Five countries in the region are on track to meet MDG 4: Botswana, Egypt, Eritrea, Malawi, and Morocco.²⁴ Other countries, such as Rwanda, are moving in the right direction: in the years from 2000 to 2008, its annual rate of reduction of under-five mortality has been 6.3 percent.²⁵

Although more remains to be done in reducing both under-five mortality and maternal mortality, in particular, countries have demonstrated that real progress can be achieved (table 2.1).

Availability of services and health interventions has also shown signs of improvement. For example, Countdown to 2015 points to increases in the proportion of children sleeping under insecticide-treated nets and neonatal tetanus protection, as well as some increases in delivery care, contraceptive prevalence, and diarrhea treatments.²⁸ Nutritional improvements have also been noted. SSA countries such as Benin, Gambia, Ghana, Guinea, Lesotho, Madagascar, Malawi, Niger, Tanzania, and Togo have all seen an increase of more than 5 percent in exclusive breastfeeding over a three-year period.²⁹

Success stories present not only opportunities for lessons to be shared with other countries, but also for future targeted investments to build on existing momentum for change.

Table 2.1: Progress toward MDG 4, average annual rate of under-five mortality reduction, observed 1990 to 2006²⁶

Country	Under-five mortality reduction
Benin	1.4 %
Cote d'Ivoire	1.2 %
Djibouti	1.9 %
Eritrea	4.3 %
Ethiopia	3.2 %
Gambia	1.9 %
Guinea	2.4 %
Guinea-Bissau	1.1 %
Madagascar	2.4 %
Malawi	3.4 %
Mozambique	3.3 %
Niger	1.5 %
Nigeria	1.2 %
Senegal	1.6 %
Somalia	2.1 %
Sudan	1.9 %
Tanzania	1.9 %
Togo	2.0 %
Uganda	1.1 %

Source: Countdown to 2015²⁷

(iv) Community care in Africa: a relevant and successful approach

The African Regional Health Report (2006) and the Ouagadougou Declaration on Primary Health Care and Health Systems in Africa (2008) identified community involvement as key to success in the African context.³⁰ This is consistent with WHO policies, which recognize that moving toward health for all requires health systems to respond to the challenges of a changing world and growing expectations for better performance. Adopting these policies involves substantial reorientation and reform of the way health systems operate in society today, and the reforms constitute the agenda of the renewal of Primary Health Care.³¹ The policy reforms are proposed in four groups, some of which place a strong emphasis on community:

- Reforms to manage inequality of health outcomes in the community by moving toward universal coverage and social protection.
- Service delivery reforms that reorganize health services as primary care, representing attitudinal responses to people's needs and expectations, so as to make them more socially relevant and more responsive to the changing world while producing better outcomes.
- Public policy reforms that secure healthier communities, by integrating public health actions with primary care and by pursuing health-promoting public policies across sectors.
- Reforms to foster more inclusive health system leadership with community participation and based upon improved knowledge management and sound evidence.³²

Cultures in Africa place importance upon the family unit and care for relatives. The region is therefore well placed to support health care provision through outreach and health education to families and communities. This strategy is complementary and indeed an integral part of the health systems in developing countries.

Box 2.2 - Niger: improved financial access for children and mothers

During 2006 and 2007, the government of Niger progressively implemented a policy of removal of user fees for childcare, antenatal care, caesarean sections, and family planning. This major shift in policy has had an enormous impact on financial access and utilization of health services. The integration of existing Community Health Posts, or Cases de Santé, in the National Health Policy has been a major breakthrough to improve access to basic health care for thousands of children, by bringing health services closer to their home. The Community health workers, a new cadre of health worker in Niger, are an integral part of the health system, formally trained, paid, and based in Cases de Santé throughout the country.

A total of 2,501 Cases de Santé have been established countrywide, with community health workers deployed to provide basic prevention and treatment for maternal and child health. These efforts to improve access and quality of health services in Niger are showing clear signs of success in recent years. During the period of 2006 (DHS/MICS) to 2010 (SMART survey), in terms of treatment for the main childhood killers, the training and deployment of community health workers through the Case de Santé network has resulted in:

- An increase from 33 percent to 60 percent of febrile children receiving appropriate malaria treatment.
- An increase from 47 percent to 60 percent of children with suspected pneumonia taken to an appropriate health provider.
- An increase from 18 percent to 51 percent of children with diarrhea receiving appropriate ORT.



3. THE WIDER INVESTMENT CASE

Improving health in Africa can be an essential driver for long-term economic development and growth. Good health is not only a consequence, but also a cause, of development. Healthier individuals, living longer lives:

- Are more productive and contribute to national income, job creation, and economic development and growth.
- Have fewer and healthier children, invest more time and greater resources in their children's education, and thus secure the future for their societies.
- Reduce costs of ill health to society and companies and enable resources to be directed to economically productive activities.

In addition to making good economic sense, these investments will help African countries fulfill their commitments to the fundamental values of safeguarding human health and life, commitments that are the bedrock of our societies today.

There are also clear additional social and political benefits of healthier populations. Although difficult to express in monetary terms, these benefits should have a significantly positive effect on the economic and wider well-being of individual nations and on their people. Healthier people also tend to be less of a burden on existing health systems and thus create a supportive, virtuous cycle.

3.1. Better health leads to greater wealth

As noted by the Commission on Macroeconomics and Health,³³ the wisdom of every culture teaches us that health is wealth, in terms of human well-being and also in terms of wealth creation. The health of the population has been identified as one of the most robust and potent drivers of economic growth,³⁴ with improved health generating significant economic benefits for individuals and families as well as their communities and the society at large.³⁵ Improving the health of girls and women in particular is likely to have a significant impact on poverty reduction, since they make up 60 percent of the world's poorest people and two-thirds of the world's illiterate people.³⁶

There are three main channels through which the better health of an individual translates into greater economic prosperity for a nation. These are through the individuals themselves, their families, and the society in which they live and work.

3.1.1. The individual

The improved health of an individual increases the market income of her work, increases the longevity of her working life, and improves her well-being.

Healthier individuals are physically and mentally more energetic and robust. In the context of SSA, where a high proportion of the workforce is engaged in manual labor, including agriculture, this greater energy is particularly important. When employed, individuals work harder and are more productive. These individuals tend to be less absent from work due to illness and better able to improve and maintain their skill levels; therefore they add greater value to the output of their endeavors. These individuals

earn more, save more, invest more, consume more, and pay more in taxes. Entrepreneurship flourishes, and the economy has access to more savings, partly as a result of lower mortality rates and longer life expectancy, which provides incentives for individuals to save for their retirement.³⁷

Each extra year of healthy life reduces the costs of medical treatment (often borne by the individual), the losses of adult earning power due to childhood illnesses, and the loss of any future earnings from premature mortality. Because of these factors, as well as the value of reduced morbidity and disability, longer life, leisure time, and general improvements in well-being, each extra year of healthy life could be valued in economic terms as a multiple of the individual's one-year earnings.³⁸

These greater earnings and lower costs should have a significantly positive impact on the overall GDP of a nation. Although establishing causality can be difficult³⁹, there have been a number of studies that have suggested a strong relationship between better health of a nation and improvements in the GDP:

- One study suggests that one extra year of life expectancy raises steady-state GDP per capita by around 4 percent.⁴⁰
- Another study estimates that reductions in adult mortality explain 10 percent to 15 percent of the economic growth that occurred from 1960 to 1990.⁴¹

Specific diseases, such as Malaria and AIDS, are thought to have especially detrimental effect on economic growth. Some estimates have suggested that an economy in which the population is at zero risk of malaria tends to grow more than 1 percent per year more rapidly than an economy with high malaria risk, when other variables are controlled for.⁴² Another study⁴³ argues that wiping out malaria in Sub-Saharan Africa could increase that continent's per capita growth rate by as much as 2.6 percent a year.

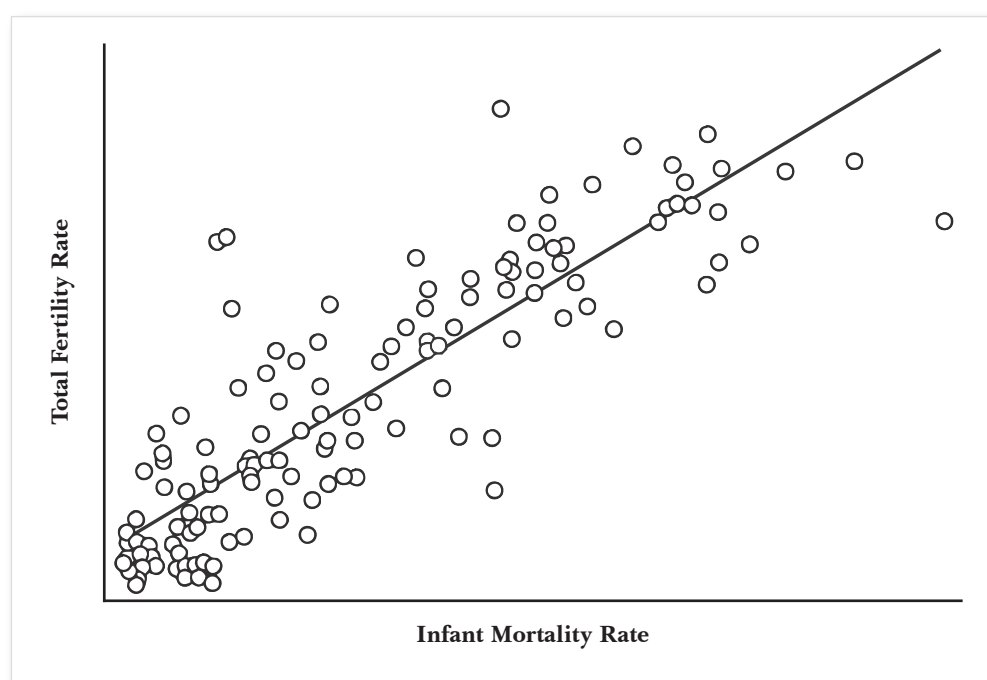
3.1.2. The family

Improved health of an individual has very positive economic effects on the family or household. It reduces fertility rates and significantly improves the educational opportunities and attainment by children.

Economic consequences of an individual's ill health are magnified in SSA, mainly due to the low availability of health insurance mechanisms that could mitigate the costs of illness. When illness occurs, the household spends much of its resources on medical care, depletes its assets, and incurs substantial debt. Relatives and the community may also incur debts. Preventing such a depletion of assets through promoting better health and health care for individuals helps households avoid the poverty trap. It will enable them to use these assets for productive investments or raising additional capital for enterprises (such as investments into seeds, fertilizers, and tools).

Disease of one individual in the family may also have detrimental impacts on the rest of the family, with children being particularly vulnerable. Faced with high levels of illness and likely child mortality, poorer families often compensate by having a larger number of children. Powerful evidence exists that high infant and child mortality lead to high fertility rates (figure 3.1). High infant mortality households have higher population growth than low infant mortality households, as more children actually survive than the family compensates for by having a greater number of children.

Figure 3.1: Relationship of infant mortality rate and total fertility rate in 148 countries, 1995 (partial regression plot)



Source: Based on Sachs, J.D. et al (2001)⁴⁴

When poorer families have so many children, as is often the case in Africa, the household can afford only a very small investment in the education of each child. Healthier families tend to have fewer children and invest more time and resources into the children's education. Children of healthier adults are themselves healthier, are more likely to attend school, have better educational opportunities, and achieve higher educational attainment. These children will go on to be healthier and more economically productive adults.

3.1.3. Society

Improved health will not only better the livelihoods of individuals and their families, but will bring considerable benefits to society as a whole. Enterprises will employ more people, be more profitable, and pay more taxes. National economies will be more attractive to both domestic and foreign investors. Healthier destinations (such as those with low levels of malaria incidence) are likely to be more attractive to tourists.

Better health not only increases people's personal earnings directly, but also reduces costs to companies from high employee turnover, repeated training costs, and provision of health care. Organizational productivity partly results from the teamwork engendered by stable working relationships between personnel who stay and train at the firm. In addition, healthier individuals tend to have greater demand for goods and services, driving investment and production within the economy.

When fewer individuals are ill, entire communities benefit. Budgets are shifted away from care for the ill and orphaned and into productive investments, such as physical and social infrastructure — roads, water and sewerage, electricity, education, and so on. Skilled workers remain in their communities, services improve, and entrepreneurship flourishes.

