NO CHILD OUT OF REACH

TIME TO END THE HEALTH WORKER CRISIS

Save the Children

EVERY ONE

NO CHILD OUT OF REACH

TIME TO END THE HEALTH WORKER CRISIS

Save the Children works in more than 120 countries. We save children's lives. We fight for their rights. We help them fulfil their potential.

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Cover photo: Midwife Catherine Oluwatoyin Ojo weighs six-month-old Mariam at a clinic in Nigeria – a country with one of the most severe shortages of health workers in the world. (Photo: Jane Hahn)

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THE HEALTH WORKER CRISIS IN NUMBERS

1 billion 1 BILLION PEOPLE NEVER SEE A HEALTH WORKER IN THEIR LIVES.

3.5 million THERE IS A SHORTAGE OF 3.5 MILLION DOCTORS, NURSES, MIDWIVES AND COMMUNITY HEALTH WORKERS IN THE WORLD'S 49 POOREST COUNTRIES.

41 THE SHORTAGE IS CRITICAL IN 61 COUNTRIES – 41 OF WHICH ARE IN AFRICA.

3% A QUARTER OF THE GLOBAL DISEASE BURDEN IS IN AFRICA, BUT THE CONTINENT HAS JUST 3% OF THE WORLD'S DOCTORS, NURSES AND MIDWIVES.

less than $\frac{1}{10}$

GHANA HAS HALF OF THE HEALTH WORKERS IT NEEDS. SIERRA LEONE HAS LESS THAN A TENTH.

25x more

A DOCTOR IN ZAMBIA COULD EARN 25-TIMES MORE IF THEY WORKED IN THE UNITED STATES.

81%

THREE-QUARTERS OF MOZAMBICAN DOCTORS AND 81% OF NURSES FROM LIBERIA WORK ABROAD.

one third

LOW-INCOME COUNTRIES RECEIVE JUST A THIRD OF INTERNATIONAL AID INTENDED TO FUND HEALTHCARE.

PREFACE

Community health workers, doctors, nurses and midwives are the key to saving children's lives. But there is a critical shortage of health workers in the world and children are dying every day because of it.

Over the years, efforts to improve global health have sidelined the vital contribution that health workers make. The focus has been on inputs into the health system – drugs, vaccines, bednets – all of which are critical. But without a parallel focus on recruiting, training and retaining the health workers needed these interventions will not deliver.

As a result, clinics and hospitals are understaffed, especially in remote or rural areas. The overworked frontline employees we do have are not rewarded for being the health heroes they truly are. Instead, many health workers are poorly paid, poorly equipped and poorly supported.

This report comes at an opportune moment, as the international community begins to acknowledge the implications of the health worker shortage. In September, world leaders will meet at the UN General Assembly where they will have the chance to take steps to end the health worker crisis. They must strengthen their commitment to boost the global health workforce between now and 2015.

Here, Save the Children makes the case for immediate and concrete action, both at the highest international political level and at the national level in every country with a health worker shortage.

Firstly, the world needs more health workers. Ghana has half the health workers it needs, Sierra Leone has one tenth. It is easy to imagine the difference that boosting those numbers would make. Donor governments and international institutions have a role to play in helping countries like these address their critical health worker shortages. The countries themselves will benefit hugely from putting health workers at the heart of their national health plans.

Secondly, we must make better use of existing health workers and strive for more equal coverage within countries. Health workers have families to feed and homes to look after, so they must be given the right incentives to work in challenging environments and be recognised for the contribution they make, both financially and by providing the right support. To make the biggest difference to health, workers must be well trained and empowered to carry out tasks that allow them to work to the best of their abilities.

No health worker can be trained overnight – to have the health workforce we need in place to meet the Millennium Development Goals by 2015, we must start today.

Health workers are life-savers. They are our most vital resource in improving the health and chances of survival of children, mothers and their families. It is time for action.

Jasmine Whitbread
Chief Executive, Save the Children

EXECUTIVE SUMMARY

Every day, 22,000 children around the world die before they have reached their fifth birthday.[1]

With the right treatment and prevention, the overwhelming majority of these deaths are avoidable. But millions of children die because of a global health worker crisis that means they miss out on life-saving care.

It is a crisis that hits children hardest. Health workers are the single most important element of any health service, and babies and young children, who are particularly vulnerable to life-threatening disease, will usually need skilled healthcare more in their first days, weeks and years than at any other point in their lives.

A child is five-times more likely to survive to their fifth birthday if they live in a country with enough midwives, nurses and doctors.[2] Without health workers, no vaccine can be administered, no life-saving drugs prescribed, no family planning advice provided and no woman given expert care during childbirth.

This crisis is two-fold. Firstly, there are too few health workers to meet the needs of children in the poorest countries. Globally, there is an estimated shortfall of at least 3.5 million community health workers, midwives, nurses and doctors.[3]

To deliver basic healthcare to all, at least 23 doctors, nurses and midwives are needed for every 10,000 people.[4] But many countries are falling dangerously below this minimum threshold: Ghana has just half of the health workers it needs; Sierra Leone has less than a tenth.[5]

Secondly, the health workers that do exist are often not working in the places where they are most needed, and many lack the skills, resources and authority they need to save children's lives. In many countries with high numbers of child deaths, health workers are concentrated in relatively better-off urban areas, out of reach of children in more remote locations.

Progress has been made in many of the poorest countries to address this twin challenge of insufficient workers and inefficient deployment – but it is not happening fast enough.

Decisive action is needed now to ensure that every child has access to a health worker at the right time, with the right skills, and in the right place. This challenge will not be met overnight: recruiting, training and deploying health workers in the numbers needed will take years, and requires both global political action and far-reaching changes in policy and practice at the national level.

At the global level, political leaders and international institutions must place health workers at the top of their agenda for achieving the health-focused Millennium Development Goals (MDGs) on child and maternal mortality.

Political commitments have already been made in response to the UN Secretary General's Global Strategy for Women's and Children's Health (the Global Strategy), which was launched last September.

The challenge for developing and developed countries alike is to deliver on those commitments

and train and recruit health workers on a scale that will reduce child mortality by two-thirds by 2015 – MDG 4.

GLOBAL POLITICAL ACTION AT THE HIGHEST LEVEL

The UN General Assembly in September 2011 will be a critical moment for catalysing global political action on health workers. Governments will review implementation of the Global Strategy at a high-level event, supported by Save the Children and a growing coalition of governments, civil-society organisations, the private sector and international institutions.

This will provide an opportunity for governments in developing countries, their donors and partner organisations to address the immediate causes of the health worker crisis. There are four key areas where progress must be made:

- Recruit more health workers with appropriate skills
- Make better use of existing health workers to reach the most vulnerable children
- Ensure that all health workers are paid a fair wage
- Deliver more funding for healthcare, and in a more effective way

MORE HEALTH WORKERS, WITH APPROPRIATE SKILLS

Governments and donors must work together to ensure that there are sufficient health workers to reach every child. Many of the most important interventions for children, such as health education, early postnatal care, treating diarrhoea and diagnosing pneumonia, will be delivered by community health workers. But they need the support of a wider healthcare service, also staffed by doctors, nurses and midwives, to be effective.

REACHING THE MOST VULNERABLE CHILDREN

Governments and donors must tackle unequal access to healthcare within countries by encouraging health workers to take up posts in remote locations and under-served areas. This means creating incentives – including financial rewards, more supportive supervision, better equipment and a functioning supply and referral chain – to make living and working in challenging contexts more attractive.

Another solution is task-sharing, with training for frontline health workers so they can take on additional responsibilities that enable them to save more children's lives. Task-sharing can expand access to healthcare, especially in under-served areas where there are critical shortages of more highly-skilled health workers.

A FAIR WAGE FOR ALL HEALTH WORKERS

In many developing countries, health workers are underpaid.

In nearly 20% of countries surveyed by UNICEF, nurses earn barely enough to keep them out of poverty. Many health workers are forced to seek supplementary income by working double shifts or multiple jobs. Lack of decent pay can lead health workers to charge their patients for care, which often means the poorest families cannot afford to pay for their sick children to be treated.

Alternatively, health workers seek better paid jobs elsewhere, leaving their community, their country or the health sector altogether in order to provide a better life for their family.

Whatever a health worker's task, and wherever they are employed, countries must ensure they are paid a living wage, and that the importance of the work they do is recognised.

MORE AND BETTER FUNDING FOR HEALTHCARE

Countries can only recruit, train, deploy and equip the health workers needed to achieve the MDGs if they invest sufficient funding. In many cases, this will require a significant increase in the public-sector wage bill and an overall increase in health spending by governments and donors.

African governments must deliver on their promise to allocate at least 15% of their national budgets to healthcare, and ensure that it translates into better results.

In the poorest countries, aid from donors will continue to play a crucial role, as 15% of an inadequate national budget is an inadequate health budget. The World Health Organization has estimated that in 2015 it will cost $60 per capita to provide a minimum package of healthcare. This is almost nine-times the amount that the government of the Democratic Republic of Congo spends on health per person.

Tackling the health worker crisis will also require governments and donors to spend more, and spend more smartly, focusing on areas that will have the greatest impact on children's health.

Developing countries should prioritise spending in areas that benefit the poorest and most marginalised children, and which tackle the key causes of under-five mortality.

Donors should provide aid over the long-term in a way that is aligned with the strategies and plans of the recipient country. And where appropriate they should contribute directly to the health budget. Donors should also coordinate better among themselves by streamlining their planning, reporting and monitoring procedures to reduce the administrative burden on recipient governments.

It is vital that every child is in reach of a trained, equipped and properly supported health worker. Meeting this challenge demands commitment globally at the highest political level, and from the countries at the centre of the health worker crisis. World leaders meeting at the UN General Assembly this September must make overcoming the crisis an urgent priority. One year on from the adoption of the Global Strategy, the opportunity must be seized to accelerate the recruitment and training of more health workers to save millions of children's lives.

Dr Abhay Bang, a Save the Children partner, has pioneered a system of community-based care for newborns in rural areas in India, helping to dramatically reduce infant mortality rates.

PHOTO: ANDY HALL

THE SCALE OF THE HEALTH WORKER CRISIS

NO HEALTH WITHOUT HEALTH WORKERS

Health workers are critical to saving children's lives: they are the single most important element of any health service and are often the deciding factor in whether children live or die.

Without them, no vaccine can be administered, no life-saving drugs prescribed, no family planning advice provided and no woman given expert care during childbirth.

Without health workers conditions like pneumonia and diarrhoea – which can be treated easily by someone with the right skills, supplies and equipment – become deadly.

No child should die because they are unable to get help from a health worker, but every year millions do. A critical shortage of 3.5 million doctors, nurses, midwives and community health workers,[6] and the inefficient use of the existing workforce, constitute a health worker crisis in the poorest countries.

The number of health workers and a child's prospects of reaching his or her fifth birthday are closely linked (Figure 1). For instance, in Somalia, where almost one in five children die before the age of five, there are just 1.5 doctors, nurses and midwives to serve every 10,000 people. In contrast,

Figure 1: Countries with more health workers have lower rates of child mortality

Source: World Health Statistics 2011

Norway employs 188 doctors, nurses and midwives per 10,000 people, and only one child in 250 will not reach their fifth birthday (World Health Organization, 2011b).

A child in a country with sufficient midwives, nurses and doctors is five-times more likely to reach the age of five than a child in a country facing a critical shortage (World Health Organization, 2011b).

