

Key health challenges for Zambia

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This paper provides an oversight into some of the key issues facing the health sector in Zambia and describes the role professionally qualified accountants can play in delivering the country's health agenda.

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Foreword

I would like to thank the ACCA for organising the health forum to which my office was invited. The participation of the Ministry of Health during this meeting was key as it provided an opportunity for the health care providers to interact with the participants and give an insight into challenges faced by the health care sector in the resource mobilisation and how these challenges could be addressed through concentrated efforts by professional bodies such as ACCA.

As a way of addressing these challenges, the Ministry proposes to introduce a Social Health Insurance which will soon be implemented and with this, it is our hope that we will realise our mission of providing equitable access to cost effective, quality, health care services as close to the family as possible.

I would like to appreciate the contribution made by the accountancy profession towards health service delivery in Zambia. Professional accountants have played a critical role in helping build capacity in the health sector and in strengthening health systems in areas such as financial reporting and good governance. The accountancy profession is critical to the delivery of quality health care in that the prudent utilisation of financial resources translates into improved health service delivery.

Lastly, I thank the ACCA for partnering with the Ministry of Health in trying to address challenges faced in the provision of health care in Zambia.

Hon. Minister of Health,
Dr Joseph Kasonde

1. Introduction

The Zambian government has set itself the ambitious target 'To provide equitable access to cost effective, quality health services as close to the family as possible' (MOH 2011: page x). Achieving this objective will require significant health reform: limited resources, high levels of poverty, poor physical infrastructure, geography and sparse population in rural areas all hamper the delivery of health care services and create challenges for policymakers and planners.

A greater insight into some of these issues was provided at a health conference organised recently by the Association of Chartered Certified Accountants (ACCA) in Lusaka. The event gave politicians, health policymakers and senior ACCA members employed in the field of health the opportunity to discuss some of the key health challenges facing Zambia, to debate potential solutions and then to consider the role that ACCA accountants can play in supporting the government to achieve its goal of improving the health of the population.

Speakers at the event included:

- Hon. Christopher Mulenga MP, deputy minister of health
- Dr Faston Goma, dean, School of Medicine, University of Zambia
- Dr Lackson Kasonka, managing director, University Teaching Hospital
- Dr Tim Meade MD, medical director, Corpmed Medical Centre
- Mr Patrick Phiri, technical expert manager, Deloitte & Touche
- Mr Mark Millar, interim chief executive Milton Keynes NHS Foundation Trust, England and ACCA council member.

The wide-ranging discussions focused on five key themes:

- health sector reform and why this is necessary for national development
- whether investment should focus on preventative or curative care
- National Health Insurance in Zambia
- how collaborative technology can be used to improve the provision of health care
- the role of the accounting profession in health care delivery.

2. The health system in Zambia

Located in sub-Saharan Africa, Zambia is a landlocked country covering an area of approximately 752,614 sq. km. Formerly a British colony, Zambia attained independence in 1964 and since that time has been politically stable. For administrative purposes Zambia is divided into 10 provinces, of which two (Lusaka and Copperbelt) are classed as urban and eight as rural; the provinces are subdivided into 72 districts.

Over the last 10 years the population of Zambia has increased at an average rate of 2.8% a year, reaching 13.47m in 2011. The most heavily populated provinces are Lusaka (2.2m) and Copperbelt (2m). The country has a very young population with 45.4% below the age of 15 and 20.8% in the age range 15–24. The vast majority of the population work in the informal sector (Table 2.1).

Zambia is classed as a lower-middle-income country but, through successive five-year development plans (Vision 2030), the government aims to transform Zambia into ‘a prosperous middle-income nation by 2030’ (Government of Republic of Zambia 2011: xii). Despite an annual average economic growth rate averaging 6.1% over the period 2006–10, however, 67% of the rural population and 20% of the urban population live in extreme poverty (UN Development Programme 2011).

Zambia’s health policy, created in 1992 and becoming operational with the Health Services Act 1995, is intended to ‘provide the people of Zambia with equity of access to cost-effective, quality healthcare as close to the family as possible...’ (MOH 2005: 1). The aim of the policy was to provide a service that was responsive to local needs by decentralisation of decision making to

districts and through encouraging local representation on health management boards. The Ministry of Health (MOH) was given responsibility for policy, financing and regulation, and a new organisation, the Central Board of Health (CBOH), was tasked with service implementation.

By 2005, the health policy had become outdated and the Health Services Act 1995 was repealed. A year later, in 2006, the CBOH was dissolved, being replaced with the current four-tier structure:

- MOH, with responsibility for policy, regulation and standard setting
- Provincial Health Offices, with responsibility for performance management at the provincial level
- District Health Offices, with responsibility for coordination, planning and support at district level
- Neighbourhood Health Committees, with responsibility for overseeing services at the community level.

In addition, national units were established to oversee specific health programmes, including the National Malaria Control Center, Reproductive Health Unit, Tuberculosis and Leprosy Control Unit, and National Aids Council.

Health care is provided by a multitude of providers, including the MOH, church organisations, the private sector (both not for profit and for profit) and alternative providers. The vast majority

Table 2.1: Distribution of currently employed persons aged 15 years and above by (institutional) sector and sector of employment, 2008

| Sector | Formal | Informal | Total |
|-----------------------------|---------|-----------|-----------|
| Central government | 209,546 | 0 | 209,546 |
| Local government | 26,891 | 0 | 26,891 |
| Parastatal | 40,000 | 0 | 40,000 |
| Private | 225,012 | 659,213 | 884,226 |
| NGO/church | 13,485 | 17,479 | 30,964 |
| International organisations | 4,675 | 2,059 | 6,734 |
| Households | 0 | 3,969,991 | 3,969,991 |
| Others | 2,566 | 50,842 | 53,408 |
| Total | 522,176 | 4,699,585 | 5,221,761 |

Source: Labour Statistics Branch, (2010): 58

of health facilities (1,489) are owned and operated by the public sector. These are supplemented by 122 mission health facilities and 271 private health facilities.

Zambia operates a pyramid classification structure of health care provision:

- tertiary or specialist care is provided in Level 3 hospitals
- provincial-level care is provided in Level 2 hospitals
- district-level care is provided in Level 1 hospitals
- community-level care is provided through health posts and health centres.

The structuring of the health system suggests that a managed hierarchical referral system is in operation, but owing to undeveloped communication systems and limited availability of ambulances, referral systems between the different levels of care are often poor.

The system also suffers from having no gatekeeper in place to manage the right-siting of patients, ie ensuring that patients are treated at the right time, in the right place by the right clinical team and at the lowest possible cost. Instead, resource and capacity constraints at the lower levels encourage many patients suffering only minor complaints to self-refer to Level 3 hospitals. (In 2009, for example, only 46.5% of health centres employed two or more professionally qualified staff.) With no

gatekeeper in place, tertiary hospitals have no option but to invest time and resources treating these patients, which often results in longer waiting times for those more critically ill.