3.2. Meeting our commitments to save human life and safeguard well-being

Increasing the wealth of societies through better health of the population strengthens the economic case for investing in health care and also builds on the fundamental value people universally attach to saving human life and safeguarding well-being. This intrinsic value is embedded in the commitments that the African nations, together with the rest of the international community, have made and as reflected in a number of international articles and declarations, including:

- Article 25 of the UN Universal Declaration of Human Rights (1948):
“Everyone has the right to a standard of living adequate for the health and well-being of himself and of his family, including ... medical care. ...”
- Article 12 of the UN International Covenant on Economic, Social, and Cultural Rights (1966):
“The steps to be taken by the States Parties ... to achieve the full realization of [the right of everyone to the enjoyment of the highest attainable standard of physical and mental health] shall include those necessary for ... the provision for the reduction of the stillbirth-rate and of infant mortality and for the healthy development of the child ... the prevention, treatment and control of epidemic, endemic, occupational and other diseases. ...”
- Article 12.2 of the Convention on the Elimination of All Forms of Discrimination against Women (1979, 185 countries have ratified to date):
“State parties shall ensure to women appropriate services in connection with pregnancy, confinement and the post-natal period, granting free services where necessary, as well as adequate nutrition during pregnancy and lactation.”
- Resolution 11/8 of the Eleventh Session of the Human Rights Council (2009):
“Recognizes that ... preventable maternal mortality and morbidity is a health, development and human rights challenge that also requires the effective promotion and protection of the human rights of women and girls, in particular their rights to life, to be equal in dignity, to education, to be free to seek, receive and impart information, to enjoy the benefits of scientific progress, to freedom from discrimination, and to enjoy the highest attainable standard of physical and mental health....”

In addition to these, the international community has also come together on various occasions to commit to improving health outcomes for the world's population. As previously mentioned the 2000 the United Nations Millennium Declaration, commits nations to a global partnership to, among others, reduce under-five child and maternal mortality, halt and begin to reverse the spread of HIV/AIDS, and so on. These commitments are the basis of the Millennium Development Goals. Leaders of government have continued to affirm their commitments to health as is seen through the 2001 Declaration of Commitment on HIV/AIDS issued by Heads of States during a Special Session of the UN General Assembly and the aforementioned Resolution 11/8.

3.3. Noneconomic social and political benefits

There are still wider, noneconomic impacts of improved health. Incidence of HIV, malaria, tuberculosis, and maternal and child mortality and morbidity have critical impacts on the social and political well-being of societies. Better health and longer life expectancy provide positive and welcome bonds between individuals and the society they live in. These bonds lead to a greater ownership of and an increased stake in the sociopolitical processes.

In particular, healthy mothers and children contribute to peace and social stability as much as they benefit from them. Maternal deaths result in children being orphaned and uncared for. Sociopolitical stability also strongly correlates positively with economic growth and sustainable economic development.

Development of societies, supported by improvements in the health of individuals within that society, is manifested in the increased capacity of people to have control over material assets, intellectual resources, individual well-being and existence of the physical necessities of life such as food, clothing, shelter, and employment.

3.4. Healthier people: a lower burden on health systems

With healthier individuals comes the development of stronger health systems. These individuals and their families tend to be a lower burden on the health systems, and they tend to provide more effective demand for health services. They generally have better health-seeking behavior and are more receptive to adopting health-safeguarding measures (such as the use of insecticide-treated nets and contraception).

This virtuous cycle centers around healthier individuals being:

- More productive; therefore, they contribute to economic growth and pay more tax to support health system development.
- Better educated; as a result, more health workers come into the system, and people make more effective use of health care services and have increased health-seeking behavior.
- Less likely to require curative care; therefore, the costs of care drop, and the focus shifts to the development of primary and preventative care, which is generally cheaper (for example, in many places, every dollar spent on family planning saves four or more dollars that would otherwise have been spent to address complications of unplanned pregnancies).⁴⁵
- More likely to demand and engage in the development of health-supporting infrastructure, such as the improvement of general infrastructure levels, leading to lower burdens on the social determinants of health (such as access to water and sanitation, food security, and transport links).

Better health tends to lead to better health systems, and better health systems tend to result in healthier individuals.





4. WHAT TO INVEST IN

Existing evidence provides us with clear guidance on where investments are needed in order to improve the health of people in Africa. New and existing resources need to be directed at strengthening the overall health systems, private and public, in African countries, as platforms for sustainable health improvements in the short, medium, and long term. Globally, between 20 percent and 40 percent of health system spending is wasted, with poorer countries losing a higher proportion of the resources allocated to health.⁴⁶ Effective spending needs to be combined with measures to increase spending efficiency. The competing demands on national Ministries of Finance — from education and agriculture to the health sector, for example — underscore the need to prioritize investment in what works.

This strengthening of health systems can be achieved only through enabling implementation of evidence-based policies, developed through analysis and stakeholder dialogue and supported by improvements in governance and stewardship to translate these policies into action on the ground.

Under the guidance of these policy frameworks and through better stewardship of resources, targeted, efficient, and effective investments are required for: (i) improving the **demand** and **use** of health services by the population and (ii) strengthening the building blocks of health service **provision** to meet this demand. Health investment should also be supplemented by cross-sectoral collaboration, reflecting an investment in the social determinants of health.

4.1. Implementation of evidence-based policies toward national health systems

National health systems are a result of well-developed and implemented evidence-based policies to improve and safeguard the health of the population. These policies are based on and developed through detailed analysis and stakeholder consultations and dialogue. They define the way in which the health system works.

Health systems thus have three fundamental objectives:

- Improving the health of the population they serve.
- Responding to people's expectations.
- Providing financial protection against the costs of ill-health.⁴⁷

These systems provide management structures that allow for investment in the most effective areas of health care. This implies the existence of mechanisms that allow managerial focus on how interventions are organized and delivered, enable scale-up of cost-effective preventive and curative measures for specific high-burden diseases, and encourage better collation and utilization of knowledge to define health strategies.

Effectiveness of health systems will improve with the strengthening of institutions as well as of governance and accountability processes. These processes are critical to ensuring that systems, once set up, are maintained and developed to respond to the changing needs of the population.

4.2. Investing in better demand and use of health services

Improving the health of people in Africa requires mechanisms that will make purchasing these services more sustainable, create greater awareness of services that can be accessed, and encourage health-seeking behavior more generally.

4.2.1. Mechanisms for improving access and ensuring financial sustainability

Provision of any health care service, in any context, will require resources to be directed from somewhere; no health care provision is free. However, there are two main approaches in which these services can be paid for, either through:

- Direct payments for services by the user at point of use (referred to as out-of-pocket expenditures).
- Mechanisms that pool risks — national taxation or some form of health insurance mechanism that eliminates or reduces the need for payment at point of use.

We advocate that a proportion of investments flowing into health systems in Africa be used to develop the latter of the two and particularly to create and maintain mechanisms that will make services free at the point of use and reduce the incidence of catastrophic out-of-pocket expenditures for people living on the continent. New evidence supports the notion that an equity-focused approach could bring vastly improved returns on investment by averting far more child and maternal deaths and episodes of undernutrition and markedly expanding effective coverage of key primary health and nutrition interventions.⁴⁸

In SSA, average total health expenditures are currently around \$24 per capita.⁴⁹ Household out-of-pocket expenditures account for more than half of all health spending,⁵⁰ resulting in great constraints on household budgets and welfare and placing the poor at great risks of falling into further poverty.⁵¹

The key investment areas, in this regard, are mechanisms that create greater opportunities for individuals to share risk with others — in effect, creating more sustainable and context-specific health insurance mechanisms (equitable prepaid health financing) that will provide the necessary support for populations in times of ill health. Health insurance mechanisms will also offer opportunities to increase the efficiency of health expenditures — in particular, the purchaser-provider split — and better value service packages with providers.

Efforts to extend health insurance mechanisms have been successful in a number of African countries (box 4.1).

Box 4.1 - Extension of health insurance in Ghana and Rwanda

During the last decade, both Ghana and Rwanda have initiated efforts to scale-up health insurance coverage among the population employed in the informal and rural sectors: as a result, enrollment in health insurance mechanisms in both countries shot up dramatically. In Ghana, enrollment in health insurance mechanisms doubled each year from 2004 until at least 2007, and health insurance coverage has reached more than 50 percent of the population within 5 years. In Rwanda, health insurance coverage also rose fairly rapidly from less than 1 percent in 2000 to reach more than 90 percent of the population in 2008. In both countries, health insurance coverage contributes significantly to increased utilization of health services and reduction of out-of-pocket spending. Both countries achieved these impressive results through strong leadership at national and local levels. They built on community-based health insurance principles to develop the decentralized local health insurance organizations that function as the insurance carriers into which individuals and families register. Both countries developed comprehensive frameworks for providing support to local health insurance mechanisms, including strong legislative and regulatory instruments, financing mechanisms at the national level for providing subsidized care for vulnerable groups, and strong technical assistance activities to support the local health insurance mechanisms.

4.2.2. Improving awareness of services

Achieving improvements in health outcomes for all depends on effective demand for these services. The current prevalence of a low use of services in SSA can be overcome through investments into areas which may include:

- Increasing access to information through educational programs and campaigns especially targeting girls and young women, and other marginalized populations.
- Conducting behavioral change communication campaigns.
- Improving the clarity of messages to the population and ensuring messages are culturally sensitive and appropriate to improve uptake.
- Ensuring a variety of channels are used, including verbal or pictorial communications, in areas of low literacy.

Community health workers and community-level care, in general, are important channels through which these activities could be implemented, for populations who do not have easy access to the mainstream public health infrastructure. The content of such messages needs to focus on:

- When people should seek health care services.
- Where and how they can obtain these health care services.
- What the cost implications and people's rights are in obtaining such care.

Particularly important will be investments in programs that on the one hand seek to understand the population's expectations and perceptions of services currently available, and on the other work with communities to change perceptions should this be appropriate in both the cultural and service provision context.⁵²

4.2.3. Encouraging health-seeking behavior

In addition to building awareness of service availability, efforts to encourage health-seeking behavior in the population are essential. Crucial efforts include educating and informing people of the steps to take to treat or prevent illness (such as using insecticide-treated nets), as well as ensuring that effective health services, ideally, are sought from regulated health service providers.

An example would be investing in educational programs targeting malaria. Health-seeking behavior would involve taking preventative measures, such as use of nets, as noted above; recognition of symptoms; and use of laboratory services, where possible, for the diagnosis of malaria. In the long run, such investments are likely to prove more cost-effective when compared with money spent on partially successful curative treatments.

4.3. Investing in the building blocks of service provision

Demand for health services needs to be coupled with the development of key building blocks of effective service provision. This author advocates targeting investments to a number of areas of health care provision, which are likely to have the greatest return in terms of economic benefits, healthier individuals, and lives saved.

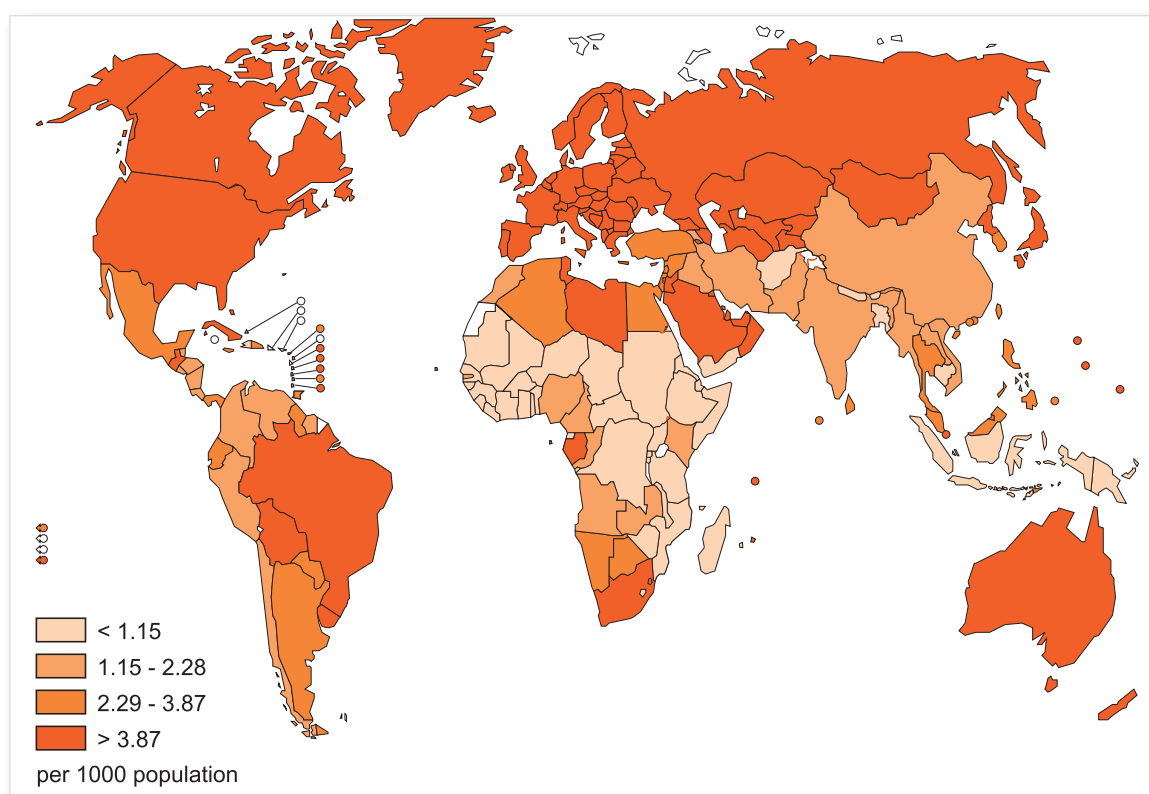
These key building blocks include a skilled health workforce, essential health commodities, the upgrade and improvement of health information management systems, health infrastructure, and quality and availability of service provision. All of these are to be considered within the context of providing both preventative and, where appropriate, curative care.