THE GLOBAL SHORTAGE OF HEALTH WORKERS

According to the World Health Organization (WHO), the minimum number of doctors, nurses and midwives required to deliver *basic* essential health services is 23 per 10,000 people. Most wealthy countries exceed this threshold several times over – the UK has 130 per 10,000 people, the United States has 125, Sweden has 152 (World Health Organization, 2011b).

Yet 61 countries – an increase from 59 five years ago[7] – fail to meet this ratio, 41 of which are in sub-Saharan Africa (Save the Children, 2011b). Ghana has half the health workers it needs, while Sierra Leone has fewer than a tenth (Save the Children, 2011b).[8]

In order to achieve the Millennium Development Goals (MDGs) of reducing child and maternal deaths by 2015, and tackling AIDS, TB and malaria, it has been estimated an additional 2.5 million doctors, nurses and midwives are needed in 49 low-income countries, and approximately 1 million community health workers (Mills, 2009). This figure should

Figure 2: The ten countries with the lowest health worker density, and three with among the highest

Country	Number of health workers per 10,000 people	People per health worker
Guinea	1.4	7,143
Somalia	1.5	6,667
Niger	1.6	6,250
Sierra Leone	1.9	5,263
Burundi	2.2	4,545
United Republic of Tanzania	2.5	4,000
Ethiopia	2.6	3,846
Liberia	2.8	3,571
Malawi	3.0	3,333
Chad	3.2	3,125
US	124.9	80
UK	130.4	77
Norway	188.4	53

Source: WHStats 2011

be considered a bare minimum, however, since it excludes a number of countries, including India, facing their own major health worker shortages (see box below).

Around the world, 1 billion people will never see a health worker (World Health Organization, 2010e). Millions of children in the world's poorest countries live out of reach of essential healthcare because there is no functioning health service in their village or community. Recent analysis from Save the Children shows that filling the 350,000 midwife shortage and having a health worker with midwifery skills present at every birth would save the lives of 1.3 million newborn babies every year (Save the Children UK, 2011a). Filling the health worker gap entirely would save millions more children's lives every year.

THE HEALTH WORKER GAP IN INDIA

The estimated gap of 3.5 million health workers applies to 49 low-income countries, and fails to consider the shortage of health workers elsewhere. It is therefore a significant underestimate of the global health worker gap. In India, we estimate that an additional 2.6 million health workers are needed to meet minimum standards of primary healthcare.*

The following cadres of health workers are involved in primary healthcare and therefore included in this figure:

- doctors placed at primary health centres
- auxiliary nurse midwives (ANMs) who provide maternal care and administer immunisations
- male multi-purpose workers (MMWs), who are responsible for many preventive and health-promotion activities
- *anganwadi* workers who provide a range of services to children under six years of age and pregnant women, including supplementary nutrition and growth monitoring
- accredited social health activists (ASHAs) and urban social health activists (USHAs) who are voluntary community health workers in rural and urban areas respectively.

According to the most recent estimates of the number of existing health workers from the Rural Health Statistics (2009), the Women and Child Development Ministry (2011), and the Five-Year Common Review of the National Rural Health Mission (2010), all of these cadres are significantly understaffed. For instance, according to Rural Health Statistics data for 2009, only 29% of the posts for doctors at primary health centres are filled.

Further, there tend to be fewer health workers in the states where they're most needed. In Madhya Pradesh, Uttar Pradesh and Bihar, where child mortality rates are particularly high, there are primary care health worker shortages of 88%, 87% and 82% respectively.

The health worker gaps are greatest in the poorest states, rural, remote and mountainous areas, and regions with tribal populations.

* This estimate draws on the health worker requirements outlined in the Indian Public Health Standards and the XIth Five Year Plan for primary healthcare.[9]

HEALTH WORKER HERO: DR MOUROU, HEAD DOCTOR, NIGER

Dr Mourou Arouna (pictured, below) is in charge of a stabilisation centre for malnourished children in Aguié, Niger. Niger has one of the world's highest mortality rates among young children – one in six don't live to see their fifth birthday and almost half of children are chronically malnourished. Niger also has fewer than two doctors, nurses or midwives per 10,000 people.

The stabilisation centre, supported by Save the Children, provides emergency feeding for children. Dr Mourou has been in charge of all the staff at the centre since 2007. His working day starts at 7.30am, making sure that there is enough medicine to carry out the morning treatments. He then begins the medical examinations. He sees every child in the centre, which at the height of a recent food crisis numbered more than 100.

"We have new admissions arriving every day," he says. "Sometimes I travel to the field to pick them up, and sometimes they are brought here. I examine them and prescribe their course of treatment. So that's a typical day. It can be 8pm or later before I leave the centre.

"My motivation is that I'm a health worker, I am a doctor. I made an oath to provide healthcare to those who need it the most. And it's this oath that gives me strength.

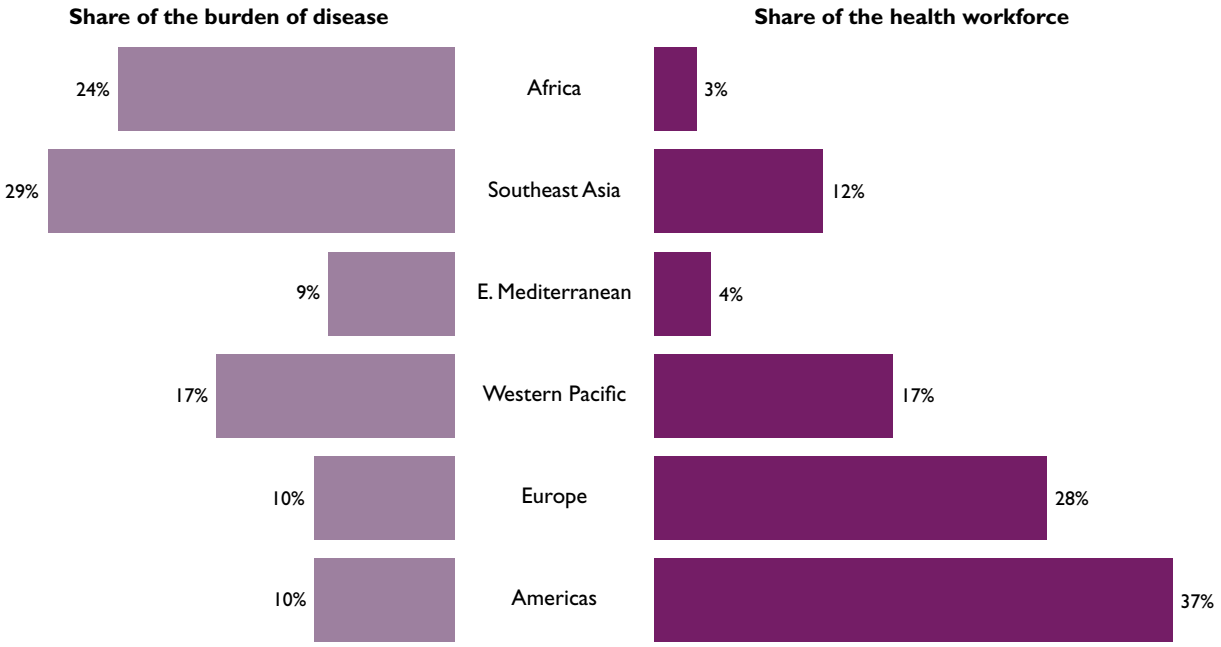
"Today, even if I don't go home until 4am, if someone calls me at 4.05 and they need me, I'll come back.

"It's the children who give me strength. I'm here because of them."

Source: interviews conducted by Save the Children staff in Niger, 2010.

PHOTO: RACHEL PALMER/SAVE THE CHILDREN

Figure 3: Regional share of global disease burden and health workforce



Source: World Health Organization, 2006; World Health Organization, 2004.

WHAT IS A HEALTH WORKER? WHAT IS A COMMUNITY HEALTH WORKER?

The WHO defines health workers as 'all people engaged in the promotion, protection or improvement of the health of the population' (Adams et al, 2003). This report focuses on the types of health workers that are most critical to child survival – community health workers and volunteers, midwives, nurses and doctors. But other health workers such as clinical officers, pharmacists, surgeons and even management and support staff are also an important part of providing comprehensive healthcare services.

Community health workers (CHWs) come in many different forms, but are generally non-professional health workers recruited from the communities they serve. They provide basic healthcare and advice, including preventive and therapeutic services such as basic antenatal care and health education.

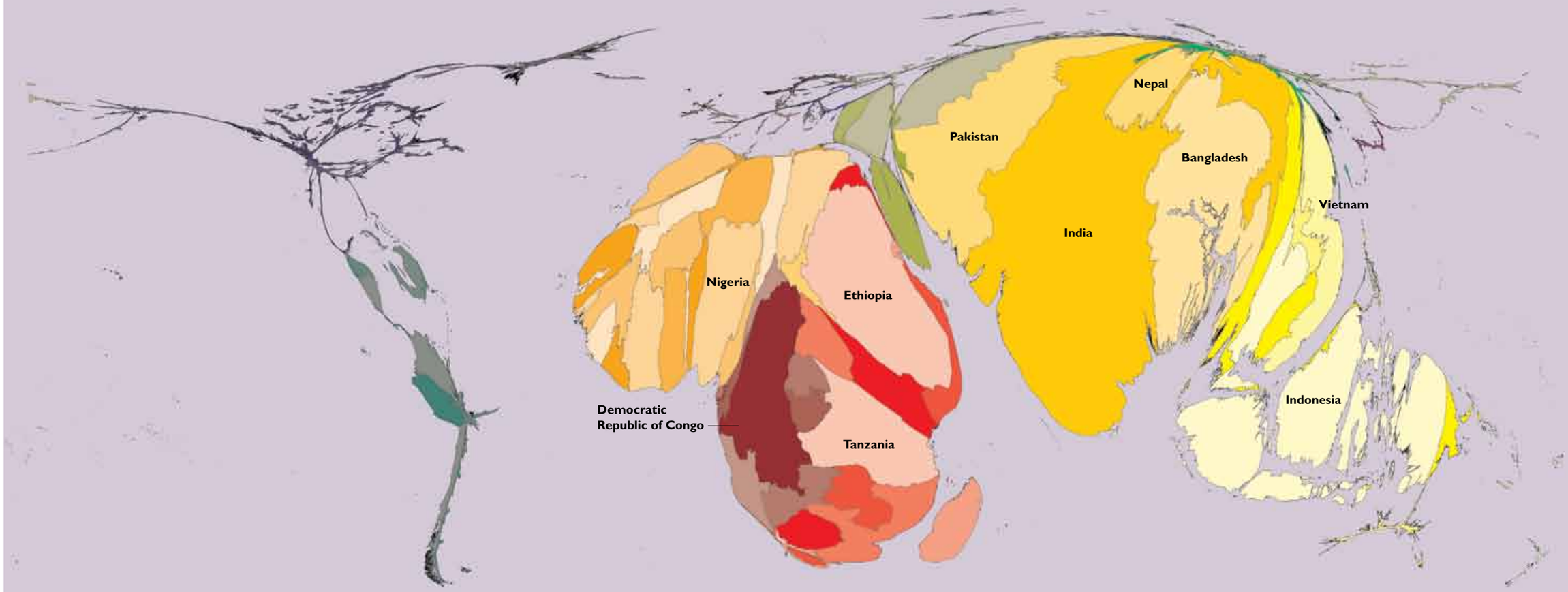
CHWs normally receive training that is nationally standardised and locally endorsed, but do not have a formal professional certified medical education.