Huge disparities in access to care place further pressures on the system. In rural areas, for example, only 46% of residents live within a 5km radius of a health centre and many have to travel more than 50km to reach their nearest health facility. Access to medical care in more remote areas is further limited by the national shortage of clinical staff: some health facilities are run by unqualified staff.

In an effort to address these issues the government has recently introduced a basic health care package that sets out the levels of service that should be provided at each tier of care. It also includes the commitment to invest in new intensive care unit (ICU) equipment for all provincial hospitals, to purchase more ambulances and to promote mobile hospitals for Level-2 care.

In addition to the tiered system of care identified above, health care is provided for those in hard-to-reach areas by mobile health services and the Zambia Flying doctors' service.

Zambia faces a double disease burden. There is high prevalence of communicable diseases including HIV/ Aids, tuberculosis (TB), malaria, diarrhoea and intestinal worms as well as rising incidence rates of non-communicable diseases such as diabetes mellitus, cancer and chronic respiratory disease.

Many of the key determinants of health are outside the direct scope of the health sector.

- There is often poor access to safe water and sanitation. Only 41% of homes have access to safe water and 25% (37% in rural areas and 2% in urban) of homes have no toilet facilities. It has been estimated that 80% of preventable diseases in Zambia relate to poor sanitation.
- Malnutrition. This is a contributory factor in nearly half (42%) of all deaths in children under five years of age.
- Lack of education, particularly among females. Although literacy rates have improved significantly (it was estimated that nationwide 64% of females and 82% of males were literate in 2009) the number of girls graduating from secondary school is just 17.9%.
- Gender discrimination.
- Climate variability and change. A study based in Lusaka found that an increase in temperature of just 1°C six weeks before a cholera outbreak increased the number of cases by 5.2%.

Other key factors include poor road networks (particularly in the rainy season), an insufficient number of vehicles for transportation, and limited access to electricity. The country's electricity is predominately consumed by the mines so, according to the Ministry of Energy, more than three-quarters of the population depend on wood fuel for their household energy needs.

THE MILLENNIUM DEVELOPMENT GOALS

In September 2000, Zambia was one of the 189 member states of the United Nations to sign the Millennium Declaration that pledged to end extreme poverty and deprivation by 2015. This declaration led to the development of eight specific Millennium Development Goals (MDGs), each of which is linked to a number of targets and indicators (Table 2.2).

Three of the MDGs relate specifically to health:

- Goal 4 – Reduce child mortality
- Goal 5 – Improve maternal health
- Goal 6 – Combat HIV/AIDS, malaria, and other diseases.

Zambia's national health priorities, as set out in the National Health Strategic Plan (NHSP) 2011–15, are closely aligned to achievement of these three MDGs as well as to resolutions of the World Health Assembly that have been ratified and signed by Zambia: the Roll Back Malaria (RBM) strategy, the Stop TB strategy and the Abuja target of committing 15% of the national budget to health.

Table 2.2: Millennium Development Goals

| |
|---|
| 1. Eradicate extreme poverty and hunger |
| 2. Achieve universal primary education |
| 3. Promote gender equality and empower women |
| 4. Reduce child mortality |
| 5. Improve maternal health |
| 6. Combat HIV/AIDS, malaria, and other diseases |
| 7. Ensure environmental sustainability |
| 8. Develop a global partnership for development |

Source: UNDP 2011

Goal 4: Reduce child mortality

Target: Reduce by two-thirds, between 1990 and 2015, the mortality rate among the under-fives.

Table 2.3: Goal 4 indicators

| | 1992 | 2007 | MDG 2015 target |
|---|-------|------|-----------------|
| Under-five mortality (deaths per 1,000 live births) | 190.7 | 119 | 63.6 |
| Infant mortality (deaths per 1,000 live births) | 107.2 | 70 | 35.7 |
| Proportion of one-year-old children immunised against measles (Africa Health Observatory/WHO 2010–13) | 77% | 85% | 100% |

Source: UNDP 2011

Results from the Zambia Demographic and Health Survey 2007 suggest that Zambia is making good progress towards this goal. The under-five mortality rate reduced from 190.7 per 1,000 live births in 1992 to 119 per 1,000 live births in 2007. Over the same period, the infant mortality rate fell from 107.2 per 1,000 live births to 70 per 1,000 live births (Table 2.3).

The proportion of one-year-old children reported to be immunised against measles in Zambia increased from 77% in 1992 to 85% in 2007. Annual immunisation rates fluctuate, however, and are dependent on the number of recorded instances of the disease and on available resources. In 2004 there were just 28 recorded deaths from measles so over the next few years immunisation rates fell and the disease resurfaced. In response, during 2012, the government instigated a new campaign to vaccinate all children between the ages of 9 months and 47 months. Although many older children will remain unprotected it is hoped that this will be sufficient to stem future outbreaks.

In addition to measles the MOH is working to reduce a number of other preventable childhood diseases by expanding the Reaching Every District (RED) programme. This aims to improve the supply-chain management of vaccines – to include availability, distribution, storage and safe injection technologies – and to ensure that 80% of children in each district receive three doses of DPT (diphtheria, pertussis (whooping cough) and tetanus) vaccine.

Goal 5: Improve maternal health

Target 5a: Reduce by three-quarters, between 1990 and 2015, the maternal mortality ratio.

Target 5b: Achieve, by 2015, universal access to reproductive health.

Table 2.4: Goal 5 indicators

| | 1996 | 2007 | MDG 2015 target |
|---|-----------|-------|-----------------|
| Maternal mortality ratio (deaths per 100,000 live births) | 649 | 591.2 | 162.3 |
| Proportion of births attended by skilled health personnel | Not known | 46.5% | Not specified |
| Contraceptive prevalence rate (any modern method) | 11.2% | 24.6% | Not specified |

Source: UNDP 2011

Of the three MDGs related to health, this is the one that Zambia is least likely to achieve.

Although the maternal mortality rate has reduced from 649 per 100,000 live births in 1996 to 591 per 100,000 live births in 2007 there is still a long way to go to achieve the MDG target of 162 per 100,000 live births in 2015 (Table 2.4).

Around three-quarters of these deaths are caused by complications such as obstructed labour, eclampsia or haemorrhage; problems that could have been treated with skilled care. A key factor in reducing maternal mortality rates, therefore, is access to antenatal care and presence of a trained nurse, midwife or physician at the birth.

Disability such as obstetric fistula is another risk of childbirth; for every

maternal death it is estimated there are 30 disabilities. Accessing treatment is difficult: the repair of fistulae, for example, is currently undertaken at only four sites, though there are plans to extend this to 10 sites.

A contributory factor to the high mortality and morbidity rates is thought to be the number of teenage pregnancies. Contraceptive prevalence rates are slowly rising – from 11.2% in 1996 to 24.6% in 2007 – but the total fertility rate at 6.2 births per woman remains high.

The Central Statistical Office Zambia reported that although 94% of women sought antenatal care during their pregnancy, only 19% presented in their first trimester, resulting in the omission of key interventions. Fewer than half of the women (46.5%) had a delivery

assisted by a nurse, midwife or physician and only 39% sought postnatal care within two days of the birth.