However, maximizing the return on investments in the health system building blocks will require focused efforts to redress some of the key causes of inefficiency within health systems. The 2010 World Health Report has identified the leading causes of inefficiency in health systems, linked primarily to poor availability and use of commodities, poorly motivated health workers, inappropriate health care services, and poor governance. Countries should reallocate existing resources to yield efficiency gains and ensure additional investments are also made along the same lines.

4.3.1. Greater, better skilled and more productive health workforce

Adequately trained, motivated, and responsive health workers are key to the delivery and management of care. Investments are particularly needed in SSA, as most countries have grossly inadequate numbers of health workers—less than 1.15 per 1,000, as opposed to the WHO recommended minimum of 2.3 per 1,000 needed to achieve 80 percent skilled attendance at delivery. The 2006 World Health Report identifies 57 countries where the density of health workers falls below the minimum threshold, and 36 of them are in SSA. The Africa Health Workforce Observatory (AHWO) estimates a shortage of more than 1 million health workers on the continent. This would require an increase in the number of existing health worker by 139 percent. Figure 4.1 below shows the low volumes of health workers in SSA.

Figure 4.1: World distribution of health workers



Source: WHO, 2006

The opportunity for investment is considerable and returns are likely to be very high, particularly since SSA is starting from a base of only 3 percent of the world's health workers, though it has 11 percent of the world's population.⁵³ Any improvements are likely to have considerable impact on the ground.

It has been shown that there is a direct relationship between the ratio of health workers to population and the survival of women during childbirth and of children in early infancy.⁵⁴ Studies published in *The Lancet* and elsewhere confirm this, suggesting that in addition to other determinants, the density of human resources for health is important in accounting for the variation in rates of maternal mortality, infant mortality, and under-five mortality across countries.⁵⁵ In SSA, where most maternal deaths occur, 70 percent of women have no contact with health personnel following childbirth, only 42 percent of births are attended by skilled health workers, and 28 percent of women never receive antenatal care.⁵⁶

Although the absence of health workers is a key barrier to the provision of quality services, poor productivity of the health workforce is an equally important barrier. Inappropriate training, recruiting, and distribution reduce the effectiveness of the workforce and the efficiency of health investments.⁵⁷ Low motivation, due to low compensation and insufficient supervision, can drive health workers to take on second jobs, reduce performance in their first employment, and drive up attrition and poor performance behaviors such as absenteeism. For example, a 26 percent reduction in productivity levels of health workers has been attributed to absenteeism and other poor uses of staff time.⁵⁸

Investments, therefore, should be aimed at:

- Improving both the quantity and quality of the health workforce, including community-level services provision.
- Putting in place policies and strategies to better utilize existing human resources, to accelerate the selection, training, distribution, retention, motivation, and productivity of all health workers.
- Developing medium and short-term strategies for task shifting and sharing initiatives and the training of community health workers in particular to drive forward the promotion of health services.

Many countries are already making progress. Ethiopia, for example, has made good progress in training health extension workers (box 4.2).

Box 4.2 - Ethiopia: Health Extension Workers

Ethiopia, 1 of the 57 countries facing a crisis in human resources for health, has put in place a Health Extension Program that focuses on meeting HR needs where they are most critical. Ethiopia's labor shortage affects most of the 85 percent of the population that lives in underserved rural areas. An estimated 60 percent to 80 percent of the country's annual mortality rate is due to preventable communicable diseases such as malaria, pneumonia, and tuberculosis. So Ethiopia decided to focus its human resources for health strategy on community-level provision through the 2004 Health Extension Program. This program trained and deployed more than 34,000 new health extension workers to work at local health posts and to provide a package of essential interventions to meet needs at this level. The government recruited female high school graduates from rural areas, and provided one year of relevant training in 16 packages of promotive, preventive, and basic care (as related to malaria, diarrhea, and recently pneumonia treatment, among others). The National Government paid for their training and is paying their salaries. Early results showed success, particularly in reduced incidence of malaria.

Underscoring the importance of these approaches, on 20 May 2010, the 63rd World Health Assembly adopted the WHO Global Code of Practice on the International Recruitment of Health Personnel. With this Code, Member States commit themselves to the voluntary principles and practices for the ethical international recruitment of health personnel, which take into account the responsibilities and rights of source and destination countries, other stakeholders, and those of the migrant health personnel themselves. The Code provides ethical principles applicable to the international recruitment of health personnel in a manner that strengthens the health systems of developing countries.

4.3.2. Availability of essential health commodities

Investing in the provision of safe and inexpensive drugs for acute respiratory infections, diarrheal diseases, tuberculosis, and malaria can save up to 10 million lives in developing countries and shorten the recuperation time of millions of other individuals.⁵⁹ Reducing the number of people in Africa who do not have access to essential drugs (currently 50 percent)⁶⁰ can make a real and sizable difference, with significant benefits.

Currently, commodities account for three of the ten leading causes of inefficiency in health spending. Spending on medicines accounts for 20-30 percent of health spending globally, with rates being higher in low income countries. A recent medicine pricing study indicates that African governments pay 34 percent to 44 percent more than necessary when they purchase medicines. Poor quality control for medicines drives up cost of health care.⁶¹ A study conducted across three African countries stated that 26-44 percent of malaria medicine samples were of poor quality. Additionally irrational use of medicines attributes resources to ineffective interventions.⁶² Poor prescription practices and inadequate adherence, by patients, to treatment guidelines drives up the cost of health care and poses considerable danger to patients.

Existing resources and new investments should seek to address primary inefficiencies and strengthen procurement and supply management systems. Investments that would be most valuable include:

- Programs to improve the use of available drugs and increase the quality.
- Efforts to reduce spending on drugs through better knowledge of international reference prices and increased use of generics.
- Strengthening logistics and supply management, including forecasting, procurement, and distribution. Agreeing upon national essential medicine lists and standard treatment guidelines and increasing efforts to promote rational use of medicines.
- Improving knowledge of storage guidelines, particularly for heat sensitive medicines.
- Upgrading regulatory frameworks governing drug patents, supply, and pricing.
- Developing prepaid health financing mechanisms to assure financial access to services and relevant commodities.

Successful investments will reduce the population's dependency on counterfeit or overpriced drugs and on the unregulated outlets that often sell them. In addition, improvements in the provision of drugs and supplies within national health care systems facilities are likely to reduce externally funded programs instituting their own purchasing and distribution systems. Although they provide an immediate vertical solution, externally funded programs ultimately increase the complexity of the supply management landscape and make standardization difficult and procurement expensive.

4.3.3. Upgrading and improving health information and knowledge management systems

Health information is the backbone of health systems. Evidence supports policy-making, planning, and programming. Evidence is also particularly important for decision-making in resource-constrained contexts, such as in many African countries. National health information systems, which include information on mortality, diseases, human resources, finances, essential medicines, public health supplies, transport, logistics, and so on, need improving in SSA. This includes improving knowledge management systems, documentation of best practices, lessons learned to inform health policies, dialogues, and debates.

High-quality, reliable information can exponentially improve the performance of the health system it supports. Developing health information systems, training staff in the use of the relevant technology, ensuring regular data collection, and building the capacity of staff to analyze and convert information into policies are key to the strengthening of health systems and should be areas for investment. Box 4.3 shows one approach to coordinated health information efforts, at the country level and in coordination with international development partners.

Box 4.3 - Kenya, Lesotho, Swaziland, Uganda: HIV Epidemic Analysis⁶³

National AIDS Authorities in Kenya, Lesotho, Swaziland, and Uganda, along with UNAIDS and the World Bank, produced a series of detailed reports that characterize the nature of the respective HIV epidemics and their drivers. The reports give very specific illustrations of challenges emerging from the relative lack of evidence-based policies and programs, while acknowledging that all countries have made considerable progress in addressing HIV and that several have seen their epidemics stabilize. They also provide concrete recommendations on how to move toward a more efficient use of resources through more evidence-informed prevention strategies.

These reports allow governments to review their existing HIV prevention response and make informed decisions on aligning sustained and effective interventions with proven need, ensuring resources are being invested in reaching those most at risk.

4.3.4. Upgrading, equipping, and maintaining health infrastructure

Equitable distribution of health infrastructure, including diagnostic equipment, appropriate transport, and communication, is vital for improving access to health services by the whole population.

In recent years, many African countries have made significant attempts to provide universal access to health care. This has taken the shape of decentralization initiatives, which have contributed to a more equitable distribution of health centers and increased responsiveness of health centers to local needs. Many countries have also benefited from a proliferation of nonstate health care providers (nonprofit and faith-based organizations) in remote areas. Although sometimes there are risks associated with the quality of care that might be provided through these outlets, care is getting better, and the nonstate actors have increased the volume of health centers and their distribution around the country. Still, inefficiencies linked to planning for health care infrastructure persist, with inappropriate levels of resources arising in some areas where hospitals have empty beds and other areas with inadequate resources.⁶⁴ Exploring ways in which nonstate actors could be engaged in service delivery will be an important aspect of overall health care provision in much of SSA.

There are many opportunities to build on these successes. Investments in improved planning and in the following example areas would deliver considerable returns:

- Decentralization of health care service points with realistic and fit-for-purpose service offerings and equipment, particularly in rural areas.
- Appropriate levels of training for health care workers supporting these centers, with shorter and less expensive training for more frontline primary care workers and a supporting infrastructure to improve ratios of skilled to less skilled workers.
- Innovative low-cost health services through e-health and its subcomponent “m-health” technologies.⁶⁵
- Mobile, inexpensive medical equipment that can be rotated between decentralized centers.

Improvements in wider infrastructure, such as better transportation links and access to water and sanitation, will also have impact on health, as previously discussed in Section 2. Multisectoral approaches, through collaborations between Ministries of Health and other Ministries (such as infrastructure and local governments), will be beneficial in progressing improvements in areas which affect the health of the population (such as improvements in water, sanitation, and transportation).

4.3.5. Improving the quality and availability of service provision

The quality of health care services will have an influence on people’s service-seeking behavior.⁶⁶ More widespread service availability, shorter waiting times, cleanliness, and friendly customer service all play a role in encouraging patients to prevent illness from occurring or to seek effective treatments when they are ill.

In this context, investments to improve service quality and availability will need consideration. Better utilization of existing resources is very important; for example, availability of care for pregnant women before they give birth is quite high, but services at the time of delivery, care of the newborn child, and post-partum care remain low.⁶⁷

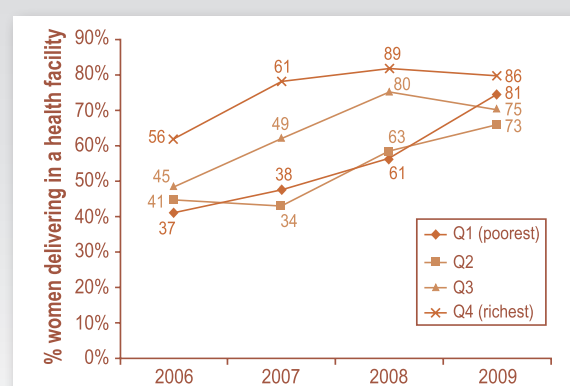
Box 4.4 - Burkina Faso: access to emergency obstetric care for the poor

Burkina Faso has subsidized obstetric and neonatal emergencies (EmONC) since 2006/7. The policy is funded by the national budget (30 billion F CFA for 2006-2015). EmONC services are subsidized at 60–80 percent; women pay the supplement. The most deprived are totally exempted.

Based on population data, an assessment in the district of Nouna showed a reduction of inequalities in use between the upper and lower quintiles between 2005 and 2008. Research undertaken in the District Ouargaye showed a reduction in medical spending by 70 percent between 2006 and 2010 for normal deliveries.

Nonmedical expenses, such as transportation, are still a significant burden, and the needy are still excluded from the system.