They have a critical role in encouraging members of their communities to make best use of the available health facilities and to demand their right to health. They can also help to address the vast inequities in access to care in rural, remote and under-served areas by providing a crucial link between families and the healthcare system.

However, they should not be seen as a cheap alternative or quick fix. CHWs are most effective where they are part of a 'continuum of care' that runs from the household to the hospital, and require effective training, management support and adequate remuneration.

Figure 4: Map of the world representing the health worker shortage by country

The size of each country is relative to the number of doctors, nurses and midwives it needs to meet the WHO recommended minimum ratio of 23 per 10,000 population



Map produced by Worldmapper Project, Sasi Research Group, University of Sheffield. The health worker shortages were calculated according to the WHO recommended minimum ratio of 23 doctors, nurses and midwives per 10,000 population, using data from the Global Health Atlas and UN population data. For South Sudan, data was used from the South Sudan Development Plan, Health Sector Development Plan, 2011 – 2013, 2011 (Draft) and the Southern Sudan Centre for Census, Statistics and Evaluation, Statistical Yearbook 2010.

UNEQUAL DISTRIBUTION OF HEALTH WORKERS

Often, there are fewest health workers where they are most urgently needed. This is true at the global level, with the shortfall disproportionately falling on the poorest regions of the world.

While Africa accounts for one-third of the global burden of disease among mothers and children, and one-quarter of the total disease burden, just three percent of the world's doctors, nurses and midwives work there (World Health Organization, 2010a). This same pattern of disparity is repeated *within* many countries.

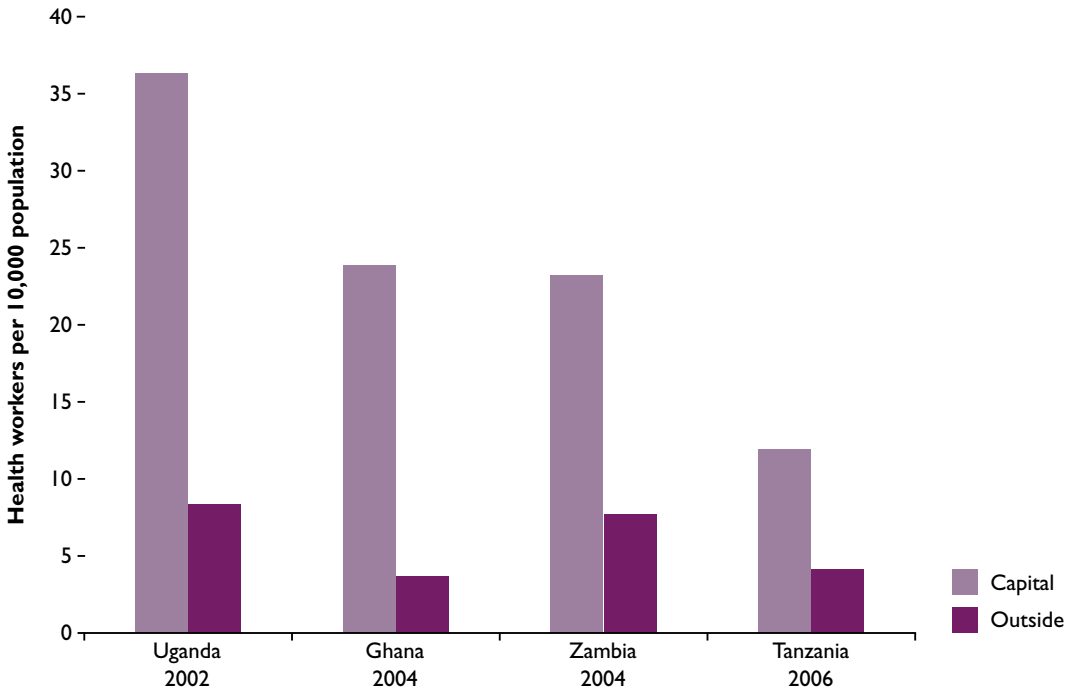
For a child living in a poor, remote or neglected community within a country with a health worker crisis, the situation can be grave. In most low-income countries, the relatively few existing health workers tend to work in the capital cities or wealthier urban areas, leaving children in rural and remote communities and in the poorest urban areas without professional care.

The reasons for this inequitable distribution are many and complex. They include poor working conditions and inadequate pay, as well as the lure of better opportunities in other parts of the country, outside the public health sector or abroad.

As a result, the nearest health clinic for many of the most vulnerable children is likely to be under-staffed and under-equipped, and unable to serve effectively the needs of the surrounding population.

Uganda is a case in point. The capital, Kampala, had about four times more health workers per person than the rest of the country in 2006 (Republic of Uganda's Ministry of Health, 2006). In Ghana in 2004, this ratio reached almost six health workers in Accra for every health worker outside the capital (Tanzania and Zanzibar's Ministry of Health and

Figure 5: Number of health workers per 10,000 population in and outside the capital city in selected countries



	Uganda 2002	Ghana 2004	Zambia 2004	Tanzania 2006
Ratio: capital to outside capital	4.5	6.6	1.4	2.9

Source: Tanzania and Zanzibar's Ministry of Health and Social Welfare, 2007

Social Welfare, 2007). Almost a third of all nurses in Bangladesh serve just 15% of the population, who live in four urban centres (Zurn et al, 2004).

Forty-six percent of South Africa's population reside in rural areas, but just 12% of doctors and 19% of nurses are available to provide them with care (Hamilton and Yau, 2004). In underserved areas within countries, children have much worse chances of survival. For instance, in Nigeria a child in the state of Jigawa is almost three-times more likely to die than one living in neighbouring Yobe state, where there are seven-times more health workers per 10,000 people (Nigeria Bureau of Statistics, 2007). This unequal distribution of health workers between urban and rural areas perpetuates inequities in health outcomes between rich and poor.

THE HEALTH WORKER CRISIS HITS CHILDREN HARDEST

Children are hit hardest by the health worker crisis. Babies and young children are particularly vulnerable to life-threatening disease, and will usually need the skilled care of a health worker more in their first few days, weeks and years than throughout the rest of their lives.

This care includes postnatal visits, essential immunisation against killer childhood diseases, vitamin A supplementation and de-worming.

Children are disproportionately vulnerable to pneumonia, diarrhoea and malaria. Without appropriate diagnosis and treatment by a skilled health worker, these preventable diseases can quickly become the cause of death.

Pregnant women also need more regular contact with health workers than average. Before women get pregnant, health workers can provide advice on family planning. During pregnancy a health worker can ensure women are getting the right nutrition and can monitor the babies' progress. And during childbirth a midwife or skilled birth attendant plays a critical role – identifying and treating complications, seeking help if those complications are serious, and helping take care of the newborn.

So it is children and their mothers who bear the brunt of the health worker shortage in developing countries.

For this reason, ending the health worker crisis is essential if we are to achieve the internationally-agreed MDG to reduce the number of children who die before their fifth birthday by two-thirds by 2015.

A health workforce cannot be transformed overnight. It will take several years to recruit and train the numbers needed, so action must be taken now to ensure there are sufficient doctors, nurses, midwives and CHWs in place by 2015. Progress is being made but the health worker gap is not reducing at a fast enough rate to meet the MDGs.

HEALTH WORKERS AND HEALTH SYSTEMS

The ability of a healthcare system to meet the needs of its population depends on the size, skills, distribution and commitment of its workforce.

Any large-scale attempts to improve access to essential medicines or family planning, increase immunisation, or introduce new treatments risk failure if there are not enough staff to effectively deliver them.

Health workers are just one element of a country's health service, however. To be fully effective they need to be within a system that has:

- a functioning infrastructure
- robust health information and surveillance systems
- a reliable supply of drugs, vaccines and technologies
- sufficient and fair financing
- good management, leadership and governance.

These pillars of an effective health system all require investment. At the same time, a shortage of health workers in many countries often creates bottlenecks, and impedes any further improvements in global health. So-called rapid-return projects – such as boosting the supply of medicines or building a new facility – can often fail if they overlook the

HEALTH WORKER HERO: SADYA NAEEMI, MIDWIFE, AFGHANISTAN

Sadya Naeemi* (pictured, below) is a midwife in a rural district in northern Afghanistan. She was the only woman in her district who had completed high school, and her community chose her to attend midwifery school. In 2009, she returned to her village where she is the only midwife in the only health centre and provides 24-hour cover. In June she was a winner of the Save the Children Midwife Award 2011.

Sadya says: "I wanted to become a midwife because my village is remote, with a very dusty and bad road. That is why no midwife wants to go there.

"I noticed that the newborns' and mothers' mortality is very high and that people needed us. My work is important for me as women form a very important part of society. I am the only midwife who can speak the local language. All these factors motivated me to become a midwife and serve my village."

The nearest hospital is five hours' drive away and Sadya has saved the lives of women and their children who would not have been able to make it to the hospital in time. Most women deliver at home, either with a traditional birth attendant, relative or alone.

Persuading men to allow their wives to come to the facility involves changing centuries of tradition. Through Sadya's efforts, gradually more women are coming, resulting in increased antenatal care, births in the health centre, and postnatal care.

* Sadya's name has been changed as a security precaution

Source: Interviews conducted by Save the Children staff in Afghanistan, 2011

PHOTO: FARZANA WAHIDY

ability of the existing health workforce to tend to a sick child that visits the clinic and prescribe them the drugs they need to recover.

Investing in health workers is a long-term undertaking. While some interventions – such as rehydration salts to treat diarrhoea, or antibiotics for pneumonia – generate an immediate return, there is a time lag between any significant increase in the number and capacity of health workers and the return on that investment.

This is especially true for specialised workers such as doctors, who require several years of training in costly facilities. But it is also the case for less-highly-qualified non-professionals such as CHWs, who still require training and management support to do their jobs effectively.

TIME FOR ACTION

There is a global consensus that a larger and better-supported health workforce is needed to achieve the health-related MDGs.

Since the WHO devoted its biennial report to the issue in 2006 (World Health Organization, 2006), there has been a renewed focus on how countries can overcome this health worker crisis. Political commitments have already been made in response to the UN Secretary General's Global Strategy for Women's and Children's Health, which was launched at the Every Woman, Every Child event in September 2010.

Leaders from several developing and donor countries, as well as international organisations, made specific commitments to address the health worker crisis. For example, Australia committed to funding skilled health workers, including midwives; Kenya said it would recruit and deploy an additional 20,000 primary care health workers; and Save the Children pledged to support the training of 400,000 health workers.[10]

The challenge now for rich- and poor-country governments alike is to deliver on these specific commitments, implement large-scale initiatives and demonstrate evidence that health workers are being trained and recruited on a scale that will accelerate progress towards filling the gap.

The momentum created by the Global Strategy must now be accelerated. At September's UN General Assembly, a high-level event supported by Save the Children and other groups will bring together governments, non-governmental organisations (NGOs) and the private sector to ensure that concrete action to tackle the health worker crisis is agreed.

It will be a platform for those who have already made commitments to demonstrate their progress, and will give other countries an opportunity to step forward and adopt clear plans to ensure that every child is within reach of a trained health worker.

Achieving this goal will require renewed efforts to ensure that every country meets the minimum ratio of health workers necessary to provide basic healthcare, and that health workers are deployed, trained and equipped to tackle the key causes of child death and illness.

This can only happen if governments and donors work to address inadequate pay; challenging living and working conditions; insufficient support, training and equipment; and scant opportunities for career progression for health workers.