Inadequate infrastructure, shortages of equipment and insufficient clinical staff limit access to care – only 53 out of 72 districts, for example have health workers trained in emergency obstetric and neonatal care (EmONC).

The MOH plans to address these challenges through:

- expansion of the EmONC programme
- expansion of the focused antenatal care programme
- scaling up the Preventing Mother to Child Transmission of HIV (PMTCT) programme.

Goal 6: Combat HIV/AIDS, malaria and other diseases

Target 6a: To have halted by 2015 and begun to reverse the spread of HIV/AIDS.

Target 6b: Achieve, by 2010, universal access to treatment for HIV/AIDS for all those who need it.

Table 2.5: Goal 6a and 6b indicators

| | 2002 | 2007 | MDG 2015 target |
|--|-------|-------|-----------------------------|
| Proportion of adults aged 15–49 who are HIV infected | 15.6% | 14.3% | Keep prevalence below 15.6% |
| Proportion of 15–24 year olds with comprehensive, correct knowledge of HIV/ Aids | 31% | 48% | . |
| Ratio of school attendance of orphans to non-orphans (10–14 years) | 79.1% | 97% | 100% |
| Proportion of population with advanced HIV infection with access to ARV | 4% | 79% | 80% |

Source: UNDP 2011

Between 2002 and 2007 HIV prevalence in adults aged between 15 and 49 reduced from 15.6% to 14.3%. The female incidence rate was higher than for males (16.1% compared with 12.3%, though this figure might be skewed by the refusal of some males to be tested) and prevalence was higher in urban than rural areas (19.7% compared with 10.3%) (Table 2.5).

The MOH is supporting four key interventions to fight the spread of the disease and to improve the quality of life of people infected with it:

- care and support for the chronically ill and their caregivers

- voluntary testing and counselling
- sexually transmitted infections (STI) syndromic management
- expansion of the Antiretroviral Therapy (ART) programme.

Care and support for the chronically ill and caregivers

Although prevalence rates are decreasing, the actual number of people living with HIV/AIDS is still increasing owing to population growth and the increased availability of antiretroviral (ARV) drugs. The projected number of new infections each year is forecast to increase from 67,602 in 2006 to 72,019 in 2015; of these around 10%

will be transmission from mother to baby during pregnancy, birth or breastfeeding.

To provide care for the growing number of people living with HIV/AIDS, caregivers are being trained to support health professionals.

Voluntary testing and counselling

The vast majority of pregnant women who seek antenatal care (98.9%) are counselled and tested for HIV. Those who test positive are given prophylaxis at prescribed stages of the pregnancy to reduce the risk of transmission to the baby. Many of these women do not give birth in a health facility, but for those that do their baby will also be tested and offered treatment if necessary.

STI syndromic management

The MOH has introduced a number of initiatives targeted at preventing HIV infection including: 'Abstinence, Be faithful and Condom use' (ABC) strategies, the use of ART drugs to prevent mother-to-child transmission, voluntary testing and counselling, safe blood strategies and training of care givers and health centre staff.

Expansion of the ART programme

Free of charge ART, funded predominantly through bilateral, multilateral and global initiatives, was made available in 2003. Initially limited to larger hospitals, availability has since been extended to 450 sites. As ART is offered free of charge at public health facilities, the MDG target of achieving universal access to treatment for all those in need should have been met. In fact, nationwide the percentage of the population in need who were receiving treatment stood at just 77.6% in 2011. The government plans to try to increase coverage through further expansion of the programme.

Target 6C: To have halted by 2015 and begun to reverse the incidence of malaria and other major diseases.

Table 2.6: Goal 6c Malaria

| | 2006 | 2008 | MDG 2015 target |
|---|-------|-------|-----------------|
| New malaria cases per 1,000 population | 412 | 252 | 255 or fewer |
| Malaria fatalities per 1,000 population | 40 | 39 | 11 |
| Proportion of households with ITNs (pre- or post-treated) | 37.8% | 62.3% | na |

Source: UNDP 2011

Table 2.7: Goal 6c Tuberculosis

| | 2005 | 2008 | MDG 2015 target |
|---|------|------|-----------------|
| TB treatment success rate in new smear-positive TB patients | 79% | 86% | 85% |

Source: UNDP 2011

Malaria

Malaria is the leading cause of both morbidity and mortality in Zambia and the disease accounts for over 40% of all hospitalisations. In 2009 there were an estimated 3.2m cases of malaria and 4,000 deaths. The disease particularly affects pregnant women and children so interventions are often targeted at these groups. The proportion of children aged under five sleeping under an insecticide-treated mosquito net (ITN), for example, increased from 6.5% to 41.1% between 2001/02 and 2008.

Although still some way short of the MDG target, the malaria incidence rate has decreased from 412 per 1,000 population in 2006 to 252 per 1,000 population in 2008 (Table 2.6).

The government is supporting three key interventions targeted at prevention and management of the disease:

- indoor residual spraying (IRS)
- insecticide-treated mosquito nets (ITNs)
- case management.

Indoor residual spraying

IRS, which involves spraying insecticides on inside walls of dwellings to repel or kill mosquitos and reduce transmission of malaria, is being scaled up to cover more districts.

Insecticide-treated mosquito nets

The use of ITNs has been found to be one of the most cost-effective ways of preventing malaria. Over the last five years more than 6m nets have been

procured and distributed; 64.3% of households have at least one net and 34.3% of the population have enough nets to protect their sleeping quarters.

Despite this, some areas have suffered from increased levels of malaria, probably from misuse of the nets and the shortage of community health workers available to promote their use. The MOH plans to build on the success of this programme by increasing ITN coverage and by wider promotion of the nets.

Case management

This covers working with stakeholders to agree and develop the strategic direction for health care initiatives and the planning and management of diagnostic and curative service provision.

Tuberculosis

Tuberculosis remains a major health problem in Zambia, with about 50,000 new cases identified each year and an estimated 5,000 deaths. TB notification rates are, however, in decline, from 545 per 100,000 population in 2003/04 to 425 per 100,000 population in 2009.

The government is supporting three key interventions:

- Directly Observed Treatment Scheme (DOTS) expansion and enhancement
- TB/HIV collaborative activities
- initiatives to combat multi-drug resistant (MDR) TB.

DOTS expansion and enhancement

Countrywide coverage of the WHO Stop TB strategy based on the Directly Observed Treatment Scheme (TB-DOTS) and improved availability of drugs in all public health facilities has helped improve the TB treatment success rate from 79% in 2005 to 86% in 2008, achieving the MDG target of 85% (Table 2.7). To ensure no loss of momentum the scheme is being enhanced in a number of ways including: training of staff, improved data management and ensuring that TB patients have access to free anti-TB drugs.

TB/HIV collaborative activities

Collaborative activities are being strengthened through staff training and screening programmes; around 70% of those newly diagnosed with TB will be co-infected with HIV so national guidelines have been established that require individuals diagnosed with TB to be offered a test for HIV. Similarly, those with HIV/Aids are offered a test for TB.