Use of facility-based delivery by socioeconomic quartile (with absolute numbers indicated)



Source: Ridde V. et al

Positive results have been achieved by many countries that have increased community participation in health provision as a means of increasing service availability. Community Health Workers have been used to provide a range of preventive and promotion services, and also invited to take part in health facility management committees and boards and area health committees. Although there have been difficulties in implementing community-level service (due to high dropout rates, for example), this continues to be an area that has produced positive results and is an important investment opportunity.

In addition, implementation of outreach strategies have improved services in more remote areas and, the development of Quality Assurance programs for service providers continues to be a relevant approach in ensuring improvements in the quality of available services. Furthermore, investment into these and other similar strategies, such as improving the referral system and strengthening the coordination of services with the continuum of care for maternal, newborn, and child health, will be reflected in improved health results for the population.

Finally, in the context of increasing volume of services being provided through nonstate actors — whether private for-profit organizations, or a whole range of not-for-profit entities (such as faith-based organizations) — investment in better regulatory frameworks, as well as improved public-private partnerships, will be important. Today, the majority of health spending comes from out-of-pocket payments. Also, most of these out-of-pocket payments are used to buy services from the private sector. In fact, 52 percent of poor people in most SSA countries who seek help for a sick child will often go to a private sector provider (shop, pharmacy, nurse's cabinet, NGO).⁶⁸ In addition, many resources (human resources, financial, infrastructures, equipment, know-how) exist in the private sector and could be harnessed through public-private partnerships. Such PPPs can be useful tools mainly to improve quality of health care services, and to increase coverage to reach some key indicators. Success stories for PPPs exist throughout the world, are well documented and can be built upon.

4.4. Promoting cross-sectoral investment and action for health

Reaching the health Millennium Development Goals will not be possible through health spending alone. Cross-sectoral engagement and investment in the leading social determinants of health is imperative to the improvement of health. Gender inequality, low levels of education, and poor access to water and sanitation hamper efforts to improve health and further drive health inequities. For instance, today, globally, 84 percent of people without access to an improved source of drinking water live in rural areas.⁶⁹ Yet access to safe drinking water and sanitation is proven to reduce illnesses such as diarrhea, one of the leading public health issues on the continent and one of the leading causes of death for children under the age of five.⁷⁰ Education and socialization are also important for disease prevention. UNICEF reports that education helps reduce poverty and that educating girls results in a dramatic reduction of chances that their children will die under the age of five.

Though progress has been made in increasing the coverage of social determinants of health in Africa, more remains to be done. Coverage of improved drinking water has increased from 49 percent in 1990 to 60 percent in 2008,⁷¹ but to date less than 4 of 10 people in Sub-Saharan Africa use an improved sanitation facility,⁷² 37 percent of the population still does not have access to drinking water,⁷³ and 46 million primary-school-age children are not enrolled in school^{74,75}.

Investments in health will need to be supplemented with cross-sectoral efforts that look at resolving these and other determinants of health. Important steps toward improving health outcomes include educating children, improving means of communication, building improved sanitation facilities, facilitating access to health centers by building roads, and increasing and improving sources of water.



5. LEVEL OF INVESTMENT, RESULTS, AND IMPROVING INVESTMENT IMPACT

Evidence exists on how much investment will be required in the African health systems in order to achieve substantial improvements. Substantial work was undertaken recently for the High Level Taskforce (HLTF) on Innovative International Financing for Health Systems on both identifying the possible approaches to, and levels of, investment required to reach the health MDGs. The Africa Investment Case bases its recommendations on this work.

HLTF's work presented two estimates of possible investment strategies, each of which is associated with a level of required investment and potential health outcomes that could be achieved from that investment. Countries in Africa are very diverse, and this investment case recognizes the need for further work at the country level to agree on and tailor the most suitable approaches, as part of existing national health planning and budgeting processes.

An increase in funding will not be sufficient, so resources must be used in a more efficient manner, and a number of approaches need to be adopted as guiding principles to increase the investment impact.

5.1. Investing for results: level of required investment and results

The range of investments recommended for the improvement of health outcomes in the region is based on two investment strategies suggested by HLTF. These vary in their assumptions and investment focus. Although more detail about the two approaches is provided in Appendix 2, the following is a summary:

- **Investment Strategy One, MBB Medium:** This approach was developed by an interagency group coordinated by the World Bank and UNICEF, in collaboration with UNFPA and PMNCH. The methodology advanced the country costs calculated with the Marginal Budgeting for Bottlenecks approach, which is largely based on country planning exercises and assumes a delivery strategy that emphasizes full scale-up of community-based services prior to expanding clinical services.
- **Investment Strategy Two, WHO Normative:** The analysis underpinning this approach was led by WHO with collaboration from UNAIDS and UNFPA. This investment strategy involves greater frontloading of capital and reflects a more facility-based approach to service expansion, as well as the importance of rapid scaling up, with a more optimistic view of the speed with which new infrastructure can be put into place.

Both investment strategies consider levels of targeted investment needed to strengthen health systems, through a series of proven interventions (Appendix 3),⁷⁶ as a means of achieving improved health outcomes that are sustainable in future years. In particular, the investment strategies:

- Focus on investing resources in health care areas that reduce both mortality and morbidity and improve key system inputs that have the greatest impact.
- Allocate funding to extend service availability based on national programs.
- Improve pre- and in-service training for human resources and address issues related to motivation and allocation of these resources in countries.
- Direct resources to infrastructure, equipment, and transportation.

The actual levels of investment and detailed approaches at the national level will depend on individual countries' positions in the development cycle, the state, and type of health systems, existing structures, and priorities.

5.1.1. How much investment is required in SSA?⁷⁷

Two noted investment strategies identify the likely additional investment requirements across low-income SSA countries in order to meet the MDGs; that is, they are assumed to be over and above the current level of spending. If national governments and the donor community meet their commitments for increasing funding flows in future years to the health sectors in SSA, much of this additional investment requirement will be met.

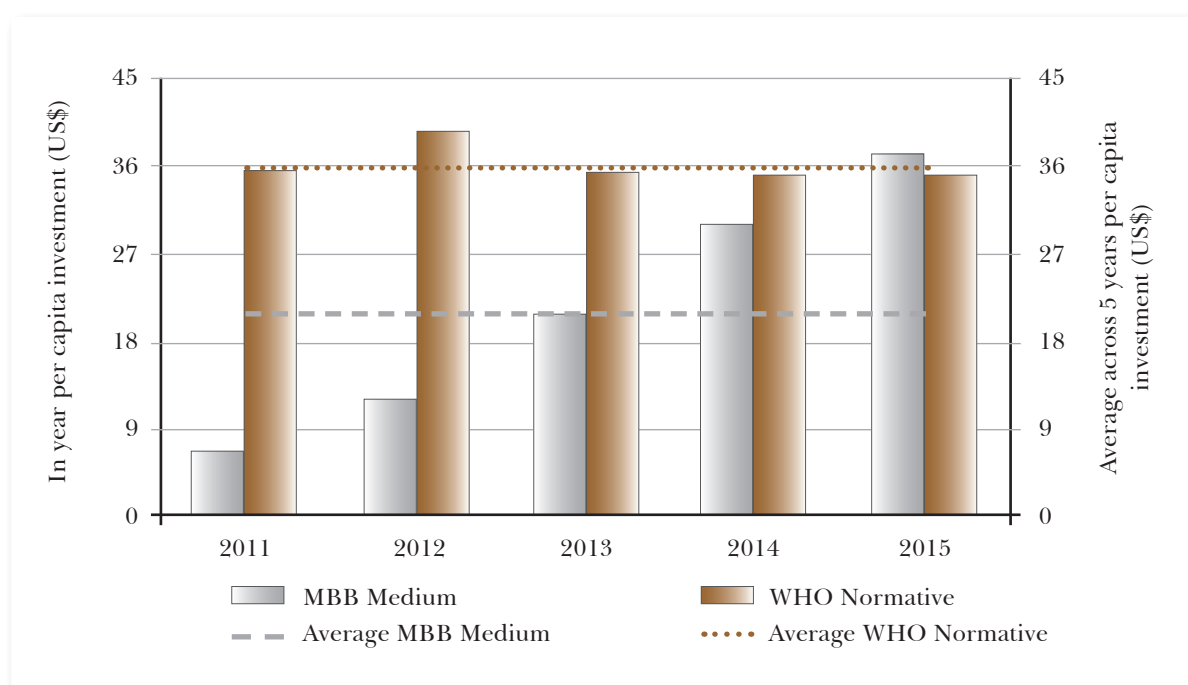
Although the investment requirements will vary between individual countries in SSA, the estimated investment levels are set out below (i) on a per capita basis, (ii) as a total over the five-year period from 2011 to 2015, and (iii) in the final year 2015 alone.

i) Per capita investment levels

The MBB Medium investment strategy suggests a buildup of investment over the five-year period, from around US\$7 per capita in 2011 to US\$37 per capita in 2015 (figure 5.1). The WHO Normative strategy assumes more linear investment levels over the five-year period ranging between US\$35 and US\$40 per capita per year. These values are assumed to be over and above what is currently invested per capita in SSA on health care.

On an average annual basis, the two investment strategies suggest that in the next five-year period, between 2011 and 2015, an additional annual investment of US\$21 (MBB Medium) to US\$36 (WHO Normative) per capita will be required over and above what is currently being invested. The difference in the per capita requirements between the two strategies is largely driven by WHO Normative approach, focusing more on health facility development and relevant human resource development, whereas MBB medium focuses more on community-led interventions.

Figure 5.1: In-year and average across 5 years per capita investment requirement



ii) Total investment levels for 2011 to 2015

Over the whole five-year period, the total level of investment in SSA countries, over and above what is currently invested, is expected to be between US\$84 billion (MBB Medium) to US\$140 billion (WHO Normative).

This is reflective of total additional in-year investments assumed by the MBB Medium strategy of around US\$5 billion in 2011 and increasing to around US\$30 billion in 2015. In the case of WHO Normative strategy, the total additional investment levels are assumed to be around US\$26 billion in 2011, rising to around US\$28 billion in 2015.

iii) Total investment levels in 2015, the final year of analysis

The year 2015 was the final year in the available analysis and had been chosen because it is both the year by when the MDG targets are to be met and the year when substantial improvements in services and health systems development is expected to occur.

Both strategies assume a comparable level of additional investment requirement for 2015, of around US\$30 billion (MBB Medium) to US\$28 billion (WHO Normative).

5.1.2. What will be achieved by this investment in SSA?

Table 5.1 below summarizes the expected, monetized, economic benefits and health outcomes in SSA as a result from the investment levels described above.

Table 5.1: Investment levels, economic benefits and expected health outcomes in SSA

Category	MBB to WHO range
Investment level	
Additional average annual per capita investment over 5 years 2011 to 2015	US\$21 to US\$36
Additional total investment over five years 2011 to 2015	US\$84 billion to US\$140 billion
Additional investment in 2015 alone	US\$30 billion to US\$28 billion
Health outcomes in 2015 alone	
Lives saved (of which 90 percent are mothers and children)	Around 3.1 million
Children (12 to 23 months old) prevented from stunting	5.1 million to 3.8 million
Monetized economic benefits	
Additional economic benefits in 2015 alone	Up to US\$100 billion
Health infrastructure improved by 2015 (cumulatively)	
Additional health facilities operating	58,000 to 77,000
Additional health workers employed	2.0 million to 2.8 million

LIVES SAVED AND STUNTING PREVENTED

The investments in health system strengthening and in key interventions are expected to yield considerable impact, saving the lives of 3.1 million people in 2015 alone of which 90 percent are women and children. The two strategies are also expecting to deliver considerable benefits to the SSA populations from preventing 5.1 million (MBB Medium) and 3.8 million (WHO Normative) children (12 to 23 months old) in 2015 from stunting and thus improving their ability to learn and fully contribute to the development of their countries.⁷⁸

MONETIZED ECONOMIC BENEFITS

Over the years, much work has been done in the context of developing countries to try to quantify the economic benefits of better health and lives saved. We refer to one such approach, as developed by the authors of the 'Macroeconomics and Health: Investing in Health for Economic Development' report for WHO,⁷⁹ to provide a monetized estimate of potential benefits from the level of investment suggested in this investment case.

(i) Economic gains from deaths averted

The Macroeconomics and Health approach had assumed that significant improvements in health systems could result in around 8 million averted deaths per year worldwide by 2015. The study estimated that, using the disability-adjusted life years (DALY) approach, this level of reduction in mortality could result in around US\$200 billion of economic gains globally.⁸⁰

Broadly speaking, SSA accounts for around 50 percent of premature deaths, as noted in Section 2 of this investment case. Thus, if around 4 million lives (50 percent of the averted deaths globally) are saved in Africa by 2015—which is also approximately the expected level of deaths averted as set out in table 5.1 above—then one might expect that economic gains would also be around 50 percent of those potentially achieved globally. This would suggest economic gains in the region of US\$100 billion in 2015 (around half of the global estimate of US\$200 billion per year).