CAUSES OF THE CRISIS

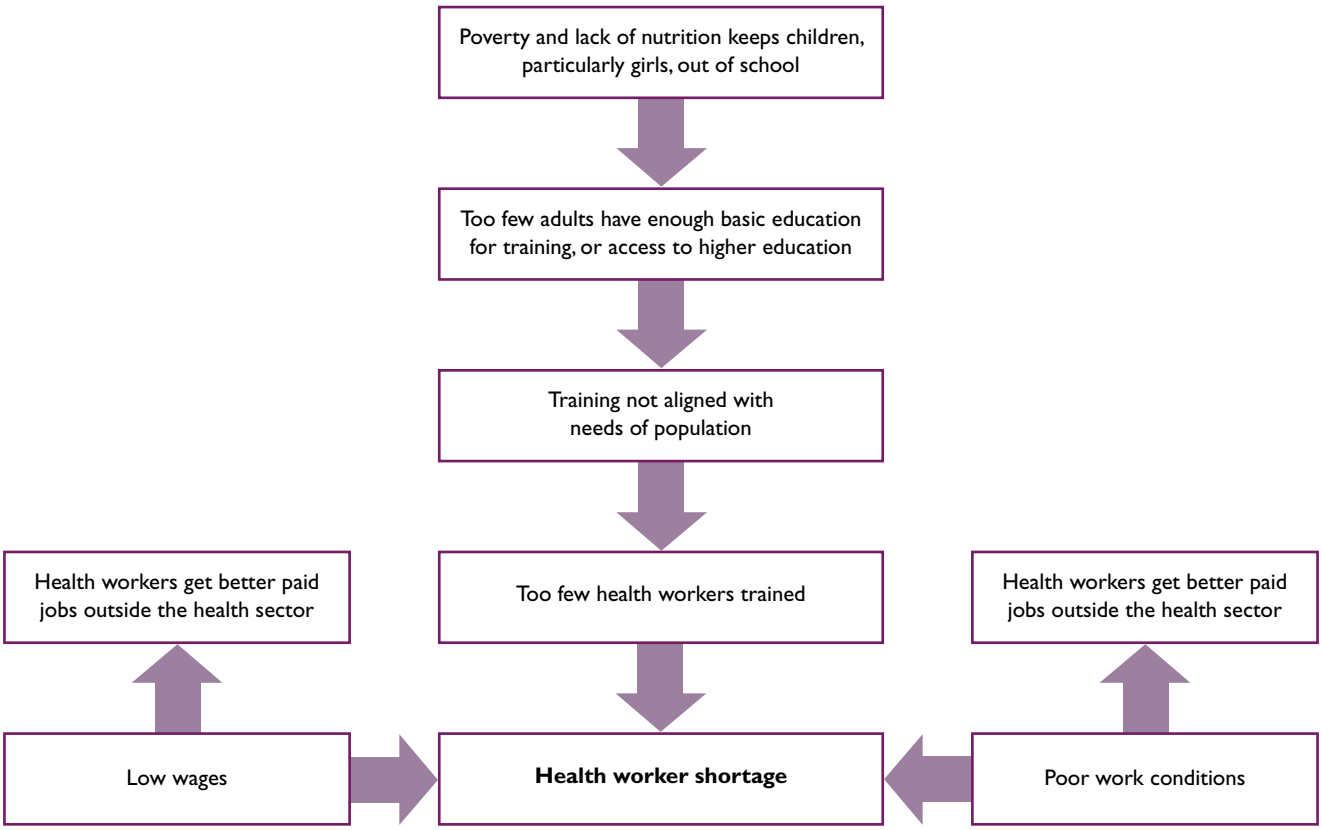
The underlying reasons for the health worker crisis are varied and interlocking, and explain why millions of children in the poorest parts of the world still lack access to life-saving healthcare. These reasons include a lack of education and training; poor working conditions and inadequate pay; the lure of better opportunities elsewhere; and chronic underinvestment in the health system and its workers.

LACK OF EDUCATION AND TRAINING

In many low-income countries, the low levels and poor quality of education contribute to critical shortages of health workers.

In the poorest countries only a small proportion of children attain the levels of education needed

Figure 6: Factors affecting the shortage and inequitable distribution of health workers



to qualify for formal training as a nurse or doctor, and there are usually too few medical training institutions, with those that do exist often under-resourced. For example, whereas in Europe 173,000 doctors are trained each year, in Africa this number is just 5,100 (Action for Global Health, 2010).

Many countries lack the capacity either to train enough people to become health workers, or to provide effective in-service training so qualified workers can develop and improve their skills.

More CHWs are urgently needed to provide basic healthcare services, especially in communities that are out of reach of most health provision. Training a CHW takes much less time than training a doctor, nurse or midwife. But there is often a lack of capacity and commitment to provide basic training for community health workers – much of which relies on members of the formal health service, such as doctors and nurses. Partly because the initial pre-service training given to CHWs is often relatively short, continuing training is vitally important to ensure that skills are sustained and developed.

Globally, an estimated 1 million additional CHWs are needed as part of addressing a shortfall of 3.5 million health workers in 49 of the poorest countries. This makes strategies to train CHWs a critical element of national health workforce plans.

POOR PAY, INSUFFICIENT INCENTIVES

"For government officials such as doctors, nurses and teachers, being posted in [the rural area of] Melghat is like a 'punishment'."

Dr War, Maharashtra state, India

Those wishing to become a health worker in a poor country or in a remote rural part of a developing country face the prospect of working in a poorly staffed, poorly equipped health centre with a huge caseload and little support or opportunity for development.

For those who do become health workers in developing countries, many will leave the health sector because of the poor pay and working conditions. This high attrition rate exacerbates this crisis, and affects the distribution of health workers between and within countries.

The reasons that determine a health worker's choice of job and location are complex and many (Joint Learning Initiative, 2004). They can be split into push and pull factors that either force people away from one environment or attract them towards another.

For health workers, low pay, lack of housing, inadequate schooling for their children, little prospect for career development, poor management and lack of support are among the common push factors.

Simultaneous opportunities for higher salaries, promotion, or better working and living conditions are strong pull factors, attracting health workers to move elsewhere (Joint Learning Initiative, 2004).

Martin works in a dispensary in the North Eastern Province of Kenya. His situation is typical of many health workers in Africa. He is the only health worker in the dispensary, but despite working 60 hours a week he is unable to feed his family of five on his salary of 24,000 Kenyan shillings (US$265) a month.

"My salary is very little," says Martin. "It cannot even cater for my family's basic needs. I feel overworked, I am the only worker in my dispensary and I don't get time off to rest. The dispensary lacks even basic supplies and I run out of medicine.

"It is very remote and I feel locked out from the rest of the world. I have very few opportunities for professional growth. When you work here, chances of promotion are very slim."

An adequate salary is an important part of job satisfaction anywhere in the world. In rich countries, the health sector typically provides an above-average wage: in the UK, the salaries of nurses and

SAMA, HEALTH HERO, CHINA

Sama (pictured, below, second from right) is a village 'doctor' in Southern Sichuan, China. She is responsible for six hamlets in the Yi community that surrounds her village. She visits each hamlet at least once a month to reach children and their families in the most remote areas, which can take her up to three hours of brisk walking up in the mountains.

She says: "Sometimes people call me at night and I am afraid to go out as the paths are steep. It is especially difficult as I sometimes deliver two or three babies a month so I have to carry my delivery kit too. If there's a complication I tell the household to take the mother to the county hospital, otherwise she might die at home. Many people do not know that hospital delivery for rural people is free."

The only training Sama has had was 20 years ago when she was one of the first from her township to be given a few months of basic medical training. She only earns RMB 40 (about US$6) a month, so she spends most of her time helping on her family's farm, planting maize and raising pigs, to survive.

"The people here are too poor to give me anything," she says.

Source: interviews conducted by Save the Children staff in China, 2011.

PHOTO: SAVE THE CHILDREN

general practitioners fall into the third-highest and highest income quintiles respectively (Office of National Statistics, 2010). Although hours are long and workloads often heavy, pay for health professionals in donor countries normally allows a reasonable standard of living and reflects the many years spent in education and training.

In many developing countries this is not the case. Even highly-skilled health workers often live a hand-to-mouth existence, sometimes forced to work two jobs to supplement their income and keep their families above the breadline. In nearly 20% of countries surveyed by UNICEF, nurses earn barely enough to keep them out of poverty (UNICEF, 2010). In Pakistan, 'lady health workers' were initially paid less than US$30 per month – a dollar a day and less than half the minimum wage – although their strike in July 2011 has led to an improvement. In 10 years, the real wages of civil servants – including health workers – fell in 26 of the 32 countries for which data is available (McCoy et al, 2008).

Salaries for health workers in the public sector can be desperately low. Some understandably supplement their pay by attending external training or meetings run by NGOs that offer a cash payment. These events may not always be an efficient use of health workers' time and mean they are temporarily unavailable to provide healthcare to the community (Riddle, 2010).

Although evidence is difficult to obtain, in some places where health services have been made free to promote equitable access, poorly-paid health workers might be more prone to charging under-the-table informal fees to patients to supplement their incomes. These charges are unregulated and often illegal. The burden then falls on the patient, irrespective of their ability to pay (Campbell et al, 2009). As a result the poorest families can't afford to pay for life-saving treatment when their children are sick (Borghi et al, 2004).

Mata, from Niger State, Nigeria, says that working as a nurse is a daily challenge. "We're used to facing a shortage of drugs, and the staff aren't motivated to work because of low salaries and the general hardship of life here," she explains.

"It's like running the health facilities properly is nobody's business – everyone's just trying to run their own private businesses to make more money."

Some health workers seek to work in private health clinics that operate for profit, charging patients fees for high-quality services and putting them out of the reach of poor families. Others seek jobs with not-for-profit organisations, such as NGOs and churches, which help provide health services in developing countries, especially in remote areas. These organisations may not charge patients for the health services they provide, but they often offer better pay and conditions than government facilities, drawing the staff away from the public health sector.

Angela, a chief nursing officer at Abuja's Federal Staff Hospital in Nigeria, explains how private hospitals, NGOs and international bodies are able to provide much better salaries and conditions than public facilities, and are the main source of 'brain drain' in the health workforce.

She says:

"What they pay cannot even be compared with what the government is paying us. But not only that, they give staff the opportunity to develop and involve them in decision-making to bring out the best in them.

"They send staff for training and courses but here, when we apply to the ministry for training, they will tell us that they don't have money. Even when opportunities exist and we are prepared to pay for ourselves, if we are in training there will be no one to do the work."

Salaries are also one of the most important factors affecting the flow of skilled health workers out of a country. This is hardly surprising when salary differentials are so large: a doctor in Zambia could earn 25-times more if they worked in the US; a nurse, nearly 30-times more (Vujicic et al, 2004).