Multi-Drug Resistant (MDR) TB

Multi-drug resistance poses a threat to the control of TB and is being addressed through a number of schemes, including dissemination of MDR TB guidelines, staff training and procurement of second-line TB drugs.

Non-communicable diseases

Although to date the burden of disease has been largely related to the prevalence of communicable disease, Zambia is currently experiencing major growth rates in non-communicable diseases: lifestyle diseases such as cardiovascular disease, cancers, chronic respiratory disease and diabetes mellitus.

A number of interventions are being put in place to address these, including the development of treatment protocols, the training of health workers, awareness raising and screening programmes.

THE CHALLENGES FACING HEALTH SERVICE PROVISION IN ZAMBIA

The mission statement of the Zambian Ministry of Health is: 'To provide equitable access to cost effective, quality health services as close to the family as possible'. This is an ambitious goal; the significant service disparities between rural and urban areas, cultural and religious beliefs, poor physical infrastructure, and limited resources all hamper the provision of equitable health services and create challenges for policymakers and planners.

Service disparities between rural and urban areas

Over 60% of the Zambian population (nearly 8m people) live in rural areas where the provision of public services is severely limited. Access to improved sources of water in rural areas, for example, is just 19% compared with 83% in urban areas. In comparison with urban areas, rural areas are also poorly served as regards access to healthcare, having just 70 clinical health workers per 100,000 population compared with 159 per 100,000 population in urban areas. Owing to the severe shortage of qualified clinical staff in more remote areas, some clinics are run by unqualified personnel or just one qualified practitioner.

The government has introduced a number of strategies to address inequity of access to health services in rural areas including abolishing user fees in 54 rural districts, improving transport, constructing new health facilities, improving existing buildings and increasing health promotion activities.

Cultural and religious beliefs

There are a number of ingrained cultural and religious practices traditionally undertaken by Zambian groups and tribes that have an adverse impact on health, including the early marriages of females, polygamy, female genital mutilation and the 'sexual cleansing' of widows (whereby a widow

Table 2.8: Population and number of health facilities by province*

| | Central | Copperbelt | Eastern | Luapula | Lusaka | Northern | North-Western | Southern | Western | Total |
|-------------------------|-----------|------------|-----------|---------|-----------|-----------|---------------|-----------|---------|------------|
| Population | 1,267,803 | 1,958,623 | 1,707,731 | 958,976 | 2,198,996 | 1,759,600 | 706,462 | 1,606,793 | 881,524 | 13,046,508 |
| Level 3 hospitals | 0 | 3 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 6 |
| Level 2 hospitals | 2 | 9 | 2 | 1 | 0 | 2 | 2 | 2 | 1 | 21 |
| Level 1 hospitals | 6 | 8 | 8 | 5 | 15 | 6 | 10 | 14 | 12 | 84 |
| Urban health centres | 32 | 137 | 8 | 1 | 182 | 14 | 18 | 34 | 10 | 436 |
| Rural health centres | 113 | 53 | 156 | 125 | 47 | 145 | 120 | 174 | 127 | 1060 |
| Health posts | 35 | 25 | 53 | 10 | 32 | 49 | 17 | 30 | 24 | 275 |
| Total health facilities | 188 | 235 | 227 | 142 | 279 | 216 | 167 | 254 | 174 | 1,882 |

* The province Muchinga is not shown as it was not created until 2012, which was after these figures were collected. Muchinga is made up of five districts from Northern Province and one district from Eastern province.

must have sexual intercourse with one of her dead husband's male relatives). The use of these practices is diminishing, in line with the modernisation of Zambia, but they are still observed in some more rural districts.

Gender disparities are also an issue. Zambia's achievements in this respect are measured against the third MDG: *To Promote Gender Equality and the Empowerment of Women*. Although the ratio of females to males in primary school has increased since 1990, the ratio of females to males attending secondary school has decreased from 92:100 in 1990 to 88:100 in 2009. Female representation in parliament was 14% in 2009, which is still far short of the MDG target of 30%. Although Zambia is committed to promoting gender equality there is still some way to go to achieve this.

Poor physical infrastructure

The location of health facilities is heavily skewed towards more urban areas so that 99% of the population in urban areas live within 5km of a health facility compared with 46% in rural areas. Despite the large number of facilities in urban areas, however, access to care is restricted by long waiting times.

In 2006 the MOH undertook a census of all health facilities and, on the basis of the results, developed capital investment plans for both infrastructure and equipment aimed at improving access to services, particularly in the underserved rural areas. The plan aims to have one Level 3 hospital and at least two Level 2 hospitals per province – currently only the urban provinces, Copperbelt and Lusaka, have Level 3 hospitals (Table 2.8).

In addition to new health facilities the plans propose construction of new training facilities, offices and staff housing.

Implementation of the plans is, however, being severely restricted by financial constraints, a shortage of staff and lack of equipment. In 2010, for example, there were seven Level 1 hospitals, 38 health centres and 135 health posts that had been constructed but not equipped.

The Zambian health service suffers from a critical shortage of equipment and, owing to budget constraints and lack of experienced maintenance staff, much of the equipment currently in use is poorly maintained. The MOH has taken some steps to address the staff shortage by adding medical equipment maintenance officers to the approved establishment list for the health service, though at present this is only at the provincial level.

Shortages of drugs and other medical supplies

Shortage of drugs, blood products and medical supplies is another major challenge facing the health sector in Zambia. In 2009, 30% of facilities reported stock-outs of drugs and 16% reported stock-outs of vaccines. Supplies are adversely affected by staff shortages, poor logistics and limited availability of 'cold chain' equipment; vaccine potency, for example, is significantly reduced by poor storage.

There are also concerns about the quality and safety of drugs: lack of a national quality assurance programme results in the circulation of counterfeit medicines and other such products.

Responsibility for distribution of drugs and related products rests with Medical Stores Limited. Each year its trucks travel 1m km to deliver supplies worth between US\$120m–140m to 110 depots around the country. From here the drugs are distributed locally by road, boat, plane and sometimes even by ox.

Distribution is based on a 'pull' system; each of the 110 delivery locations completes an order form then submits it, usually by post, to Medical Stores Limited. The order is only ever an estimate of requirements, however, as records of use and stock levels in the localities are often poor and the fluctuation of populations in some areas makes forecasting difficult.

The drugs and medical supplies budget is estimated to be underfunded annually by 40%. This figure would be significantly higher if support provided by bilateral, multilateral and global health initiatives were to end, as the majority of the delivery trucks and around 60% of the stock received by Medical Stores Limited is provided by donors.

Staff shortages

Zambia suffers from a chronic shortage of health workers as well as inequities in both distribution of workers and in their skills mix, and this severely restricts service provision and achievement of the national health objectives.