However, since calculations are based on DALYs, a more conservative estimate is assumed by this investment case. We assume that only the deaths averted of those of working age would be counted toward an economic benefit estimate, which is assumed to be around 40 percent of the African population today. Therefore, the direct economic benefits are assumed to be 40 percent of US\$100 billion or around US\$40 billion in the year 2015.

(ii) Additional economic gains due to prevented morbidity and improved quality of life

Deaths averted are not the only source of economic gains, as noted in the Macroeconomics and Health study and supported by this investment case. When other factors — such as benefits accruing to the family and society at large from better health and lower morbidity, lower prevalence of disability, general human well-being, and political and social stability — are taken into account, the direct economic benefits could be perhaps be as much as two to three times higher.

In this regard, the US\$40 billion of direct benefits in Africa in 2015 could be as much as US\$100 billion if the additional and important benefits are taken into account.

With the total investment in the year 2015, as noted in table 5.1 above, estimated to be around US\$28–US\$30 billion for both strategies, investing in health in Africa has the potential for significant returns on investment: the benefit to cost ratio is around three or four times to one.⁸¹

HEALTH INFRASTRUCTURE IMPROVED BY 2015 (CUMULATIVELY)

(i) Additional health facilities created

It is important to note that the strategies link investment to the previously defined system constraints, which in turn increase and improve provision of and use of health care services. The investments over the five-year period to 2015 are expected to yield between 58,000 (MBB Medium) and 77,000 (WHO Normative) additional health facilities in SSA countries. This increase in quantity and quality of health infrastructure will improve accessibility to services (especially in remote areas, where individuals are often most in need) and encourage populations to seek health care by removing barriers associated with cost (stemming from transport due to the distance and time off work) and issues of quality associated with poor physical infrastructure.⁸²

(ii) Additional health workers trained

The health sector workforce, often referred to as the biggest barrier to the provision of health care, will be improved through an additional 2.0–2.8 million health workers trained, which is a long-term investment. This investment will also provide governments with the opportunity to revise the skill mix of the workforce to better meet population needs. In-service training will also be an important element of the human resource policies adopted by the government.⁸³

OTHER HEALTH OUTCOMES

Additionally, access to high-impact interventions will be scaled up, including for sexual and reproductive health. For instance, in the Strategy 1 (MBB Medium strategy),⁸⁴ 13 million additional women will be receiving antenatal care, and 10 million will be delivering with skilled birth attendants in 2015 alone. In the same year, children under the age of five will receive treatment for an additional 76 million cases of malaria, 161 million cases of acute respiratory diseases, and 80 million cases of diarrhea. Full immunization of children under 12 months will increase by 12 million.

There will be a drastic increase in nutritional factors, including exclusive breastfeeding for children under six months, therapeutic feeding for malnourished children under five years of age and vitamin supplementation. Cumulatively, by 2015, 261 million additional insecticide-treated nets will be distributed, and 2 million more people will be receiving antiretroviral treatment. This strategy will even improve the determinants of health by providing access to improved sanitation to an additional 461 million people.

Strategy Two, the WHO Normative approach, will similarly improve access to skilled birth attendants and antenatal care for an additional 15 million women and improve newborn care for an additional 15 million babies. Contraceptive services will be available to an additional 26 million people, and 24 million children will be treated for pneumonia according to guidelines. Five million people will live longer because of increased access to, and provision of, antiretroviral drugs. This strategy also reserves substantial funding for the improvement of health information systems and logistics for commodities.⁸⁵

5.2. Improving investment impact

The suggested investments will require a substantial increase in financing, as well as implementation of approaches to increase the efficiency and effectiveness of both existing and any new resources. The framework set out in table 5.2 below provides a number of approaches to be adopted as guiding principles in moving toward optimum levels of spending, targets, means, and mechanisms for investing the resources by governments, households (including individuals and employers), and development partners, so that better health is achieved for the money invested.

Table: 5.2: Funding framework

	Domestic revenue	Households / individuals / employers	ODA
Level of health spending	<ul style="list-style-type: none"> • More domestic investment for health • More equitable investment in health 	<ul style="list-style-type: none"> • Reduced level of catastrophic out-of-pocket expenditure 	<ul style="list-style-type: none"> • More ODA spending for health in the short to medium term, reducing in the long term • Fulfilment of existing commitments • Timeframe of commitments sufficient to allow for planning
Where to invest resources (effectiveness)	<ul style="list-style-type: none"> • Investing in strengthening health systems • Increased investment in primary and community care 	<ul style="list-style-type: none"> • Out-of-pocket spending directed at effective and proven care 	<ul style="list-style-type: none"> • Policy alignment with national plans and not silo programs • Fulfillment of ODA flows according to agreed disbursement schedules
Approaches to investing (efficiency)	<ul style="list-style-type: none"> • Investing in institutional capacity to improve absorption • Results-based funding • Decentralization (fiscal, mandates and services) • Reduce wastage and strengthen control systems 	<ul style="list-style-type: none"> • Establishment of risk pooling / health insurance mechanisms • Out-of-pocket spending directed through risk pooling and health insurance mechanisms 	<ul style="list-style-type: none"> • Harmonization and alignment of funding flows and monitoring processes
Mechanisms for channelling funds	<ul style="list-style-type: none"> • National mechanisms • Empowering local governments where appropriate 	<ul style="list-style-type: none"> • Prepayment / Health insurance mechanisms • Public-private partnership 	<ul style="list-style-type: none"> • Move towards a global funding platform • Bilaterals and multilaterals encouraged to fund through One Budget, One Plan, One results framework

5.2.1. Level of health spending

National governments should increase funding allocations to health in line with their commitments, while recognizing the wider benefits that such expenditures can generate, as set out in this investment case. In addition, allocation of such funding ought to be equitable, both geographically and socially (for example, with respect to gender and marginalized groups), as it will be important to address the current inequities in the availability of care and to achieve the highest health outcomes across the respective countries.

It is desirable that there be, over time, a reduction in the incidence and severity of catastrophic out-of-pocket payments by households and individuals.

ODA will continue to be an important source of investment for health sectors in Africa. In terms of level of funding, there will likely be a need to increase such funding in the short to possibly medium term (mainly in

meeting the commitments already undertaken by the international community), but with a view to reducing the share such funding will have in national health investment plans. However, the Paris Principles and Accra Agenda should be used as the framework for providing such funds. Donors are encouraged to increase the predictability of their funds and, where beneficial, to use either national mechanisms for channeling funds or multipartner funding platforms. The timeframe for relevant commitments should be sufficiently long in order to allow health sector investment plans, which often have multiyear horizons, to be implemented.

5.2.2. Where to invest resources?

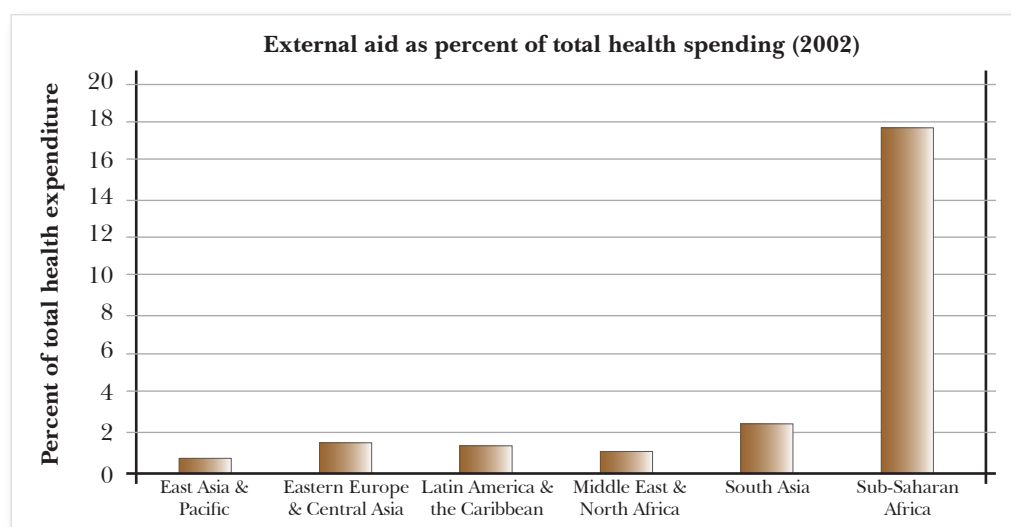
National governments are most likely to achieve higher health outcomes and wider economic and other benefits by focusing domestic resources on supporting national health systems. Investing in health systems over the years produces a cumulative effect on better and more effective care, through improvements in both physical and social infrastructure. Within the context of health systems, investments should be directed to the noted building blocks of those systems (Section 4) and to strengthening primary and community services in particular. In the long term, human resources will have to increase in numbers and will need to be better distributed. Short-term solutions to maximize the use of existing health workers will need to be explored, such as task shifting, re-profiling, sharing, improving absorption capacity, improving retention and motivation of staff (in line with the most recently adopted resolution by the World Health Assembly on recruitment of human resources in health), and making institutional and on-the-job training more accessible.

Investments in education and informing the population will be essential to support households' decisions on seeking and, where appropriate, paying for the most effective care.



Health outcomes will be improved by development partners aligning their policies and support with national plans, rather than silo programs. This is particularly important in the context of SSA's continued dependence on external aid, though there are differences between individual countries (figure 5.2).

Figure 5.2: External aid as a percentage of total health spending



Source: Kirigia, J and Soucat, A (2009) WHO AFRO - World Bank⁸⁶

Finally, in order to support the implementation of plans, the disbursement of ODA funds according to schedule is very important. Delays in disbursements are very costly, particularly when they miss the financial year for which they have been earmarked.

5.2.3. Approaches to investing?

Governments' plans to invest domestic revenue to achieve health outcomes, along with the efficient implementation of these outcomes, will benefit from a focus on:

- Building institutional capacity and promoting equity by decentralizing health systems.
- Improving quality of services by tying remuneration to performance through results-based financing.
- Promoting the decentralization of fiscal policy, mandates, and services so that service development and its implementation is undertaken closer to the patients.

Other benefits from use of such financial incentive mechanisms will be to reduce the waste of drugs in service provision and to strengthen control systems to reduce misuse of resources.

Another important approach in increasing the efficiency of spending resources in the health sector is to work with communities to support the development of health insurance mechanisms to provide more equitable health care opportunities and protect the poorest and most vulnerable from the adverse effects of exposure to risk. From the perspective of individuals, households, and their employers, directing out-of-pocket expenditures toward such insurance mechanisms is the most efficient use of resources and will reduce the incidence and magnitude of potentially catastrophic out-of-pocket expenditures.

The key aspect of increasing the efficiency of ODA investments in African health systems will be to harmonize and align these funding flows with existing national plans. In a similar manner, having a joint mission as well as aligning indicators and monitoring frameworks will be an important step forward.

5.2.4. Mechanisms for channeling funds

Any decentralization of service provision will need to be accompanied by empowerment of local governments and authorities, where appropriate, and will need to use them as mechanisms for channeling funding into health system development.

As noted already, it is assumed that the best mechanism for individuals, households, and employers to direct their out-of-pocket expenditures is through health insurance mechanisms, and governments are encouraged to put in place or support the development of such programs.

Finally, in order to provide support to nationally defined plans and priorities in the most efficient manner, development partners are encouraged to consider channeling funds through unified global funding platforms and generally reduce the complexity by aligning funding streams and all related logistics and management. The approach of One Budget, One Plan, and One Results framework, as shared by both country and development partners, is the most effective context within which channeling of funds should be undertaken.



6. ACTIONS

Overall, the recommendations of this Africa Investment Case are for both governments and international donors to focus their attention on supporting the development of national health systems, as opposed to silo programming. These investments are directed at both strengthening the demand for health services and improving the building blocks of service provision.

Investments in the health sector are likely to have considerable benefits from the perspective both of economic gain and of lives saved. These benefits justify the investment levels suggested by this investment case, which are proposed to be an average of additional US\$21 to US\$36 of annual per capita investment over and above what is currently being invested across the years 2011 to 2015. Increases in investment must go hand in hand with existing and new investments, with better effectiveness and greater efficiency.

In particular, we recommend:

- (i) *Improving engagement in policy dialogue among national, regional, and global stakeholders about how to use the Africa Investment Case in the existing process.*
- (ii) *Using recommendations from the Africa Investment Case to improve the case of existing national health planning and budgeting processes and more specifically the need to:*
 - a. Focus investment on areas of governance, demand for effective services, and provision of service.
 - b. Increase sustainability of finance by improving the use of existing resources, increasing domestic contributions, lowering catastrophic out-of-pocket expenditures, and reducing dependence on donor funding in the long term.
 - c. Implement results-based financing and improvements in governance and accountability.
- (iii) The HHA will support governments in the development of national or subnational investment cases and related advocacy and policy documents through the provision of technical support in the following areas:
 - a. Analysis, as required, to support policy dialogue.
 - b. Analytical papers, underpinned by evidence.
 - c. Policy dialogue process.
 - d. Development of plans for policies implementation.