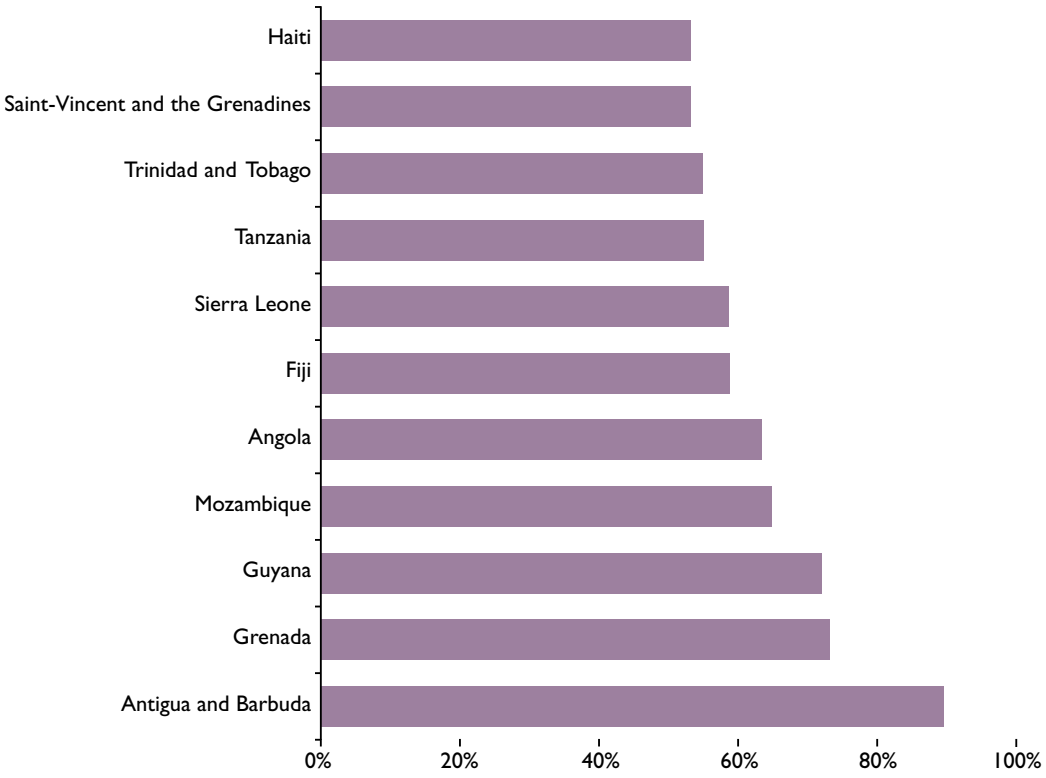
Salaries clearly motivate health workers to stay or move: in Ghana, for example, 81% of health workers said they would remain in their country for a better salary, as did 84% in Uganda and 78% in South Africa (World Health Organization, 2003). A study in six African countries documented that most health workers intend to migrate for higher salaries (Hongoro and Normand, 2006).

Acting on such intentions can leave the health system at home desperately understaffed. A staggering proportion of some countries' health workforce moves to work abroad: 81% of nurses from Liberia, 78% of nurses from Burundi, 75% of Mozambican doctors and almost 60% of doctors from Zambia work outside their country of origin (Clemens and Pettersson, 2006). The movement of health workers is not just taking place between developed and developing countries, but also within regions, to neighbouring countries that offer better career prospects.

INSUFFICIENT FUNDING

A shortage of health workers and ineffective use of existing health workers often reflects chronic underinvestment in the wider health sector. Paying regular salaries and sustaining a health workforce is a major recurrent cost that can only be met where a significant proportion of the total government budget is allocated to health, and a significant share of the health budget is allocated to recruiting, training, paying and supporting staff.

Figure 7: Eleven countries with the highest expatriation rates for doctors in OECD countries



Source: International Migration Outlook – SOPEMI 2007. Paris, Organisation for Economic Co-operation and Development, 2007

Health workers typically account for the majority of health expenditure. In Ethiopia, health workers' salaries represent 59% of the recurrent government health budget, 56% in Liberia, 66% in Laos, and 76% in Mozambique (Tyrell et al, 2010. World Health Organization, 2011a).

In the majority of the health worker crisis countries, the government has not prioritised health and has failed to allocate enough of the national budget to the health sector.

In 2001, leaders of African governments met in Abuja and pledged to dedicate 15% of their national budgets to health (African Union, 2001). Yet, to date, only eight countries have met this commitment (World Health Organization, 2011b).

Responsibility for recruiting, training and maintaining a country's health workforce is primarily the responsibility of that country's government. Developing countries must make health a national priority and reflect that in the way resources are allocated.

However, in some of the poorest countries, even where the target of 15% of government expenditure on healthcare has been met, the amount of money available remains too low to provide a decent standard of health.

After all, 15% of an inadequate national budget constitutes an insufficient health budget. In 2008, the Democratic Republic of the Congo allocated 17.5% of public spending to health, which still translated as only US$7 per person. Liberia's 17.2% spend worked out at just US$9 per person per year.

In contrast, the UK spends US$2,500 per person per year on health, Sweden more than US$3,000, and Denmark, Norway and the US almost double that (World Health Organization, 2011b). The WHO estimates that by 2015 the minimum expenditure required to meet a country's basic health needs will be US$60 per person (World Health Organization, 2010c).

Current levels of funding by low-income countries – even where they make a significant effort – usually cannot cover the full costs of essential healthcare.

Table 1: Ten countries that spend the least on health as a percentage of total government expenditure and per capita health expenditure

Country	Percentage of government health expenditure as a share of total government expenditure (2008)	Country	Per capita government allocation to health (in US$ value) (2008)
Myanmar (Burma)	0.7	Guinea	3
Azerbaijan	2.5	Sierra Leone	3
Eritrea	3	Eritrea	4
Iraq	3.1	Bangladesh	5
Pakistan	3.1	Guinea-Bissau	5
Afghanistan	3.7	Lao People's Democratic Republic	6
Lao People's Democratic Republic	3.7	Burundi	7
Guinea-Bissau	4	Democratic Republic of the Congo	7
Sierra Leone	4.2	Ethiopia	7
Guinea	4.3	Pakistan	7

Source: World Health Statistics, 2011

The ability of the poorest countries to meet their health workforce needs is often hindered by unduly restrictive fiscal conditions attached to International Monetary Fund (IMF) programmes. If the poorest countries are to overcome their health-worker shortages, increased quantity and quality of donor aid, and more liberal macro-economic policies are needed.

UNMET PROMISES

There is now a clear consensus – reflected in the Global Strategy – that the health MDGs cannot be achieved unless the health worker crisis is also addressed (Appendix 1). The main changes that will resolve this crisis need to come from developing countries themselves. Donors have a shared responsibility to meet health worker needs, particularly in the poorest countries that are heavily dependent on aid.

At a time when many rich countries' aid budgets are shrinking, support for health workers risks being squeezed. If all donors followed the lead provided by Norway, Sweden, Denmark, the Netherlands and Luxembourg, and met the UN target of giving 0.7% of national income in aid, the international community would have far more scope to respond rapidly and flexibly to the health worker crisis.

Unmet promises on aid carry a heavy cost in terms of children's health. Although aid for maternal, newborn and child health has doubled since 2003 to US$5.4 billion in 2008 – 60% of which is from the UK and the US – this still only represents four and a half cents in every dollar of global aid spending, and is just one-third of what is needed to meet the health-related MDGs as is identified in the Global Strategy (Pitt et al, 2010).

The aid given to fund healthcare often bypasses the countries with the greatest need: low-income countries only receive a third of total aid for health, even though these countries endure the most severe and urgent health challenges (Mills, 2009).

INEFFECTIVE AID

Too often, the ways in which donors give aid blunt the ability of governments to address the health worker crisis.

Low-income countries typically rely on a variety of sources of health finance, including domestic tax revenues, and formal and informal payments.

It is normal for health funding from donors to come through various channels at different points in time, while each donor may have several streams of funding going into a health service. The fragmented way in which aid is often given to a country's health sector makes long-term decision-making about the health workforce difficult, especially in the poorest countries that rely heavily on aid to cover their core costs.

Each donor's aid brings with it specific processes for project or programme design, approval, implementation, monitoring and reporting, which can impose a heavy burden on already overstretched recipient governments, often at the expense of implementing countries' own national health plans.

For instance, a recent review in Mozambique identified 185 separate donor projects being implemented in the health sector, each with separate planning, implementation and reporting requirements (OECD, 2011).

Donor fragmentation can also have a direct impact on the capacity of local health services: in Tanzania, one assessment found that hosting visits from donors can take up 10–20% of a district medical officer's time, with report-writing consuming even more (McKinsey & Company and Bill & Melinda Gates Foundation, 2005).

What's more, aid money is often committed for short periods of time – typically around an annual budget cycle – which prevents countries from planning for the future and from embarking on long-term projects like those needed to recruit and train a health workforce.

As well as being short term, aid for health is usually much more volatile than tax revenue (McKinsey & Company and Bill & Melinda Gates Foundation, 2005). Where countries can't rely on a steady stream of funding, they can't plan investments that last for several years, and this has significant implications for their ability to meet recurrent costs (Oya and Pons-Vignon, 2010).

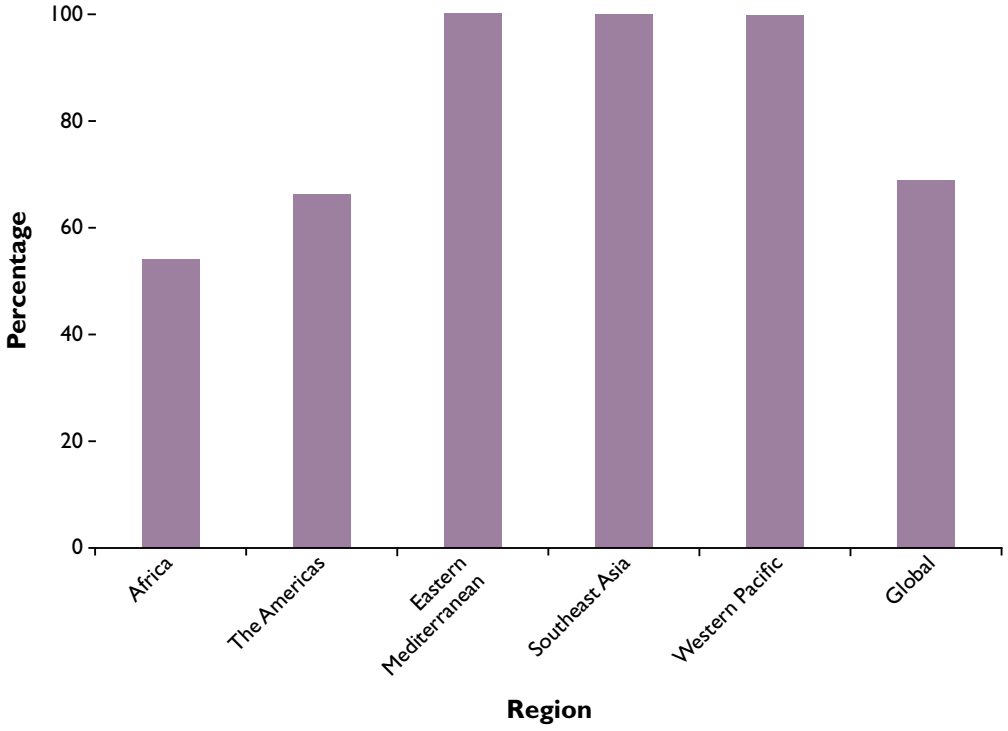
UNDER-FUNDED AND UNIMPLEMENTED NATIONAL HEALTH WORKFORCE PLANS

Every country that has a critical shortage of doctors, nurses, midwives and CHWs needs to plan how they will meet their needs in a sustainable way, as a core component of the national health plan. In each country's health workforce plan, a balance must be struck between efforts to increase the skills of existing health workers and a drive to recruit new ones. Existing plans normally focus on retention and training. This is essential but needs to be matched by efforts to increase the long-term recruitment of all types of health worker (World Health Organization, 2010d).