The total number of core healthcare staff in 2009 was 17,168: less than half the approved establishment figure of 39,360 (Table 2.9). The average number of clinical health workers per 100,000 population was 93 but numbers are heavily skewed towards the more urban areas. The urban areas of Lusaka and Copperbelt both have 166 clinical health workers per 100,000 whereas Northern Province has just 68 per 100,000 (Table 2.10).

One of the main causes of staff shortages is lack of funding and capacity to train staff. The government is planning to address this through increasing in-service training provision and expanding the number of student places available in training institutions.

Human Resource (HR) processes are another contributory factor: limited information on staffing numbers and long bureaucratic employment procedures delay recruitment processes.

Like other sub-Saharan countries, Zambia loses staff from the 'brain drain' in which nurses and doctors migrate overseas to seek improved career opportunities. This loss is somewhat counteracted, however, by the recruitment of foreigners to cover shortages; around 30% of the doctors working in Zambia are thought to be expatriates.

Table 2.9: Health staff in post compared with recommended establishment numbers

| | 2005 | 2009 | Recommended establishment number |
|-----------------------------------|--------|--------|----------------------------------|
| Clinical officers | 1,161 | 1,376 | 4,000 |
| Doctors | 646 | 801 | 2,300 |
| Dental surgeons | 56 | 241 | 633 |
| Lab scientists | 417 | 526 | 1,560 |
| Midwives | 2,273 | 2,374 | 5,600 |
| Nurses | 6,096 | 7,123 | 16,732 |
| Other | 1,524 | 4,727 | 8,535 |
| Total clinical healthcare workers | 12,173 | 17,168 | 39,360 |
| Administrative | 11,003 | 12,365 | 12,054 |
| Overall total | 23,176 | 29,533 | 51,414 |

Source: MOH 2011: 22

Table 2.10: Distribution of health staff by province in 2010

| | Population | Clinical staff | Clinical staff per 1,000 population |
|---------------|------------|----------------|-------------------------------------|
| Central | 1,267,803 | 1,442 | 1.14 |
| Copperbelt | 1,958,623 | 3,260 | 1.66 |
| Eastern | 1,707,731 | 1,385 | 0.81 |
| Luapula | 958,976 | 807 | 0.84 |
| Lusaka | 2,198,996 | 3,648 | 1.66 |
| Northern | 1,759,600 | 1,191 | 0.68 |
| North-Western | 706,462 | 1,033 | 1.46 |
| Southern | 1,606,793 | 2,477 | 1.54 |
| Western | 881,524 | 984 | 1.12 |
| Total | 13,046,508 | 16,227 | 1.24 |

Source: MOH 2011:18

To address the overall shortage of community health workers (CHWs) in rural areas, the MOH has introduced the Community Health Worker Strategy. The aim of this is to train 5,000 CHWs by 2015. Initially being run as a pilot, the programme will recruit individuals from rural communities, offer them standardised training and certification, and then employment at a recommended rate of remuneration at their local health facility. As the CHWs will be practising in their own community they will be able to make use of both local knowledge and their clinical skills when providing care. Whether or not the scheme succeeds in producing 5,000 CHWs will depend on the availability of sufficient funding but, if the scheme is successful, then it will help bridge the huge gap in skilled workers, particularly in rural areas.

An initiative designed to encourage professional health staff to work in more rural areas is the **Zambian Health Workers Retention Scheme**. This offers monetary incentives of between 30% and 75% of salary to staff willing to work in rural and remote areas, plus a cash bonus on completion of a three-year contract as well as non-monetary incentives such as improved working conditions, upgraded infrastructure, provision of motor cycles for transport and the installation of solar panels. In 2010, 961 workers were registered on the scheme.

Lack of suitable housing is a key factor in dissuading staff from relocating to rural areas so a house-building programme has been instigated in an attempt to address this. Houses are also being built near hospitals.

Other strategies being implemented to address the inequitable distribution of medical staff include scaling up the **Zambian Health Workers Retention Scheme** to cover a wider band of professionals, developing or improving databases to record staffing levels, and appointing HR officers in all districts to oversee recruitment processes.

Funding

The overall level of funding allocated to health is not sufficient to tackle the many health challenges facing the country: in 2010 total expenditure on health as a percentage of GDP was just 5.9% (WHO 2012). Donors provide nearly half (42%) of all health funding in Zambia. Other sources of health funding are: households (27%), government (25%), employers 5% and others 1% (Government of the Republic of Zambia 2006).

The government has promised to increase funding to the health sector significantly in 2013, to 11.3% of total annual budget. Although this is some way short of the Abuja target of 15%¹ it is a significant increase (of approximately 40%) on the previous year's allocation.

The new funding will be targeted at:

- improving service delivery, particularly in rural areas
- scaling up the provision of essential drugs and medical equipment
- upgrading all hospitals, commencing with the three 'referral hospitals'.

Funding is allocated to districts in a way that takes account of population and deprivation. The formula nonetheless ignores key factors such as the size and terrain of a district, and it is not sufficiently sophisticated to be used at the community level. Work has been undertaken to gain a better knowledge and understanding of hospital costs and this will be used as a basis for developing allocation formulas for hospitals.

Hospitals are provided with sufficient funds for purchasing supplies necessary to provide basic health care but all staff costs are paid centrally. Hospitals may earn 'income' from charging patients a premium or 'top up' fees for improved service provision or through negotiating health insurance deals with local companies. Revenue earned from such schemes may be retained by the hospital and used to subsidise standard care or perhaps to improve service provision.

The funding from cooperating partners (CPs) is usually ring-fenced for specific programmes of spending, such as HIV/ AIDS, TB or malaria. Vertical programme funding, such as this, can undermine health care provision if not properly integrated with the local health strategy, so the government is now encouraging donors to pool funds and jointly invest in wider-reaching programmes of care. It has also adopted SWAp (sector-wide approach) which encourages CPs to align their support with national health sector priorities.

1. The heads of state of African Union countries met in Abuja in April 2001 and pledged to set a target of allocating at least 15% of their annual budget to improve the health sector.

Dependence on donor funding puts the provision of health care at risk as such funding may be suspended or terminated at any time. Following the reported embezzlement of health funds by government officials, for example, donor supplies of drugs and stocks to Medical Stores Limited dropped by 40% for a period of two years.

There are a few employer or private health insurance schemes in Zambia but the majority of the population are required to pay for their health care out of pocket. Residents of more rural areas, however, benefit from the User Fees Removal Policy, which was introduced with the aim of increasing access to health care in these areas, though the success of the policy has been limited owing to shortages of clinical staff and drugs. The policy is only applicable in rural areas so does not benefit those living in poverty in urban areas.

The government is currently working on plans to introduce a social health insurance scheme to replace the 'out of pocket' system, and it is hoped that this will close the financing gap. Initially the scheme will cover less than one-quarter of the population: only employees of the formal sector (central government, local government, parastatal organisations, and the private sector), their spouse and up to four dependants. The majority of the population, those who work in the informal sector, will not be covered under the scheme.

3. Roundtable discussion 1: Health sector reform and why this is necessary for national development

‘I value the role professional accountants play in contributing to the health delivery agenda. We will continue to use their professional advice.’