HHA will also support countries in reviewing, monitoring, and evaluating existing processes for tracking performance and commitments.



APPENDIX 1: CONTRIBUTING AND SUPPORTING STAKEHOLDERS

The development of the Africa Investment Case was undertaken under the auspices and leadership of the Harmonization for Health in Africa (HHA) group and its constituent organizations. The document was a result of extensive consultations with both international and national stakeholders, by telephone and through electronic means, but also at three HHA consultative events: (i) in December 2009 (Tunis, Tunisia); (ii) in March 2010 (Nairobi, Kenya); and (iii) in June 2010 (Dakar, Senegal).

Organizations that have participated in these consultation meetings and have contributed and supported the development of this investment case are set out in table A1.1 below.

Table A1.1: Contributing and supporting stakeholders

HHA led consultation meetings on the Africa Investment Case	
December 2009 – Tunis, Tunisia	
	Africa Union (AU)
	African Development Bank (AfDB)
	Global Fund for AIDS, Tuberculosis, and Malaria, (GFATM)
	Global Health Workforce Alliance (GHTA).
	Joint United Nations Programme on HIV/AIDS (UNAIDS)
	United Nations Children's Fund (UNICEF)
	United Nations Population Fund (UNFPA)
	West Africa Health Organization (WAHO)
	World Bank
	World Health Organisation (WHO)
	Country representatives from Benin
	Country representatives from Burkina Faso
	Country representatives from Burundi
	Country representatives from Ethiopia
	Country representatives from Kenya
	Country representatives from Madagascar
	Country representatives from Mali
	Country representatives from Niger
	Country representatives from Nigeria
	Country representatives from Rwanda
	Country representatives from Senegal
	Country representatives from Uganda
	Country representatives from Zambia
March 2010 – Nairobi, Kenya	
	African Development Bank (AfDB)
	Partnership for Maternal, Newborn and Child Health (PMNCH)
	United Nations Children's Fund (UNICEF)
	United Nations Population Fund (UNFPA)
	World Bank
	World Health Organisation (WHO)
June 2010 – Dakar, Senegal	
	Joint United Nations Programme on HIV/AIDS (UNAIDS)
	Partnership for Maternal, Newborn and Child Health (PMNCH)
	United Nations Children's Fund (UNICEF)
	United Nations Population Fund (UNFPA)
	United States Agency for International Development (USAID)
	World Bank
	World Health Organisation (WHO)
	Country representatives from Benin
	Country representatives from Burkina Faso
	Country representatives from Malawi
	Country representatives from Niger
	Country representatives from Nigeria
	Country representatives from Senegal

APPENDIX 2: BRIEF ON THE TWO COSTING METHODOLOGIES

Overview

Costing methods estimate the additional funding needed to expand the coverage of health interventions and programs and calculate the cost of providing the necessary health system support in terms of additional facilities at various levels of care, additional health workers and managers, strengthened procurement and distribution systems for drugs and commodities, better information systems, improved governance, accreditation and regulation, and health financing reforms. Based on assumptions of the speed of expansion, additional capital and recurrent expenditures needed each year between 2011 and 2015 were calculated.

There is no fixed and agreed path that countries must follow to scale up interventions to meet the health MDGs. Countries are very diverse and follow diverse paths. The two sets of analyses that form Investment Strategies 1 and 2 reflect two different views of how best to scale up services to meet the MDGs. There are some relatively minor differences between them such as the interventions included. Full details on methodologies and assumptions are available in the HTLF Working Group 1 Report on “Constraints to Scaling Up and Costs,” as well as the details of the outcomes that are likely to be expected from these investment strategies.

Investment Strategy 1: Marginal Budgeting for Bottlenecks (MBB)

Investment Strategy 1 was determined by an interagency group coordinated by the World Bank and UNICEF, in collaboration with UNFPA and the Partnership on Maternal, Newborn and Child Health; it advanced the country costs calculated using the MBB approach and assuming three scaling-up scenarios. It was the medium costing scenario that was adopted by the HLTF in its final report for comparison purposes with the second of the two investment strategies.

The methodology identifies the critical constraints of existing health systems (bottlenecks) for scaling up effective interventions (Appendix 3b) and then identifies the strategies to overcome them. It uses availability of essential inputs and human resources, physical access, utilization, continuity, quality, and effective coverage as determinants. It then estimates the cost of strategies aimed at removing bottlenecks and their returns in terms of health outcomes, with a special focus on the health MDGs. The MBB is based mainly on country planning exercises and assumes a delivery strategy that emphasizes full scale-up of community-based services prior to expanding clinical services. Its scale-up targets are less ambitious and probably more realistic than those of WHO. Major capital investments for the provision of clinical services are not introduced until the final years of the period and so would not come fully into operation until the period after 2015.

Investment Strategy 2: WHO Normative approach

Analysis for Investment Strategy 2 was led by WHO with collaboration from UNAIDS and UNFPA, expanded the work already done on the financial resources needed for the main health programs, including HIV, tuberculosis, malaria, child health, immunization, and maternal and newborn health. The approach is termed a “normative” costing: the amount of resources required to scale up country health

systems to a level that is considered “best practice” by experts and practitioners. This approach is based on reaching universal coverage and utilizing proven interventions (Appendix 3a) to reach the health MDGs between now and 2015. This approach is consistent with international commitments and builds on previously published global costing on the health MDGs. Missing data meant that a few specific countries were excluded from some cost models. The team also drew on the expertise of the technical programs linked to WHO to calculate the health impacts.

The WHO normative costs reflect a more facility-based approach to service expansion and the importance of rapid scaling up; they take a more optimistic view of the speed with which new infrastructure can be put into place and involve greater frontloading of capital. Capital investment would peak in 2012; hence infrastructure would be fully operational before 2015.

APPENDIX 3: LIST OF INTERVENTIONS

Table A3.1: List of interventions in WHO

PREVENTIVE INTERVENTIONS

- Communication and behavior change
- Condom promotion and distribution
- Control of tobacco use
- Counselling for improved complementary feeding
- Counselling for promotion of exclusive and continued breastfeeding
- Family planning interventions: oral contraceptives, injectables, condom (male and female), intrauterine device (IUD), implant, sterilization (female and male)
- Harm reduction among intravenous drug users
- HIV prevention among female sex workers
- HIV prevention among male sex workers
- HIV prevention among men who have sex with men
- HIV prevention: mass media
- Immunizations (all routine immunizations including BCG, DPT, OPV, Hib, pneumococcus, two-dose measles, hepatitis B, yellow fever, rubella, rotavirus, and meningitis A, and Japanese encephalitis for populations at risk)
- Implementation of the international code of marketing of breast milk substitutes
- Insecticidal mosquito nets, long-lasting, or other malaria vector control intervention
- Intermittent preventive therapy for malaria
- Male circumcision
- Newborn care, routine (immediate postnatal care, breastfeeding support, resuscitation, small baby care and kangaroo mother care, care for minor problems, presumptive sepsis care, eye prophylaxis, presumptive treatment for syphilis, pre-referral care for seriously ill neonate)
- Post-exposure prophylaxis
- Postnatal care
- Postpartum administration of anti-D immunoglobulin to rhesusnegative women with a rhesus-positive foetus
- Postpartum care in the maternity ward, routine (examination of the mother, information and counselling, recording and reporting, administration of iron and folate supplements, administration of vitamin A supplements)
- Postpartum care, follow-up visit (postpartum examination of the mother, information and counselling on home care, care seeking, counselling on family planning methods)
- Postpartum counselling on family planning (counselling on family planning methods, voluntary tubal ligation, intrauterine device, combined oral contraceptives, combined injectables)
- Prevention and control of malaria epidemics
- Prevention of mother to child transmission of HIV by antiretroviral prophylaxis and infant feeding counselling
- Salt reduction in processed foods
- Screening all pregnant women for blood group isoimmunization
- Social marketing
- Sexually transmitted infection management
- Universal salt iodization
- Vitamin A supplementation to children under five, routine
- Voluntary counselling and testing

COMPLICATED INTERVENTIONS

- Antenatal care, routine (assessment of maternal and foetal well-being, information and counselling, recording and reporting, screening for hypertensive disorders of pregnancy [pre-eclampsia], screening for anaemia, prevention of anaemia, specialist care for pregnant women with diabetes, syphilis testing, tetanus Toxoid immunization)
- Childbirth care, routine (initial assessment and recognition of delivery complications, surveillance and regular monitoring of labour and delivery, social support throughout labour and delivery, prevention and control of infections, assistance during childbirth, active management of the third stage of labour, care and support of the mother)

TREATMENT INTERVENTIONS

- Antibiotic treatment for dysentery
- Antiretroviral therapy
- Antiretroviral therapy (plus co-trimoxazole preventive therapy for HIV positive TB +ve)
- Basic care package for HIV positive people
- Case management of diarrhoea
- Case management of malaria (artemisinin-based combination therapies and RDT)
- Case management of pneumonia
- Case management of severe malnutrition
- Case management of neonatal infections
- Co-trimoxazole preventive therapy for HIV positive TB patients
- Diagnostic testing (HIV)
- HIV care and support in TB patients
- HIV surveillance in TB patients tested
- HIV testing and counselling of TB patients
- Home-based care for people living with HIV
- Isoniazid preventive therapy, following tuberculin skin test
- Isoniazid preventive therapy, no tuberculin skin test
- Management of breathing difficulty
- Management of congenital syphilis
- Management of convulsions
- Management of mastitis
- Management of neonatal tetanus
- Management of postpartum depression
- Management of severe hypothermia
- Management of severe jaundice
- Multidrug-resistant tuberculosis patients treated
- Nutritional support
- Palliative care for people living with HIV
- Prophylaxis for opportunistic infections
- Regular deworming
- Routine offer of counselling and testing
- Safe abortions/management of abortion complications
- Sepsis management
- Severe and complicated malaria, case management
- Special general care for seriously ill neonate
- Supporting breastfeeding (maternal stay for baby care)
- TB smear positive/ negative / extrapulmonary treatment
- TB screening among people living with HIV
- Treatment of bacterial vaginosis or trichomoniasis infection in pregnancy
- Treatment of chlamydia in pregnancy
- Treatment of chronic diseases including asthma, cardiovascular disease, mental illness and neglected tropical diseases and symptomatic treatment
- Treatment of complications during childbirth (ultrasound, promote foetal maturation before preterm delivery, management of pre-labour rupture of membranes or infection, management of antepartum hemorrhage, management of puerperal sepsis, management of obstructed labour, management of prolonged labour, management of foetal distress, episiotomy, avoid breech presentation at birth [with external cephalic version], vaginal breech delivery, craniotomy or embryotomy, management of postpartum haemorrhage, management of perineal infection, repair of vaginal or perineal tear, repair of cervical tear, symphysiotomy)
- Treatment of eclampsia
- Treatment of gonorrhoea in pregnancy
- Treatment of hookworm infection (antenatal care)
- Treatment of lower urinary tract infection in pregnancy
- Treatment of measles and measles complications
- Treatment of moderate anaemia in pregnancy
- Treatment of opportunistic infections
- Treatment of severe anaemia
- Treatment of severe hypertension in pregnancy
- Treatment of severe pre-eclampsia
- Treatment of syphilis in pregnancy
- Treatment of upper urinary tract infection
- Treatment of upper urinary tract infection in pregnancy
- Treatment of vaginal candida infection in pregnancy
- Very small baby care and kangaroo mother care