In 2010, nearly 80% of the countries experiencing a critical shortage of health workers reported having a plan in place to address their health worker gap. Of these, 71% included a costed budget for its implementation, albeit to varying degrees of detail. However, only 38% of these plans had enough funding to cover their needs. This lack of funding also helps to explain why only 55% of health workforce plans have actually been implemented (World Health Organization, 2010d).

The countries with the greatest needs are also the countries most likely to have under-funded plans (Figure 8) (World Health Organization, 2010d). In Liberia, for example, less than 5% (US$1.5 million) of aid received for health went towards supporting health workers (World Health Organization, 2011a).

Figure 8: Proportion of costed plans that receive donor funding by WHO region and globally

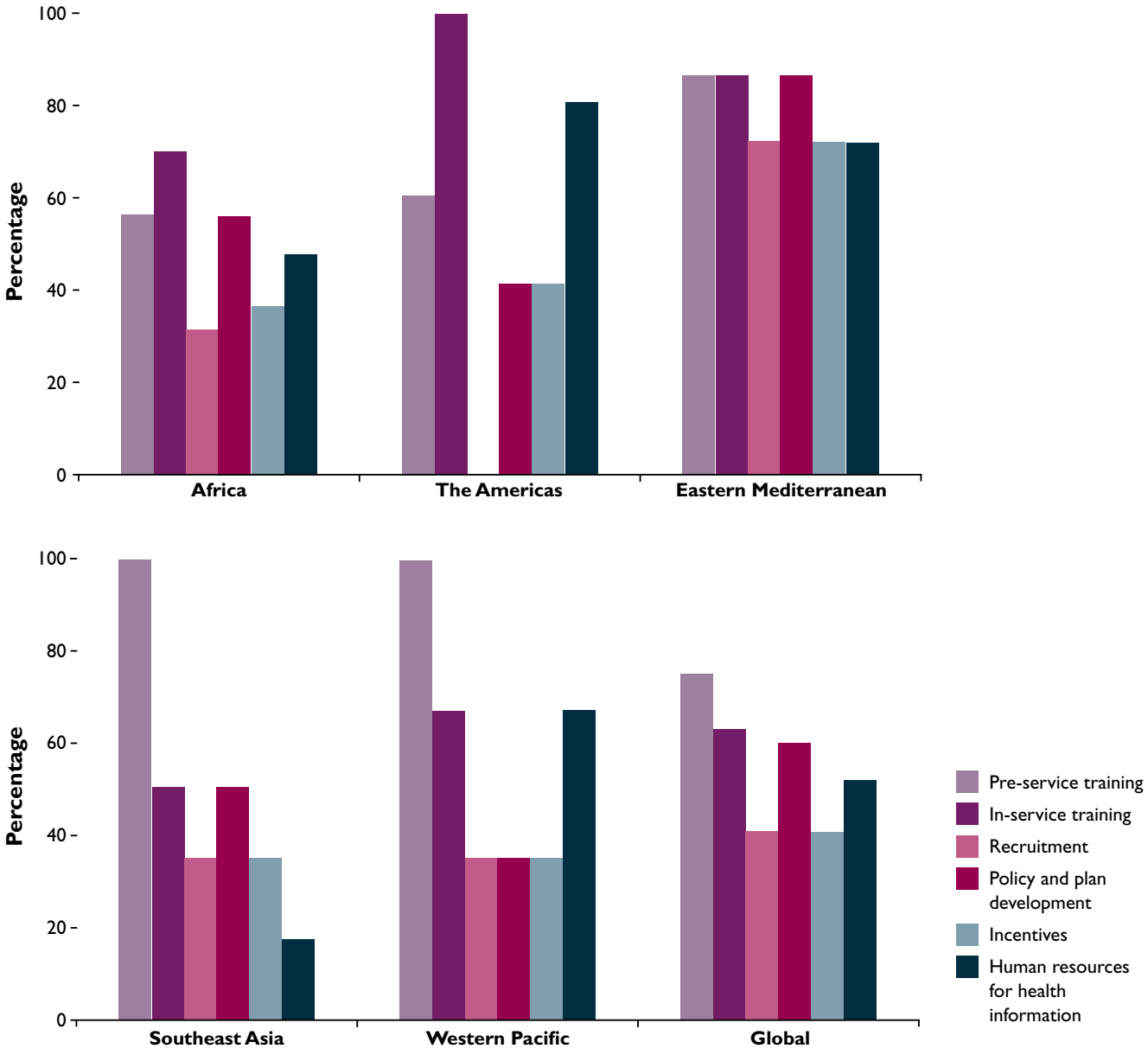


Source: World Health Organization, 2010d

Aid for health workers mainly supports training – in the form of pre-service and in-service education, incentives and occasionally recruitment (Figure 9). Aid is not typically given to help pay health workers' salaries – partly because of donors' reluctance to be tied to long-term recurrent costs. Only 19 of the countries surveyed by the WHO received support for health worker pay (World Health Organization, 2010d).

In countries with a critical shortage of health workers, and where current wage levels are a barrier to recruitment, retention and performance, this reluctance on the part of donors to contribute to recurrent costs through sector or budget support can be a significant obstacle to progress.

Figure 9: Proportion of the type of health worker activities supported by development partners, by WHO region and globally



Source: World Health Organization, 2010d

OVERCOMING THE CRISIS

Overcoming the health worker crisis requires urgent action on two levels.

At the global level, political leaders and international institutions must use the forthcoming UN General Assembly to put health workers at the top of their agenda, mobilise resources and regularly review progress.

At the same time, developing countries facing a health worker crisis need to adopt and implement costed, time-bound plans to get the health workforce they need in place by 2015.

GLOBAL POLITICAL ACTION AT THE HIGHEST LEVEL

Governments have already made commitments to increasing the numbers of health workers, and making effective use of existing health workers, through the Global Strategy.

These commitments need to be added to by countries that have so far held back from specific pledges, and in other cases they need to be strengthened and implemented. Progress against these commitments will be reviewed at a high-level event at the UN General Assembly in September 2011, providing an opportunity to intensify efforts to address the health worker crisis, and spur action at the national level.

ACTION AT THE COUNTRY LEVEL

Action to tackle the health worker crisis in the poorest countries must address both the absolute shortage of health workers, and the ineffective use of existing health workers. There needs to be greater emphasis placed on those frontline health workers, such as midwives and CHWs, who are the first point of contact with children and their families.

Many of the measures needed to meet these challenges can be implemented over a relatively short time scale – for example, increasing the skills of existing health workers through in-service training and task-sharing – and can have a significant impact on the availability and quality of healthcare.

However, longer-term investment is also required to ensure a sustainable supply of workers in future years, and to develop a full 'continuum of care' from the home to the hospital.

The solutions to the health worker crisis will require collective action across national governments.

Ministries of finance have a central role, given that health workers typically account for a large proportion of the public sector wage bill.

Education ministries also have an important part to play, because in most countries pre-service professional education of health workers is funded mainly out of education budgets.

Ministries of health require clear political leadership, with health ministers who are committed to addressing health workforce needs in a sustainable and sequenced way that prioritises the unmet needs of the poorest children and their families.

Countries affected by the health worker crisis must:
- recruit more health workers with a range of skills
- make better use of existing health workers to reach the most vulnerable children
- ensure that all health workers are paid a decent wage
- deliver more funding for healthcare, and in a more effective way.

National health workforce plans

Every country affected by the health worker crisis must have a fully-costed government plan in place to recruit and train more new health workers, and a strategy to ensure that the supply of health workers is sustainable over the long term (Global Health Workforce Alliance, 2008).

Developing-country governments must prioritise healthcare and allocate a sufficient percentage of their budgets to pay for their plans. Donors must also do their part to ensure that no country's health workforce plan fails due to a lack of funding, and provide technical support to ensure the plan reflects the specific needs of the population, including those living in underserved areas.

As well as increasing the supply of health workers, workforce plans must identify ways to better use existing health workers, through appropriate in-service training, task-shifting, redeployment to underserved areas, retention packages and investment to better support, manage and equip health workers (Table 2) (Grobler et al, 2009).

MORE HEALTH WORKERS WITH APPROPRIATE SKILLS

Recruiting more community health workers

CHWs are an essential component of any health workforce, and are often the frontline of healthcare for children. The poorest countries will not be able to achieve MDG 4 without more, better-supported CHWs. Since it takes considerably less time to train CHWs than more specialised health professionals, they have the potential to address many of the immediate health challenges facing countries with high rates of child mortality (Bhutta et al, 2010).

In the longer term, CHWs can play a vital role in complementing more highly-skilled health workers, and providing a link between the community and the health service. However, recruiting more CHWs, and training and deploying them effectively are complex challenges, and CHWs should not be seen as a quick fix or substitute for a chronic shortage of midwives, nurses and doctors.

Experience shows that CHWs are most effective when they work alongside other health professionals, are linked to a functioning health facility, and are able to refer more serious cases to specialised health professionals (Lehmann and Sanders, 2007).

The greatest value of CHWs lies in their potential to reach into the poorest communities, and access more remote populations who are often bypassed by the formal health sector.

CHWs are particularly important for improving child health. By providing low-cost, high-impact preventive and curative care, such as treatment for pneumonia and diarrhoea, and advice on breastfeeding and nutrition, CHWs can play a central part in achieving better and more equitable results in child and maternal health (Lehmann and Sanders, 2007). Their effectiveness in reaching the poorest children and mothers is especially important given that progress in reducing child

mortality in most low-income countries has been disproportionately concentrated on wealthier income groups.

In many countries, the use of CHWs is well established. In Brazil, CHWs now reach more than 80 million people (Bhutta et al, 2010). In Pakistan, a huge public sector programme for training and deploying lady health workers has existed since 1994, creating a workforce of more than 90,000 that is estimated to cover 70% of the rural population (Jalal, 2011).

As a result of the relatively low cost and rapid returns, an increasing number of countries are focusing on CHWs in their efforts to reduce maternal and child mortality.

EFFECTIVE HEALTH WORKER DEPLOYMENT

The areas with the most vulnerable children often have the fewest health workers.

There are many strategies to encourage more health workers to work in frontline roles – often in remote, rural or underserved areas – that extend access to healthcare and directly address the key causes of under-five mortality.

These include financial incentives, better communications technology, tailoring health workers' training to meet the needs of underserved regions, and regulatory change – such as allowing a health worker to supplement their income by working a certain number of hours in the private sector.

MALAWI'S EMERGENCY HUMAN RESOURCES PROGRAMME

Malawi has demonstrated how a country's health worker gap can best be filled by developing a national health workforce plan and budget that is then supported by donors. Malawi's Emergency Human Resources Programme (EHRP) increased the health workforce by 53% between 2004 and 2009, saving an estimated 13,000 lives.

The plan consisted of five interventions that addressed the country's long-term health worker needs, while also implementing temporary measures that met immediate needs:

1. Improving incentives through a 50% salary top-up for 11 different types of health worker, along with new recruitment and re-engagement strategies.
2. Expanding training capacity to double the number of nurses and treble the number of doctors who could be trained.
3. Using international volunteer doctors and nurse tutors in the short-term while large-scale training was taking place.
4. Strengthening the ministry of health's ability to plan, manage and develop human resources.
5. Developing health-management information systems to monitor and evaluate human resource capacity.

The EHRP was implemented with the financial and technical support of development partners through a sector-wide approach, in which donors provided funding for the core health budget, enabling the government to set its own priorities and implement a single national plan.