HON. CHRISTOPHER MULENGA MP,
DEPUTY MINISTER OF HEALTH

Health sector reform in Zambia is essential:

- to achieve the government’s target of providing ‘cost effective, quality health services as close to the family as possible’
- for complete achievement of the three health-related MDGs
- for building a health system fit for the future.

ACHIEVING THE GOVERNMENT TARGET OF PROVIDING ‘COST-EFFECTIVE, QUALITY HEALTH SERVICES AS CLOSE TO THE FAMILY AS POSSIBLE’

This is an admirable, if ambitious, target. Although some advances have been made towards achievement of the three health-related MDGs, in many other respects the Zambian health system is failing. Health outcomes, for example, are poor when compared with the regional and global averages. Life expectancy at birth is 46 for Zambian males compared with the global average of 66 and for females it is 50 compared with the global average of 71. Prevalence of HIV and TB are also high in Zambia when compared with the

regional and global averages. The average mortality rate for the under-fives and maternal mortality rates, however, are slightly better than the regional averages but are poor when compared with the global averages (WHO 2012) (Table 3.1).

The figures in Table 3.1 are country-wide averages and so they hide the inequities of service provision between rural and urban areas and between the rich and poor. There are fewer health facilities in rural areas and those that do exist are generally understaffed and poorly equipped and this has a detrimental impact on health service use. The ‘under-five’ mortality rate, for example, is 138 deaths per 1,000 live births in rural areas compared with 131

in urban areas and the DTP3 immunisation rate is just 78% among the poorest 20% of the population compared with 95% among the richest 20%.

The most noticeable variation, however, is in the proportion of women who choose to give birth attended by skilled health personnel; just 31% in rural areas compared with 83% in urban areas. One of the reasons cited for this huge disparity is that women in rural areas may have to travel long distances by ox or bicycle to the health clinic if they wish to benefit from an assisted birth so, to avoid the discomfort of the journey and the risk of delivering the baby en route, they choose to give birth at home without assistance (Table 3.2).

Table 3.1: Comparison of selected health outcomes in Zambia with regional and global averages (2010)

| | Zambia | Regional average | Global average |
|--|--------|------------------|----------------|
| Life expectancy at birth – males | 46 | 52 | 66 |
| Life expectancy at birth – females | 50 | 56 | 71 |
| Prevalence of HIV (per 1,000 adults aged 15–49) | 135 | 47 | 8 |
| Prevalence of TB (per 100,000 population) | 345 | 332 | 178 |
| Under-five mortality rate (per 1,000 live births) | 111 | 119 | 57 |
| Maternal mortality ratio (per 100,000 live births) | 440 | 480 | 210 |

Source: WHO 2012

Table 3.2: Inequities of care

| | Rural | Urban | Poorest 20% | Wealthiest 20% |
|--|-------|-------|-------------|----------------|
| Under-fives mortality rate per 1,000 live births | 138 | 131 | 124 | 108 |
| Births attended by skilled health personnel | 31% | 83% | 27% | 91% |
| DTP3 immunisation | 77% | 90% | 78% | 95% |

Source: WHO 2012

PROGRESS TOWARDS ACHIEVEMENT OF THE THREE HEALTH-RELATED MDGS

Zambia's progress towards achievement of the MDGs was reviewed in the Zambia Millennium Development Progress Report 2011. Using a traffic-light system, the report ranked MDG 4 Reduce Child Mortality as amber, MDG 5 Improve Maternal Health as red and MDG 6 Combat HIV/AIDS, Malaria and other Major Diseases as green in respect of HIV/AIDS and amber in respect of malaria (Table 3.3).

The report stated that Zambia would not achieve MDG 5 Improve Maternal Health unless it was able to reduce the maternal death rate by 72.5% or 429 deaths per 100,000 live births between 2007 and 2015 and that to do this would require significant reform and investment.

Better progress has been made towards achievement of MDG 4 Reduce Child Mortality. The under-five child mortality rate, for example, reduced from 190.7 deaths per 1,000 live births in 1992 to 119 deaths per 1,000 live births in 2007.

The fall in death rate was greater in rural areas and is probably explained by increased immunisation and improved nutrition. The report suggested a number of reforms that, if implemented, would support achievement of MDG4, including improving outreach for under-fives clinics, promoting exclusive breast feeding in the first six months of life and achieving universal coverage of vaccination against measles, DTP and other preventable diseases.

Zambia has successfully achieved the MDG 6 Combat HIV/AIDS and other

Table 3.3: Rating of achievement of the health-related MDGs by 2015 in Zambia

| MDG | Target | Indicator | Latest figure | 2015 target | Will target be achieved under present trend? |
|--|---|--|---------------|-------------|--|
| MDG 4 Reduce child mortality | To reduce by two-thirds, between 1990 and 2015, the under-five mortality rate | Under-five mortality rate (deaths per 1,000 live births) | 119 | 63.6 | Acceleration required |
| | | Infant mortality rate (deaths per 1,000 live births) | 70 | 35.7 | Acceleration required |
| | | One-year-olds immunised against measles (%) | 84.9 | 100 | Acceleration required |
| MDG 5 Improve maternal health | To reduce by three-quarters, between 1990 and 2015, the maternal mortality ratio | Maternal mortality ratio per 100,000 live births | 591.2 | 162.3 | Significant reforms and investment are necessary |
| | | Births attended by skilled personnel | 46.5 | . | . |
| | To achieve by 2015, universal access to reproductive health | Contraceptive prevalence rate (%) | 24.6 | . | . |
| MDG 6 Combat HIV/AIDS, Malaria and other Major Diseases | To have halted by 2015 and begun to reverse the spread of HIV/AIDS | HIV prevalence rate | 14.3 | <15.6 | Yes |
| | | Proportion of population (15–24 years) with comprehensive, correct knowledge of HIV/AIDS (%) | 48 | . | – |
| | | Ratio of school attendance of orphans to non-orphans (10–24 years old) (%) | 97 | 100 | Yes |
| | To achieve by 2010, universal access to treatment for HIV/AIDS for all those who need it | Proportion of population with advanced HIV infection with access to ARVs | 79 | 80 | Yes |
| | To have halted by 2015, and begun to reverse, the incidence of malaria and other major diseases | New malaria cases per 1,000 population | 252 | ≤255 | Acceleration required |
| | | Malaria fatality rate per 1,000 population | 39 | 11 | Acceleration required |
| | | Households with ITNs | 64.3 | . | . |

Source: UNDP 2011

major diseases. To reduce HIV prevalence further, the report stated that a number of constraints needed to be addressed, including cultural practices that make it difficult for women to demand safer sex, the lack of comparative data for policy formation and inadequate funding of HIV/AIDS awareness campaigns.

Achievement of the targets relating to malaria is, however, proving more problematic. The number of new cases per 1,000 reached a peak of 425 in 2003 but now appears to be in decline. The report identified a number of actions to help combat malaria, including intensifying indoor residual spraying, increasing the frequency of health education programmes via local radio stations, and improving integration of the health sector with strategic planners in forestry, water, agriculture and disaster management.