Table A3.2: List of interventions in MBB

INTERVENTIONS TO REDUCE U5 MORTALITY	
DIARRHEA <ul style="list-style-type: none"> Antibiotics (diarrhoea) Breastfeeding, children 6-11 months Complementary feeding Exclusive breastfeeding 0-5 months Oral rehydration therapy Vitamin A supplement (child) Hand washing with soap by mother Use of sanitary latrine Supply of safe drinking water Quality of drinking water Multiple water/sanitation/hygiene interventions Zinc supplements (child) Zinc therapy Rotavirus vaccine Management of severe dehydration and complicated enteric fevers at referral level 	NEONATAL PREMATURITY <ul style="list-style-type: none"> Calcium supplementation in pregnancy Detection and management of (pre) eclampsia (magnesium sulphate) Additional antenatal care: detection and treatment of asymptomatic bacteriuria Additional intrapartum: antenatal steroids Universal skilled maternal and immediate neonatal care Community support to low birth weight babies Universal emergency neonatal care (asphyxia aftercare, management of serious infections, management of the very low birth weight infant) Balanced protein energy supplements for pregnant women Supplementation in pregnancy with multi-micronutrients
HIV / AIDS <ul style="list-style-type: none"> Condom use Male circumcision Sexually transmitted infection management Preventing mother-to-child transmission of HIV, (testing and counselling, AZT + single dose nevirapine and infant feeding counselling) First-line antiretroviral therapy for pregnant women with HIV/AIDS Co-trimoxazole prophylaxis for children of HIV-positive mothers Antiretroviral therapy for children with AIDS Management of complicated AIDS Management of first-line antiretroviral therapy failures 	NEONATAL SEVERE INFECTION <ul style="list-style-type: none"> Clean delivery Community support to low birth weight babies Early breastfeeding Universal case management for pneumonia Intermittent presumptive treatment of malaria (IPT) for pregnant women Skilled delivery and neonatal care Detection and treatment of syphilis in pregnancy Additional intrapartum: antibiotics for premature and prolonged rupture of membranes Additional emergency newborn care (management of serious infections) Universal emergency neonatal care (asphyxia aftercare, management of serious infections, management of the very low birth weight infant)
MALARIA <ul style="list-style-type: none"> Complementary feeding Therapeutic feeding Insecticide-treated mosquito nets for under-5 children Vitamin A Zinc Chloroquine for malarial treatment Antimalarial combination treatment at primary health care level Management of complicated malaria at referral level Intermittent presumptive treatment for children 	ASPHYXIA <ul style="list-style-type: none"> Universal antenatal care Skilled delivery and immediate neonatal care Resuscitation of asphyctic newborns at birth Asphyxia aftercare at referral level Assisted delivery or vacuum extraction at basic emergency obstetric care level Caesarean section at comprehensive emergency obstetric care level
MEASLES <ul style="list-style-type: none"> Complementary feeding Therapeutic feeding Measles immunization Vitamin A - supplementation Vitamin A - treatment for measles Management of severe measles at referral level 	PNEUMONIA <ul style="list-style-type: none"> Complementary feeding Therapeutic feeding Breastfeeding for children 0-5 months Breastfeeding for children 6-11 months Zinc Hib immunization Antibiotics for under-5 children with pneumonia Management of severe pneumonia at referral level Pneumococcal immunization Referral care for severe post-partum haemorrhage Management of maternal sepsis Medical termination of pregnancy / management of complicated abortions Family planning Iron/folic acid supplements Multi micronutrients Deworming Calcium supplements
NEONATAL TETANUS <ul style="list-style-type: none"> Skilled delivery Tetanus toxoid Clean delivery 	
INTERVENTIONS TO REDUCE STUNTING	
<ul style="list-style-type: none"> Balanced protein energy supplements for pregnant women Intermittent preventive treatment (IPTp) for malaria in pregnancy Supplementation in pregnancy with multi-micronutrients 	<ul style="list-style-type: none"> Complementary feeding Zinc preventive Hand washing by mother
INTERVENTIONS TO REDUCE DEATHS FROM AIDS, TB, AND MALARIA IN ADULTS AND DURING PREGNANCY	
<ul style="list-style-type: none"> Co-trimoxazole prophylaxis for adults with HIV/AIDS ART for adults with AIDS Management of first-line ART failures Management of complicated AIDS 	<ul style="list-style-type: none"> DOTS DOTS retreatment Treatment of multidrug-resistant TB Artesunate combination treatment (ACT) Management of complicated malaria with second-line drugs
INTERVENTIONS TO REDUCE MATERNAL MORTALITY	
<ul style="list-style-type: none"> Tetanus Toxoid Screening for pre-eclampsia Screening and treatment of asymptomatic bacteriuria Normal delivery by skilled attendant Active management of the third stage of labour Initial management of post-partum haemorrhage Drugs for preventing malaria-related illness in pregnant women and death in the newborn Treatment of severe pre-eclampsia or eclampsia Assisted delivery and vacuum extraction at basic emergency obstetric care 	<ul style="list-style-type: none"> Management of obstructed labor, breech and fetal distress at comprehensive obstetric care level (caesarean section) Referral care for severe post-partum haemorrhage Management of maternal sepsis Medical termination of pregnancy / management of complicated abortions Family planning Iron/folic acid supplements Multi micronutrients Deworming Calcium supplements

APPENDIX 4: ADJUSTMENTS TO HLTF INVESTMENT STRATEGIES

The HLTF documentation presented values for investment from 2009 to 2015, a seven-year period. The Africa Investment Case is considering a five-year period of 2011 to 2015. For this reason, an adjustment has had to be made to the original data.

Scaling seven-year period to five years

HLTF documentation provided information on investment levels required over a seven-year period between 2009 and 2015 (Table A4.1). Values for the two scenarios used in the Africa Investment Case have been highlighted.

Table A4.1: Original HLTF investment scenarios: 2009 to 2015

	2009	2010	2011	2012	2013	2014	2015	Total
Total (in US billions)								
WHO Normative Approach	11.14	16.05	21.01	24.72	24.11	25.82	27.96	150.81
Capital	6.79	9.53	12.59	12.90	7.75	4.81	1.50	55.89
Recurrent	4.35	6.52	8.41	11.82	16.36	21.00	26.46	94.93
MBB Comprehensive Scenario	9.96	13.25	18.99	18.71	21.06	47.03	43.47	172.47
Capital	7.84	8.91	11.64	9.28	9.05	32.31	26.47	105.51
Recurrent	2.11	4.34	7.35	9.43	12.00	14.72	17.00	66.96
MBB Medium Scenario	3.19	4.07	5.15	9.96	15.27	21.40	30.15	89.19
Capital	1.88	1.80	1.93	4.78	7.32	10.98	17.07	45.75
Recurrent	1.31	2.27	3.22	5.18	7.95	10.42	13.09	43.44
MBB Minimum Scenario	2.00	3.10	4.79	6.01	7.67	11.27	13.44	48.29
Capital	1.29	1.49	1.90	2.00	2.07	4.60	5.69	19.05
Recurrent	0.71	1.61	2.89	4.02	5.60	6.66	7.75	29.24
Per capita (in US)								
WHO Normative Approach	15.84	22.25	28.41	32.61	31.05	32.45	34.32	196.92
Capital	9.66	13.21	17.03	17.02	9.98	6.05	1.84	74.79
Recurrent	6.18	9.03	11.38	15.6	21.06	26.4	32.48	122.13
MBB Comprehensive Scenario	13.38	17.8	25.51	24.05	27.07	58.11	53.71	219.63
Capital	10.54	11.97	15.64	11.93	11.64	39.92	32.71	134.35
Recurrent	2.84	5.83	9.87	12.13	15.43	18.19	21	85.29
MBB Medium Scenario	4.28	5.47	6.92	12.81	19.63	26.44	37.26	112.81
Capital	2.52	2.42	2.59	6.15	9.4	13.57	21.09	57.74
Recurrent	1.76	3.05	4.33	6.66	10.22	12.87	16.17	55.06
MBB Minimum Scenario	2.69	4.17	6.44	7.69	9.82	13.78	16.44	61.03
Capital	1.74	2	2.56	2.55	2.65	5.63	6.96	24.09
Recurrent	0.95	2.17	3.89	5.14	7.16	8.15	9.48	36.94

In scaling from the seven-year period to a five-year period of investment, the costing teams (MBB and WHO) make adjustments that take into consideration the ODA flows in 2009 and 2010 (Table A4.2).

Table A4.2: Scaled HLTF investment scenarios: 2011 to 2015

	2009	2010	2011	2012	2013	2014	2015	Total
Total (in US billions)								
WHO Normative Approach			26.17	29.95	27.27	27.76	28.47	139.63
Capital			15.68	15.63	8.77	5.17	1.53	46.78
Recurrent			10.48	14.32	18.51	22.58	26.94	92.83
MBB Medium Scenario			4.91	9.01	16.04	23.66	30.15	83.77
Capital			1.84	4.32	7.69	12.14	17.07	43.06
Recurrent			3.07	4.69	8.35	11.52	13.09	40.72
Per capita (in US)								
WHO Normative Approach			35.38	39.51	35.11	34.88	34.94	179.82
Capital			21.21	20.62	11.29	6.50	1.87	61.49
Recurrent			14.17	18.89	23.83	28.38	33.07	118.33
MBB Medium Scenario			6.64	11.89	20.65	29.74	37.02	105.93
Capital			2.49	5.70	9.90	15.26	20.95	54.30
Recurrent			4.15	6.18	10.75	14.48	16.07	51.63

The average values for per capita investment over the five year period were arithmetic averages of the relevant values presented in Table A4.2 above.

Scaling factors for health infrastructure improvements

HLTF documentation provided information on health infrastructure improvements globally when the different investment strategies are implemented. Given the focus of the Africa Investment Case on SSA, a scaling factor, based on overall number of lives saved, was used to estimate the number of additional health facilities and health workers that may result from such investments on the continent. The assumptions and scaling factors are noted below.

Table A4.3: WHO Normative investment strategy

	Sub-Saharan Africa	Globally	Ratio / Scale
Lives saved	3,750,000	4,710,000	80 percent
Health Facilities	77,100*	96,838	80 percent
Health workers	2,767,969*	3,476,569	80 percent

* Calculated values, using the constant ratio / scaling factor of 80 percent of total lives saved being in SSA.

Table A4.4: MBB Medium investment strategy

	Sub-Saharan Africa	Globally	Ratio / Scale
Lives saved	3,890,333	4,920,353	79 percent
Health Facilities	58,268*	73,695	79 percent
Health workers	2,044,566*	2,585,894	79 percent

* Calculated values, using the constant ratio/scaling factor of 79 percent of total lives saved being in SSA.



ENDNOTES

- 1 Eds Kinney MV, Lawn JE, Kerber KJ, *Science in Action – Saving the lives of Africa’s mothers, newborns and children*, ASADI, 2009.
- 2 WHO. *The World Health Report 2010 - Health systems financing: the path to universal coverage*, Geneva, World Health Organization, 2010.
- 3 Harmonization for Health in Africa members: African Development Bank (AfDB), Japan International Cooperation Agency (JICA), the Joint United Nations Programme on HIV/AIDS (UNAIDS), United Nations Population Fund (UNFPA), The United Nations Children’s Fund (UNICEF), United States Agency for International Development (USAID), World Health Organisation (WHO) and the World Bank.
- 4 References in the document to Africa, in this context, refer to those countries understood to be geographically in Sub-Saharan Africa. The terms Africa and Sub-Saharan Africa are used interchangeably.
- 5 High Level Taskforce on Innovative International Financing for Health Systems. The Taskforce was launched in September 2008 to help strengthen health systems in the 49 poorest countries in the world. Chaired by the former UK Prime Minister Gordon Brown and World Bank President Robert Zoellick, the Taskforce released its Recommendations in May 2009, identifying a menu of innovative financing mechanisms to complement traditional aid and bridge the financing gaps that compromise attainment of the health-related Millennium Development Goals (MDGs). The Taskforce completed its work in September 2009 and at the UN General Assembly in New York City launched new initiatives to raise more money and use money more effectively, to improve health care for women and children around the world. All the relevant reports can be sourced from: www.internationalhealthpartnership.net/en/taskforce/taskforce_reports Investment figures sourced from the HLTF and adjusted for SSA reflect averages from the following countries: Benin, Burkina Faso, Burundi, Central African Republic, Chad, Comoros, Democratic Republic of Congo, Côte d’Ivoire, Eritrea, Ethiopia, Gambia, Ghana, Guinea, Guinea-Bissau, Kenya, Liberia, Madagascar, Malawi, Mali, Mauritania, Mozambique, Niger, Nigeria, Rwanda, São Tomé and Príncipe, Senegal, Sierra Leone, Somalia, Tanzania, Togo, Uganda, Zambia, Zimbabwe.
- 6 The **Paris Declaration**, endorsed on 2 March 2005, is an international agreement to which over one hundred Ministers, Heads of Agencies, and other Senior Officials adhered and committed their countries and organizations to continue to increase efforts in harmonization, alignment, and managing aid for results with a set of monitorable actions and indicators. In particular, it calls for joint progress toward enhanced Aid Effectiveness through the following: (i) Ownership: Developing countries set their own strategies for poverty reduction, improve their institutions, and tackle corruption; (ii) Alignment: Donor countries align behind these objectives and use local systems; (iii) Harmonization: Donor countries coordinate, simplify procedures, and share information to avoid duplication; (iv) Results: Developing countries and donors shift focus to development results and results get measured; and (v) Mutual Accountability: Donors and partners are accountable for development results. The **Accra Agenda for Action (AAA)** was drawn up in 2008 and builds on the commitments agreed in the Paris Declaration. In particular, it is an agenda to accelerate progress through: (i) Predictability: donors will provide 3-5 years forward information on their planned aid to partner countries; (ii) Country systems: partner country systems will be used to deliver aid as the first option, rather than donor systems; (iii) Conditionality: donors will switch from reliance on prescriptive conditions about how and when aid money is spent to conditions based on the developing country’s own development objectives; (iv) Untying: donors will relax restrictions that prevent developing countries from buying the goods and services they need from whomever and wherever they can get the best quality at the lowest price.
- 7 WHO. *The World Health Report 2010 - Health systems financing: the path to universal coverage*, Geneva, World Health Organization, 2010.
- 8 Generally speaking, MDGs 4 (Reduce child mortality), 5 (Improve maternal health) and 6 (Combat HIV/AIDS, malaria and other diseases) are referred to as Health MDGs. Clearly, achieving other MDGs as well will have a significantly positive impact on the health of the populations in Africa.
- 9 WHO, *The World Health Report 2008 - primary Health Care (Now More Than Ever)*, Geneva, World Health Organization, 2008.
- 10 The African Union has supported health issues through the development of initiatives such as the Maputo Plan of Action (also known as the Plan of Action on Sexual and Reproductive Health and Rights) and the Campaign on Accelerated Reduction of Maternal Mortality in Africa (CARMMA), among others.
- 11 In 2007 half of African countries set aside at least five percent of their national income for health care. Source: The Global Fund To Fight Aids, Tuberculosis And Malaria, *Trends in Development Assistance and Domestic Financing for Health in Implementing Countries*, Third Replenishment (2011-2013). Existing commitments by African heads of state have sought to allocate at least 15 percent of the national annual budget to the improvement of the health sector.
- 12 Reported in World Health Report (WHO) – www.who.int/mediacentre/news/releases/pr84/en/index.html
- 13 Eds Kinney MV, Lawn JE, Kerber KJ, *Science in Action – Saving the lives of Africa’s mothers, newborns and children*, ASADI, 2009.
- 14 WHO, *The world health report 2005 – Make every mother and child count*. Geneva, World Health Organization (2005).
- 15 The threshold for when health care costs exceed a household’s capacity to pay is arbitrary; one often-used threshold is 40 percent of annual nonfood spending.
- 16 The Global Fund To Fight Aids, Tuberculosis And Malaria, *Trends in Development Assistance and Domestic Financing for Health in Implementing Countries*, Third Replenishment (2011-2013).
- 17 For further information, please see: www.who.int/pmnch/media/press_materials/pr/2009/20090922_worldleadersconsensus/en/index.html
- 18 UN. (2010). Every Woman, Every Child: Summary of commitments for women’s and children’s health.
- 19 The Global Fund To Fight Aids, Tuberculosis And Malaria, *Trends in Development Assistance and Domestic Financing for Health in Implementing Countries*, Third Replenishment (2011-2013).
- 20 Ibid.
- 21 The Global Fund To Fight Aids, Tuberculosis And Malaria, *Trends in Development Assistance and Domestic Financing for Health in Implementing Countries*, Third Replenishment (2011-2013).
- 22 World Bank, *Africa Development Indicators*, World Bank, 2007.