The evaluation of the EHRP said that political will, the participation of multiple partners and stakeholders, long-term planning and the balance between different cadres of health worker had all been essential to the success of the programme. The government could not have paid for the entire plan, including the substantial salary top-ups, without donor support.

Source: Management Sciences for Health, 2010

Table 2: Interventions to improve the retention of health workers in remote areas

Category of intervention	Examples
A. Education and regulatory interventions	• Targeted admission of students from rural background • Recruitment from and training in rural areas • Changes/improvements in medical curricula • Early and increased exposure to rural practice during undergraduate studies • Educational outreach programmes • Community involvement in selection of students • Compulsory service requirements • Conditional licensing • Loan repayment schemes • Producing different types of health workers • Recognise overseas qualifications
B. Monetary compensation (direct and indirect financial compensation)	• Higher salaries for rural practice • Rural allowances, including installation kit • Pay for performance • Different remuneration methods • Loans (housing, vehicle) • Grants for family education • Other non-wage benefits
C. Management, environment and social support	• General improvement in rural infrastructure (housing, roads, phones, water supplies, radio communication, etc) • Improved working and living conditions, including opportunities for education and spouse employment, ensured adequate supplies of technologies and drugs • Supportive supervision • Support for continuous professional development, career paths • Special awards, recognition • Flexible contract opportunities for part-time work • Measures to reduce the feeling of isolation of health workers • Increased opportunities for recruitment to civil service

Source: World Health Organization, 2009

Both professional support from health sector management, and community support from the local population, are crucial to ensure that health workers are secure and highly motivated.

Frontline health workers have been successfully recruited to work in remote locations in many countries. In Nigeria, the Midwife Service scheme makes one year's service in a health facility in a rural community mandatory for newly qualified midwives, and is also enlisting the help of unemployed and retired midwives.

More than 2,600 midwives have been deployed to 652 health facilities, and the project has been extended from two to three years due to its success (Nigeria Federal Ministry of Health, 2011).

Burundi and Sierra Leone have deployed the temporary strategy of recalling retired health workers to work in rural areas while new health workers are trained.[11] In some cases, health workers from other countries have been requested. For example, Cuban doctors and nurses have been deployed to rural areas in a number of sub-Saharan African countries (Laleman et al, 2007).

Task-sharing

Many health workers do not have the necessary training, equipment or authority to address the key causes of under-five mortality. Where this is the case, health workers will often need to be trained and empowered to take on new and different responsibilities.

Task-sharing usually entails training and equipping health workers to re-focus their priorities. In some cases it will also involve changes to regulations and laws, enabling different cadres of health worker, such as CHWs, to take on responsibilities from more

HEALTH SURVEILLANCE ASSISTANTS – THE CASE OF MALAWI

Many of the improvements in the survival chances of Malawi's children can be attributed in part to the health promotion work of more than 10,000 health surveillance assistants (HSAs) who are deployed in rural areas of the country (VSO Malawi, 2011).

HSAs have continued in the tradition of temporary smallpox vaccinators in the 1960s and cholera assistants in the mid-1970s. They are trained, salaried outreach workers who deliver preventative healthcare such as oral immunisations and health education.

The Malawian government, supported by Save the Children, has been increasing the numbers of these frontline health workers and making existing ones more effective through training, as part of the Malawi National Health Programme to provide maternal and newborn services at the community level. This programme, which is carried out in partnership with the ministry of health, UNICEF and others, reaches about 500,000 babies and mothers (Save the Children US, 2007).

Today, HSAs are trained to provide care for mothers and babies, including visits during pregnancy and after birth, and to refer sick babies to local health facilities for further treatment.

Routine monitoring in the three pilot districts of Chitipa, Dowa and Thyolo suggests an increase in antenatal care and facility deliveries. The results of a household survey on the coverage of services, including newborn care, will be available soon.

Following the programme's success, Malawi's ministry of health is implementing it in four additional districts and has plans to deliver it throughout its 28 districts.

DORIS THE HEALTH HERO: COMMUNITY-BASED HEALTH WORKER, SOUTH SUDAN

Doris (pictured, below) is a community-based health worker in South Sudan's Western Equatoria State. She's been trained by Save the Children to diagnose and treat malaria, pneumonia and diarrhoea in children under five in her community.

Doris says: "I gave birth to six children but three have died. They've all suffered from diarrhoea and malaria. I learnt about the drugs used to treat these diseases and how to deal with patients. I learnt to ask the right questions when a mother comes to me with her sick child. I ask the name and age of the child, and which part of the body the pain comes from.

PHOTO: RACHEL PALMER/SAVE THE CHILDREN

"If the child's body is hot I know it's malaria so I'll give them three anti-malaria tablets. I'll tell the mother to give her child one a day and if there's no improvement I'll refer the child to the clinic.

"For diarrhoea, if the mother says it started many days ago, I ask her why she didn't bring her child to me sooner. I ask if the mother is feeding the child because of the stomach problems.

"I felt happy after the training because I've now treated 20 children with pneumonia and given people the drugs they need to treat malaria. I see the children get better. One of my neighbours' daughters was sick with pneumonia. I knew what was wrong

"The community chose me to become a community-based health worker so I can help treat local children. I agreed to do it because I wanted to help children. Sometimes they come in the morning, sometimes five, three, four at a time. Sometimes they'll wake me at night. I can't refuse to treat the child even if I'm tired because I know what it feels like to be a mother with sick children."

Source: interviews conducted by Save the Children staff in South Sudan, 2010.

specialised health professionals (who are paid more and take much longer to train). These tasks can include community case management of common childhood diseases, like pneumonia and malaria.

In many countries, task-sharing is gathering momentum and having a positive effect on women's and children's health. For example, Ethiopia has implemented a large, innovative programme employing 34,000 new female health workers in health promotion and disease prevention, largely around maternal and child health, HIV and malaria.

In regions where promotion and prevention work is already strong, task-sharing of community case management of pneumonia, diarrhoea, malaria and severe acute malnutrition is being piloted. Early indications suggest that these health workers have been able to assess, classify and treat children effectively (Degefie et al, 2009, Wakabi, 2008).

The government of Ethiopia is also training mid-level health officers, who need less training than doctors but can perform many similar tasks, including caesarian sections and comprehensive obstetric care.

Task-sharing is especially relevant in low-income countries like Ethiopia, with high child mortality, scarce resources, and large, underserved rural populations.[12]

A FAIR WAGE FOR ALL HEALTH WORKERS

Countries can only recruit more health workers and get the best out of the existing workforce by offering incentives. Working conditions, management support, opportunities for skills development and the social standing of health workers are all crucially important.

However, in many areas, low pay discourages people from joining or staying in the health workforce, or leads health workers to under-perform in their

MAKING BETTER USE OF HEALTH WORKERS IN NORTHERN NIGERIA

Save the Children is a member of the Partnership for Reviving Routine Immunisation in Northern Nigeria – Maternal, Newborn and Child Health. The partnership, which reaches 17 million people in four states, was launched in 2006 in cooperation with the Nigerian government and supported by the UK and Norway.

The training and management of existing health workers has been a strong focus of the programme. The partnership provided in-service training in life-saving ante- and postnatal childcare, family planning and management of childhood illnesses to 43% of health workers in targeted facilities. The training programme included 40 new trainers and the establishment of 14 new training sites. A human resource information system has been established in all states, and 29 managers and supervisors have been trained on how to use the software.

A review of the programme concluded that the remaining challenges were to develop incentive packages to retain health workers in remote rural areas and to increase the number of female health workers. The programme has been extended until 2013 and will look at the potential for training community health extension workers in midwifery skills, as well as improving supervision for new graduates.

Source: PRRINN-MNCH, March 2011.

posts. A fair income can help increase productivity, reduce absenteeism and moonlighting, and boost staff retention.

A living wage – one that allows someone to meet their basic needs – is especially relevant for CHWs, midwives and nurses, who tend to be low paid. A national minimum wage, where one exists, may be used as a benchmark for a basic living wage; but few low-income countries have yet defined them. An alternative could be to regulate salaries within the health sector by defining a standard salary scale for each type of health worker. This would attract better quality workers and ensure that pay is fair across a country.

Various ways of linking financial rewards with results are becoming increasingly popular with donors, especially the World Bank. One of these mechanisms is performance-related pay, whereby health workers receive additional payments if they achieve successful results.

Although pay-for-performance is currently being introduced or expanded in at least 20 countries (Meessen et al, 2010) results have so far been mixed (Pearson, 2011). The design of any scheme is crucial to its impact, especially in identifying the right success indicators, and linking rewards with achievements comes with potential risks. For instance, some essential procedures can be neglected if pay incentives are linked to the quantity of services provided rather than their quality, or lead to a focus on the easiest-to-reach children, at the expense of those in remote communities.

Where health workers are scarce and reporting systems unreliable, monitoring performance can

THE ROLE OF COMMUNITY HEALTH VOLUNTEERS – THE CASE OF NEPAL

In Nepal, Save the Children has been supporting the Ministry of Health to improve healthcare services for newborns and mothers. The project includes training existing health workers to give them new skills to save newborn babies.

Nepal has a unique and well-established body of more than 48,000 female health volunteers who act as the frontline provider of a wide range of maternal and child health services throughout the country. They have been the bridge between the formal health system and the community since the 1990s. These community health volunteers carry out home visits before and after birth. They have been trained in newborn care, including resuscitation and skin-to-skin care for premature or underweight babies.

Although volunteers are not medically qualified, they have been trained to identify the danger signs of serious infection – which is the leading cause of newborn deaths in Nepal.

The Nepalese government has rolled out the training across 10 districts and has demonstrated its commitment to saving the lives of newborns by providing effective support and incentives for these volunteers.

Working with other partners, Save the Children's role in the project was to provide evidence of how effective these interventions could be, give technical assistance and help shape the government's policy – along with providing direct training in one district.

Nepal is on track to meet MDG 4 – reducing childhood mortality by two-thirds by 2015.

Source: Saving Newborn Lives, 2009

be particularly challenging. Pay-for-performance schemes must be considered with caution and designed with care. If designed well, performance-based incentives have the potential to improve healthcare, as was the case in Rwanda, which saw increased coverage and improved quality of maternal and child health services (Basinga et al, 2011).

MORE AND BETTER FUNDING

Recruiting more health workers and creating better working conditions will require increased health expenditure. Ultimately the responsibility to pay the public sector wage bill falls to the national government employing the health workers. Many countries can take further steps to allocate more of their resources for healthcare, and governments must look for ways to increase their ability to raise the necessary money through taxation.

In countries where domestic revenue – and by extension potential tax revenue – is low, support from international donors is also needed. Donors need to make their aid more effective, as well as increase their support for health, in order to help countries address the health worker crisis.

Domestic resource allocation and equitable financing

A large share of healthcare spending in developing countries is made through out-of-pocket payments by the patients themselves (World Health Organization, 2010c). Health facilities in many countries charge direct user fees. This can increase the cost of care when it is eventually sought, or simply prevent many more children from receiving life-saving care (Save the Children UK, 2009).

In the event of a serious illness or complicated delivery, for instance, a household can suddenly have to pay unpredictably high costs for healthcare, which can plunge it into poverty and debt (Xu et al, 2003). Further, user fees are inefficient and costly to administer (Save the Children UK, 2009). For poor families, they can create a barrier between CHWs and accessing healthcare. A central responsibility of a CHW is the timely referral of women and children to clinics. But if those clinics then charge patients fees for essential services, the poorest patients will continue to be denied access and the added value of CHWs is undermined.