TO MAKE HEALTH CARE FIT FOR THE FUTURE

Demand for health care in Zambia is increasing annually. The reasons are many but include the growing population and changing disease patterns. There is also a need to build a sustainable health service that is not dependent on donor funding.

Zambia's fast-growing population, up from 3m in 1964 to 13.47m in 2011, is placing an increasing burden on the health system. It is a relatively young population with over 45% under the age of 15. Average life expectancy increased from 40.5 in 1998 to 51.3 in 2010.

Zambia is heavily dependent on donor funding to support its health strategy and achievement of the three health-related MDGs. This is unavoidable but it is a significant risk in the current economic climate as the donor funding is not guaranteed and may be withdrawn at any time. Zambia must work towards building an equitable, sustainable health system that is less dependent on donor support.

Like the rest of the world, Zambia's health system is facing increasing pressure from the growth in non-communicable diseases (NCD). A needs assessment was undertaken for diabetes, hypertension, cervical cancer, breast cancer, prostate cancer, asthma and epilepsy to identify gaps in service provision. Various interventions, including the development of dietary guidelines, the training of clinical staff and public awareness campaigns, have now been put in place, with more planned for the future.

At the roundtable the Deputy Minister of Health, Hon. Christopher Mulenga MP, stated that the government's primary aim in health care was universal access. He said that the government was implementing a health reform programme, targeted at increasing accessibility, which included:

- increasing the number of hospital beds
- improving and upgrading the infrastructure
- increasing the number of medical personnel, and
- appointing experienced health professionals to manage service provision.

These reforms will help address many of the challenges facing the health service in Zambia but they have a high financial cost. The government recently promised to increase funding to the health sector significantly in 2013 to 11.3% of the country's total annual budget. This new funding will be targeted at many of the interventions discussed above including:

- improving service provision, especially in rural areas
- scaling up the provision of essential drugs and medical equipment
- upgrading all hospitals, beginning with the three referral hospitals.

4. Roundtable discussion 2: Should investment focus on preventative or curative care?

‘The cost of funding health care is a bottomless pit, demand for care is insatiable and difficult decisions have to be taken over the prioritisation of services. Professionally qualified accountants have a key role in supporting the decision making process through the provision of relevant, timely and accurate information.’

MARK MILLAR, INTERIM CHIEF EXECUTIVE,
MILTON KEYNES NHS FOUNDATION
TRUST, ENGLAND AND ACCA COUNCIL
MEMBER

Fastone Goma, dean of the School of Medicine, University of Zambia said that a question that arises repeatedly is whether investment should focus on preventative or curative medicine.

Preventative care usually takes place in the community and includes screening programmes, immunisation, health promotion campaigns and counselling. Curative care is usually provided by secondary care organisations and generally includes diagnostics and either surgical or medical care. Both preventative and curative care have a cost but curative care tends to consume the most resources.

Mr Goma said that Zambia was faced with a double burden of disease: both infectious diseases such as HIV/AIDS, TB and malaria, and non-communicable diseases such as coronary heart disease (CHD), diabetes and chronic obstructive pulmonary disorder (COPD).

Non-communicable diseases are mostly associated with poor lifestyle choices such as smoking, excessive alcohol consumption, unhealthy diets and lack of exercise. These diseases generally develop over a long period and, if addressed at an early stage, are often preventable (Table 3.4).

Table 3.4: Non-communicable diseases and modifiable causative risk factors

| | Modifiable causative risk factors | | | |
|--------------------------|-----------------------------------|-----------------|---------------------|------------------------|
| | Tobacco use | Unhealthy diets | Physical inactivity | Harmful use of alcohol |
| Heart disease and stroke | ✓ | ✓ | ✓ | ✓ |
| Diabetes | ✓ | ✓ | ✓ | ✓ |
| Cancer | ✓ | ✓ | ✓ | ✓ |
| Chronic lung disease | ✓ | | | |

Mr Goma said that the corporate world had a part to play in tackling non-communicable disease through establishing Wellness Programs that promote healthy living and reward healthy behaviour changes in their employees. These could offer health screening, weight management initiatives, smoking cessation clinics and opportunities to take part in physical exercise. He said that this would benefit employers because a healthier workforce is a more productive one; employees who smoke, for example, have around twice as much lost production time per week as employees who have never used tobacco.

He said, however, that investment could not just be focussed on preventative care; but that there must also be a concerted effort toward furnishing curative service provision in Ghana. He said that curative services are costly but necessary and that there is a need for prioritization and increased commitment for funding of this sector

Mr Mulenga said that preventative medicine is not always available to Zambians living in more rural areas but that the government was working to increase accessibility through radio broadcasts and school programmes. Planned interventions include introducing sport to schools and local communities, enforcing legislation on tobacco use and promoting healthy diets.

Delegates agreed that a 'double-pronged approach' was needed with continued investment in both preventative and curative health care.

Summing up, Mr Goma said, 'As we move towards achieving the millennium development goals, there is need for enhanced effort to fund both curative and preventative services. It is commendable that the accountants took time to consider health financing.'

5. Roundtable discussion 3: National Health Insurance in Zambia

'As the economy grows, accountants need to heighten their pace and add value to our economy, support our development goals and our objectives.'

HON. CHRISTOPHER MULENGA MP,
DEPUTY MINISTER OF HEALTH

Health systems may be funded through taxation, insurance schemes, out of pocket, charitable donations or a combination of these but which is best?

In Zambia the health budget is heavily supported by donor funding ring-fenced for specific programmes of care, including HIV/Aids, malaria and tuberculosis. As a percentage of total health expenditure, donors contribute 42%, households 27%, the government 25%, employers 5% and others 1% (Government of the Republic of Zambia 2006).

The MOH is committed to replacing the 'out of pocket' funding system, whereby the patient pays something for health care at the point of receipt, through the introduction of a Social Health Insurance. This is expected to ensure a more equitable health service.

A detailed actuarial study was undertaken in 2008 to assess the feasibility of such a scheme and consider:

- the population size necessary to make the scheme viable
- the break-even point
- the premium to be charged for the benefit package envisaged
- the benefit package
- the rate of administrative expenses
- eligibility conditions for benefits
- projection of investments and reserves.

The study found that the scheme would be feasible if the total employee and employer contribution rate was set at 5% of the insured person's salary.

Legislative and administrative arrangements are now being made in preparation for the establishment of the fund through an Act of Parliament.

The scheme is initially expected to cover only those employees working in central government, local government, parastatal organisations, and private-sector employees plus their spouse and up to four children or dependants. Overall this has been estimated to be about 3m people or around 22% of the population. In years ahead it is hoped to extend the scheme to those working in the informal sector.

Dr Lackson Kasonka, managing director, University Teaching Hospital said that many Zambians are reluctant to assume responsibility for their health: they consider it to be the responsibility of the state. He said this led to opposition to the introduction of health insurance schemes, whether public or private.