- 23 Work recently published in the Lancet Journal (April 2010 – Murray C. et al.), suggests that mortality rates may have actually fallen faster than has been recognised to date.
- 24 Countdown to 2015, *Tracking progress in Maternal, Newborn and Child Health – The 2010 Report*, UNICEF, 2010.
- 25 Countdown to 2015, *Tracking progress in Maternal, Newborn and Child Health – The 2010 Report*, UNICEF, 2010.
- 26 Ibid. Observed average annual rate of reduction in percentage. Only countries with a mortality reduction of more than 1 percent are shown.
- 27 Ibid.
- 28 Ibid.
- 29 Ibid.
- 30 AfDB / UNICEF / UNFPA / UNAIDS / WHO / World Bank. *Ouagadougou declaration on primary health care and health systems in Africa: achieving better health for Africa in the new millennium*. Brazzaville; AfDB / UNICEF / UNFPA / UNAIDS / WHO / World Bank. 2008.
- 31 WHO. Framework for the implementation of the Ouagadougou Declaration on primary health care and health systems in Africa: achieving better health for Africa in the new millennium. AFR/RC59/4. Fifty-ninth session of WHO Regional Committee for Africa. Brazzaville; 2009.
- 32 WHO, *The World Health Report 2008 - primary Health Care (Now More Than Ever)*, Geneva, World Health Organization, 2008.
- 33 Sachs, J.D. et al, *Macroeconomics and Health: Investing in Health for Economic Development, Report of the Commission on Macroeconomics and Health*, Chaired by Jeffrey D. Sachs and Presented to Gro Harlem Brundtland, Director-General of the World Health Organization, 2001. This report, together with a few other publications, has been used as a source for some of the material in this and other sections of the Africa Investment Case.
- 34 D. E. Bloom, D. Canning and D. T. Jamison. *Health, Wealth and Welfare*, Finance and Development 41: 1 10 – 15, 2004.
- 35 Borghi J et al., *Mobilising Financial Resources for Maternal Health*, Lancet, 368: 1457-1465, 2006.
- 36 Lancet editorial, *Gender equity is the key to maternal and child health*, The Lancet, Volume 375, Issue 9730, Page 1939, 5 June 2010.
- 37 D. E. Bloom, D. Canning and D. T. Jamison. *Health, Wealth and Welfare Finance and Development*, 41: 1 10 – 15, 2004.
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- 40 D. E. Bloom, D. Canning and J. Sevilla, *The Effect of Health on Economic Growth: A Production Function Approach*, World Development 32: 1 – 13, 2004.
- 41 Jamison, D. T., L. J. Lau, and J. Wang., *Health's Contribution to Economic Growth in an Environment of Partially Endogenous Technical Progress*, In Health and Economic Growth: Findings and Policy Implications, ed. G. Lopez-Casasnovas, B. Rivera, and L. Currais, 67-91. Cambridge, MA: MIT Press. 2005. In their paper, the authors note that the average adult survival rate increased from 707 per thousand in 1965 to 796 in 1990. The estimated resulting increase in the level of 1990 income then implies, on average, a contribution of 0.23 percent per year from better health to the income growth rate during this period. This was about 11 percent of growth overall.
- 42 Sachs, J.D. et al, *Macroeconomics and Health: Investing in Health for Economic Development, Report of the Commission on Macroeconomics and Health*, Chaired by Jeffrey D. Sachs and Presented to Gro Harlem Brundtland, Director-General of the World Health Organization, 2001.
- 43 Gallup, John Luke, and Jeffrey D. Sachs. 2001, "The Economic Burden of Malaria." *American Journal of Tropical Medicine and Hygiene* 64 (1 supplement, January): 85–96.
- 44 Ibid.
- 45 Moreland S, Talbird S., *Achieving the Millennium Development Goals: The Contribution of Fulfilling Unmet Need for Family Planning*. Futures Group, POLICY Project: Washington DC. 2006.
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- 47 WHO, *The world health report 2000 – Health Systems, improving performance*, Geneva, World Health Organization. (2000)
- 48 Unicef, *Narrowing the Gaps to Meet the Goals*, 7 September 2010.
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- 50 Gottret, P and Schiebe, G., *Health financing revisited: A practitioner's guide*. World Bank, Washington DC, 2006.
- 51 Xu, K., et al., *Household catastrophic health expenditure: a multicounty analysis*. The Lancet, 362(9378): p. 111-7. 2003.
- 52 The area of population's expectations and perceptions of service provision is an area that will require and merit further research, as the issues of low levels of effective demand for health services within many SSA communities remains a challenge that needs to be overcome.
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- 54 WHO, *The global shortage of health workers and its impact*, Fact Sheet Number 302. World Health Organisation: Geneva. 2006.
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- 56 Lawn, JE, Kinney MV, and Kerber KJ, eds., 2009. *Science in action: Saving the lives of Africa's mothers, newborns, and children*. Cape Town, South Africa. Report for the Academy of Science Development Initiative.
- 57 WHO. *The World Health Report 2010 - Health systems financing: the path to universal coverage*, Geneva, World Health Organization, 2010.
- 58 Ibid.
- 59 WHO, *WHO Policy Perspectives on Medicines – Equitable access to essential medicines: a framework for collective action*, World Health Organisation: Geneva, 2004.
- 60 WHO, *WHO Policy Perspectives on Medicines — Equitable access to essential medicines: a framework for collective action*, World Health Organisation: Geneva, 2004.
- 61 WHO. *The World Health Report 2010 - Health systems financing: the path to universal coverage*, Geneva, World Health Organization, 2010.
- 62 Ibid.
- 63 UNAIDS, *Ambitious project brings key countries in eastern and southern Africa closer to 'knowing their epidemics'*, 25 May 2009.
- 64 WHO. *The World Health Report 2010 - Health systems financing: the path to universal coverage*, Geneva, World Health Organization, 2010.
- 65 The m-health field has emerged as a subsegment of e-health, the use of information and communication technology (ICT), such as computers, mobile phones, communications satellite, and patient monitors, for health services and information. m-health applications include the use of mobile devices in collecting community and clinical health data, delivery of health care information to practitioners, researchers, and patients, real-time monitoring of patient vital signs, and direct provision of care (via mobile telemedicine).
- 66 Fournier P, Itaj NK, Haddad S., *Quality of health services in Africa : example of dystocia prenatal screening in Nioki (Zaire)*, Mar-Apr;6(2):107-14. 1996.
- 67 Countdown to 2015, *Tracking progress in Maternal, Newborn and Child Health – The 2008 Report*, UNICEF, 2008.
- 68 Source: [www:http://ps4h.org/country_data_files/SSAfrica.pdf](http://ps4h.org/country_data_files/SSAfrica.pdf)
- 69 UNICEF and WHO, *Progress on Drinking Water and Sanitation: Special Focus on Sanitation*, 2008.
- 70 Fewtrell, L and Colford, J. 2004. *Water, Sanitation and Hygiene: Interventions and Diarrhoea - A Systematic Review and Meta-analysis*. Health, Nutrition and Population Discussion Paper. The World Bank. Washington D.C.
- 71 UNICEF and WHO, *Progress on Drinking Water and Sanitation: Special Focus on Sanitation*, 2008.
- 72 *Progress on sanitation and drinking water - 2010 update*, WHO/UNICEF Joint Monitoring Programme for Water Supply and Sanitation, 2010.
- 73 *Progress on sanitation and drinking water - 2010 update*, WHO/UNICEF Joint Monitoring Programme for Water Supply and Sanitation, 2010.
- 74 UNICEF, *Progress for Children*, 2007.
- 75 UNESCO Institute for Statistics, *Children Out of School: Measuring Exclusion from Primary Education*, 2005.
- 76 Full list of interventions considered under each of the two strategies can be found in HLTF Working Group 1 Report, *Constraints to Scaling Up and Costs*, Appendix 1 and Appendix 2.
- 77 All values are presented in 2005 constant US\$, as was used in the High Level Task Force documentation.
- 78 Two sources: For MBB Medium values HHA Zero Draft of the Africa Investment Case (unpublished), see Appendix 3 for details; and (ii) For WHO Normative numbers see Background paper to HLTF Working Group 1, *Constraints to Scaling up Health Related MDGs: Costing and Financial Gap analysis*, Final Draft, 23rd September 2009, pages 37 and 38.
- 79 Sachs, J.D. et al, *Macroeconomics and Health: Investing in Health for Economic Development, Report of the Commission on Macroeconomics and Health*, Chaired by Jeffrey D. Sachs and Presented to Gro Harlem Brundtland, Director-General of the World Health Organization, 2001.
- 80 The study assumed that saving 8 million lives would equate to 330 million DALYs, with an average per capita income in low income countries assumed to be around US\$500 to US\$600 in 2015.
- 81 There are clearly considerable uncertainties associated with these estimates. These include: (i) potentially different starting points for mortality assumptions, which may emerge with further elaboration of ongoing research in this area (such as Murray et al, Lancet, April 2010); (ii) uncertainties on possible multipliers of benefits; (iii) uncertainties around the benefit impacts due to relatively young populations in Africa (and therefore not productive yet) etc. However, the order of magnitude of benefits is still likely to be correct.
- 82 See Appendix 3 for explanation of scaling factors used.
- 83 Ibid.
- 84 Values for sub-Saharan Africa have been sourced from the work undertaken and presented by HHA members at the Tunis meeting in December 2009. See Appendix 3 for more details.
- 85 Background paper to HLTF Working Group 1, *Constraints to Scaling up Health Related MDGs: Costing and Financial Gap analysis*, Final Draft, 23rd September 2009.
- 86 Kirigia, J. and Soucat, A., *Health Financing in Africa: Where Are We and What Has Been Committed?*, HHA, WHO AFRO and World Bank, 2009.

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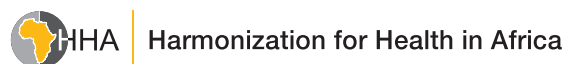
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