As a result of these factors, there is now a consensus that charging patients at the point of use for healthcare is regressive, and that alternative ways of raising funding – through prepayment, risk-pooling and increased tax revenues – should be established (World Health Organization, 2010c).

More and better aid

In most low-income countries, governments will need support from donors in order to address their health workforce needs. Although aid for health has risen significantly in recent years, it remains well below the funding needs identified in the Global Strategy.

Increasing aid budgets in line with the UN target of 0.7% of national income would enable donors to respond more rapidly and flexibly to developing countries' health workforce needs. If all developing countries committed 15% of expenditure to health, and donors met the 0.7% target and maintained the share of aid going to health, then funding would be sufficient to ensure the health-related MDGs were achieved (Mills, 2009).

Donors must also make their aid for health more effective. The forthcoming aid effectiveness forum in Busan, South Korea, will take stock of progress in implementing the commitments made in Paris in 2005 and Accra in 2008. In many respects, the health sector is a test case, given the large number of donors and the lack of effective coordination.

The International Health Partnership (IHP+) aims to put the Paris and Accra principles into practice in the health sector, harmonising donor engagement and making aid better aligned with recipients' own healthcare plans. However, this agenda has seen only slow and partial implementation. Donors need to intensify their efforts around the IHP+.

CONCLUSION

Every day, thousands of children are dying in the poorest countries because they are out of reach of a health worker with the skills and equipment to prevent and cure the common causes of under-five mortality. Without concerted action to address the healthcare needs of millions of children, the global promise to cut child mortality by two-thirds by 2015 cannot be achieved.

The forthcoming UN General Assembly meeting in New York, where a high-level event will review progress against donor and government commitments on health workers, provides an opportunity to tackle the health worker crisis, by mobilising resources, identifying policy changes, and eliciting fresh commitments from countries that have so far failed to step up their efforts.

This high-level event must address both dimensions of the health worker crisis: a critical shortage of health workers affecting 61 countries, and a failure to make effective use of existing health workers. Large-scale recruitment of health workers and better training and deployment must start now.

The health worker crisis disproportionately affects children in the poorest communities, which tend to be least well served by healthcare services. Reducing child mortality across every income and social group depends on large-scale redeployment of health workers to areas that are currently underserved, and requires a focus on training health workers with the skills needed to tackle the key causes of child death.

Addressing the health worker crisis will require action at the global and national level. Increased long-term investment is needed to recruit and train more health workers, with a balance across different cadres. At the same time better use of the existing workforce must be made by ensuring they receive a fair living wage, and are well supported, trained, equipped and motivated.

Developing-country governments need clear health workforce plans to carry out what are often challenging changes. They also need to adequately budget for healthcare to ensure that these plans are fully implemented.

In the poorest countries, many of which face a critical shortage of health workers, governments will usually need substantially increased and more effective donor aid, and more supportive IMF fiscal conditions, in order to help meet their health workforce needs.

The health workforce commitments made as part of the Global Strategy attest to a growing consensus around the solutions to the health worker crisis, and a widespread recognition that health workers are critical to saving children's lives.

The challenge, as the international community gathers in New York this September to review progress, is to translate aspiration and commitment into change on the ground, and lay the foundations for accelerated progress towards the MDGs on child and maternal health.

INTERNATIONAL COMMITMENTS TO HEALTH WORKERS

WORLD HEALTH ASSEMBLY (WHA) RESOLUTION 57.19, 2004

Urges member states to develop strategies to mitigate the adverse effects of migration of health personnel and minimise its negative impact on health systems.

WHA RESOLUTION 59.23, 2006

Urges member states to affirm their commitment to the training of more health workers by:

- giving consideration to the establishment of mechanisms to mitigate the adverse impact on developing countries of the loss of health personnel through migration, including means for the receiving developed countries to support the strengthening of health systems, in particular human resources development, in the countries of origin;
- promoting training in accredited institutions of a full spectrum of quality professionals, and also community health workers, public health workers and paraprofessionals;
- encouraging financial support by global health partners, including bilateral donors, priority disease and intervention partnerships, for health training institutions in developing countries;
- promoting the concept of training partnerships between schools in industrialized and developing countries involving exchanges of faculty and students;
- promoting the creation of planning teams in each country facing health-worker shortages, drawing on wider stakeholders, including professional bodies, the public and private sectors and nongovernmental organizations, whose task would be to formulate a comprehensive national strategy for the health workforce, including consideration of effective mechanisms for utilization of trained volunteers;
- using innovative approaches to teaching in developed and developing countries with state-of-the-art teaching materials and continuing education through the innovative use of information and communications technology.

EU PROGRAMME FOR ACTION TO TACKLE THE CRITICAL SHORTAGE OF HEALTH WORKERS IN DEVELOPING COUNTRIES (2007–2013), 2007

The Council underlines the need for greater EU support for the capacity development of public administration including human resources management training, the implementation of civil service reform, and the promotion of decent work and salary and non-salary incentives as set out in the European Programme for Action.

The Council recognises that adequate financial resources are needed to ensure sustainable

solutions to the human resource crisis in the wider context of health sector financing in developing countries.

The Council calls on the Commission and the Member States to ensure the full consideration of the critical shortage of health workers in their health programming with developing countries.

G8, 2008

The G8 members will work towards increasing health workforce coverage towards the WHO threshold of 2.3 health workers per 1,000 people, initially in partnership with the African countries where we are currently engaged and that are experiencing a critical shortage of health workers.

G8, 2009

In order to advance the goal of universal access to health services, especially primary healthcare, it is essential to strengthen health systems through health workforce improvements, encompassing both health professionals and community health workers, information and health financing systems including social health protection, paying particular attention to the most vulnerable.

We reaffirm our commitment to address the scarcity of health workers in developing countries, especially in Africa, and we note the 2008 Kampala Declaration and the Agenda for Global Actions launched by the Global Health Workforce Alliance.

We encourage the WHO to develop by 2010 the Code of Practice on the International Recruitment of Health Personnel.

DRAFT RESOLUTION REFERRED TO THE HIGH-LEVEL PLENARY MEETING OF THE GENERAL ASSEMBLY BY THE GENERAL ASSEMBLY AT ITS 64TH SESSION, 2010

We commit ourselves to accelerating progress in promoting global public health for all, including through … reviewing national recruitment, training and retention policies, and developing national health workforce plans, based on lessons learned, that address the lack of health workers as well as their uneven distribution within countries, including in remote and rural areas, and throughout the world, which undermines the health systems of developing countries, in particular the shortage in Africa, and in this regard recognising the importance of national and international actions to promote universal access to healthcare services that take into account the challenges facing developing countries in the retention of skilled health personnel in light of the adoption of the World Health Organization code of practice on the international recruitment of health personnel, adherence to which is voluntary.

APPENDIX 2

COMMITMENTS ON HEALTH WORKERS AS PART OF THE GLOBAL STRATEGY FOR WOMEN'S AND CHILDREN'S HEALTH

(WORLD HEALTH ORGANIZATION, 2010B)

- **Afghanistan** will increase the number of midwives from 2,400 to 4,556.
- **Australia** will fund skilled health workers (including midwives).
- **Bangladesh** will train an additional 3,000 midwives.
- **Burkina Faso** will develop and implement a plan for human resources for health and construct a new public and private school for midwives by 2015.
- **Burundi** will increase the number of midwives from 39 in 2010 to 250, and the number of training schools for midwives from one in 2011 to four in 2015.
- **Cambodia** will improve reproductive health by increasing the proportion of deliveries assisted by a skilled birth attendant to 70%.
- **Central African Republic** will ensure the proportion of births assisted by skilled personnel increases from 44% to 85% by 2015.
- **Chad** will strengthen human resources for health by training 40 midwives a year for the next four years, including creating a school of midwifery and constructing a national referral hospital for women and children with 250 beds; and deploying health workers at health centres to ensure delivery of a minimum package of services. Chad also commits to passing a national human resources for health policy.
- **Comoros** will accelerate the implementation of the strategic plan for human resources for health.
- **Democratic Republic of Congo** will increase the proportion of deliveries assisted by a skilled birth attendant to 80%.
- **Ethiopia** will increase the number of midwives from 2,050 to 8,635.
- **Haiti** will develop a plan for human resources for health by 2015.
- **Indonesia** will ensure all deliveries will be performed by skilled birth attendants.
- **Kenya** will recruit and deploy an additional 20,000 primary-care health workers.
- **Liberia** will double the number of midwives trained and deployed (compared to 2006).
- **The Lao People's Democratic Republic** will train 1,500 new midwives by 2015 by upgrading existing staff and training and recruiting new staff.
- **Madagascar** will increase the proportion of births assisted by skilled attendants from 44% to 75%.
- **Malawi** will accelerate training and recruitment of health professionals to fill all available positions in the health sector.
- **Mongolia** will implement a policy on increasing salaries of obstetricians, gynaecologists and paediatricians by 50%.

- **Myanmar** will improve the ratio of midwife to population from 1/5000 to 1/4000, and develop a new human resources for health plan for 2012–2015.
- **Nepal** will recruit, train and deploy 10,000 additional skilled birth attendants.
- **Niger** will train 1,000 providers to handle adolescent reproductive health issues.
- **Nigeria** will introduce a policy to increase the number of core service providers including community health extension workers and midwives, with a focus on deploying more skilled health staff in rural areas, to reinforce the 2,488 midwives recently deployed to local health facilities nationwide.
- **Papua New Guinea** will improve midwifery education and register 500 new midwives by 2015, and will increase the number of obstetricians from 17 in 2011 to 40 in 2020.
- **Rwanda** will train five-times more midwives, increasing the ratio from 1/100,000 to 1/20,000.
- **Sao Tome & Principe** will increase the proportion of births attended by a qualified health personnel from 87.5% to 95%.
- **Senegal** will increase the proportion of assisted deliveries from 51% to 80% by increasing recruitment of state midwives and nurses.
- **Sierra Leone** will ensure that all teachers engage in continuous professional development in health.
- **Tajikistan** will ensure that by 2015, 85% of midwives are trained in provision of emergency obstetric care.
- **Tanzania** will increase the annual enrolment in health training institutions from 5,000 to 10,000, and the graduate output from health training institutions from 3,000 to 7,000. Simultaneously, it will improve recruitment, deployment and retention through new and innovative schemes for performance-related pay, focusing on maternal and child health services.
- **Vietnam** will increase the rate of women giving birth with trained health workers from 96% to 98%.

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[10] For details of Save the Children's commitment to the Global Strategy, and the commitments made by other NGOs and CSOs, see www.everywomaneverychild.com/commitments

[11] From experience of the authors in Burundi and Sierra Leone.

[12] There isn't a clear consensus on task-sharing and its appropriateness depends heavily on the context. In some cases, professional associations of health workers have had mixed responses to task-sharing, with some resistance to expanding the roles of existing health workers beyond their internationally defined remits. While there is promising potential, task-sharing should not be seen as an alternative to developing the necessary cadres over the longer term.

NO CHILD OUT OF REACH

TIME TO END THE HEALTH WORKER CRISIS

Every day, thousands of children are dying in poor countries because a critical shortage of health workers means they miss out on life-saving care.

Health workers are the single most important element of any health service. Without them, no vaccines can be injected, no life-saving drugs prescribed, no woman given expert care when they give birth.

As world leaders gather in New York on 20 September 2011 it's time for decisive action to tackle the staggering global shortfall of 3.5 million health workers and save millions of children's lives.

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