Delegates queried whether all Zambians could afford to invest in health insurance. In response Dr Kasonka said that individuals have to make a decision on whether to invest in their health or in goods and services. He pointed out that, in a car accident, the car is always fully insured but the driver is not.

Questions were raised about the affordability of a social health insurance scheme and, in particular, about whether Zambia had the critical mass to support it.

It was suggested that a more affordable solution might be to segment the population and the methods of paying for care. Possible segmentation might be:

- civil service and private sector employees – employer-funded insurance
- independent business sector – private medical insurance
- rural sector – funded by charities, donor grants and/or government.

Delegates were agreed on one point: funding health care is a challenge and finding an optimal solution will be tough.

6. Roundtable discussion 4: How collaborative technology can be used to improve the provision of healthcare

‘Recognising that a healthy population is critical to improved production and productivity, Zambia will continue investing in the health sector, in order to ensure sustainability of the nation’s capital base, required for sustained economic growth.’

REPUBLIC OF ZAMBIA MINISTRY OF
HEALTH, 2011 ACTION PLAN

E-Health has the potential to transform the provision of health care in Zambia. It can be used to monitor outbreaks of disease, to record and transmit a patient’s vital signs, for appointment booking, for conducting tele-consultations and to support communication between health professionals.

Mr Mulenga said that the government recognises the role ICT plays in the provision of health care, including facilitating the sharing of information across providers, and it has the potential to support more equitable availability of health care in a country where geography hampers traditional service provision. He said that the government is currently reviewing how e-Health can be used to improve services further.

Delegates at the conference stressed that ICT must not be seen as a stand-alone solution: it must be fully integrated into other areas of health policy. They said that the benefits would be harnessed only if its use is aligned with national policy.

Dr Meade said that the introduction of Smart Card – a card that holds an encrypted copy of a patient’s medical records, which is a key part of the electronic medical records system – had already put Zambia ahead of its regional neighbours in terms of e-Health. Zambia adopted Smart Card in 2005 and, by October 2010, it was operational in 552 health facilities. The system will be extended to other, more remote facilities, once the necessary infrastructure is in place.

Dr Meade then described how technology had been employed to reduce significantly the cost of training 19,375 health workers in providing pain relief. He said that the cost of classroom training was US\$64m (US\$3,300 per person), which would have been an inappropriate use of funds: the available budget was just US\$300,000. Using technology, a multifaceted, web-based training programme was developed that reduced the cost to a more affordable US\$15.56 per person. Instead of a three-day classroom-based training programme, students were given access to an online module-based programme followed by a one-day conference.

The full benefits of ICT will not be realised in Zambia, however, until the necessary infrastructure is in place. Some areas of Zambia, for example, are still not connected to an electricity supply and for many other parts of the country, power cuts are an everyday occurrence; bandwidth can also be a problem and this restricts the use of video conferencing.

These issues are, however, slowly being addressed and as more people gain access to the internet and become computer literate the benefits of ICT will be realised.

7. Roundtable discussion 5: The role of the accountancy profession in healthcare delivery

‘Accountants have a key role to play in the delivery of health care. Indeed accountants promote sound business practices, championing sustainable developments and identifying value drivers that deliver high performing organisations. We will continue to rely upon the valuable professional advice that accountants give to government on economic matters as they play a key role in national development.’

HON. CHRISTOPHER MULENGA MP,
DEPUTY MINISTER OF HEALTH

The government’s objective for healthcare financing is: ‘To mobilise adequate financial resources, through sustainable means, and ensure efficient and effective utilisation of such resources, to facilitate provision of equitable quality health services to the population’ (MOH 2011:64). This will be undertaken through three key strategies:

- resource mobilisation
- reviewing and strengthening resource allocation
- resource tracking.

Accountants, with their professional expertise, have a key role in meeting these goals.

RESOURCE MOBILISATION

Whether funded through taxation, insurance schemes, ‘out of pocket’ by patients, charitable donations or a combination of these, health care budgets worldwide are being strained by the need to fund new drugs, technological advances, changing disease patterns, ageing populations and the ever-increasing demands and expectations of patients.

In Zambia, the health budget is significantly under resourced and is heavily dependent on discretionary donor funding that is often ring-fenced for a specific project. This makes the delivery of an equitable, patient-centred health service particularly challenging. Accountants, working in partnership with clinicians, can help address this challenge by optimising the provision of health care within available funds.

There are numerous questions, including those below, that need answering before decisions can be taken on how and where resources can be most appropriately invested to give best value for money.

- Are the health facilities appropriate and sufficient to meet the needs of each area? If there are insufficient health centres then patients will self-refer to hospitals, where care costs more.
- How are funds currently invested, in primary and community care or more costly secondary care?

- How much does an episode of care cost in each health facility and how does this compare in terms of cost and quality with other providers?
- Are resources invested mainly in preventative care, such as immunisation or health promotion programmes, or in curative care? Preventative care is less costly but prevalence of disease often requires significant investment in curative care.
- Is funding targeted at national health priorities?

Accountants, working in partnership with health professionals, can help provide answers to these questions and, in doing so, will play a key part in helping the MOH meet its objective of ensuring a more efficient and effective use of resources.

REVIEWING AND STRENGTHENING RESOURCE ALLOCATION

The government has said it is committed to refining the formula and is looking to accountants to provide the necessary support.

Mr Mulenga said that lack of relevant information, for example about the cost of episodes of care, is delaying health reform and that it is the responsibility of accountants to provide such information.

Accountants need to gain a much better understanding of how each health facility operates, including the local demographics, the types and levels of service provided, and the number of patients treated. They then

need to calculate the costs of these services, which can then be fed into the allocation formula and used as a tool for monitoring and assessing performance. This is a key task for accountants as, without this data, the MOH will not be able to achieve its objective of providing a more equitable quality health service to the population of Zambia.

RESOURCE TRACKING

In addition to providing information for resource allocation and performance monitoring, accountants have a critical role to play in ensuring sound financial management, an issue that became paramount in 2009 following reported embezzlement of donor funds. The allegations highlighted significant weaknesses in the system, particularly for financial management and procurement.

As a result of the past issues with alleged corruption, governance and accountability now have increased priority at the Ministry of Health.

Delegates agreed that accountants, with their professional expertise, have a key role in ensuring sound financial management by:

- introducing improved governance procedures
- strengthening operational procedures
- ensuring that robust systems of financial reporting are in place
- improving financial transparency through faster reporting
- instilling confidence in the system.

Mark Millar, interim chief executive Milton Keynes NHS Foundation Trust, England and ACCA council member, said:

‘Those working in the health sector must demonstrate high levels of transparency, accountability and responsibility in the management of financial resources. ACCA as a professional body will continue to promote these values and will hold to account any member who violates them.’

8. Conclusion

'[We] fully acknowledge the critical role health plays in the development of the country and that no meaningful development or no economic growth can be attained when the population is faced with a huge disease burden.'

THE ZAMBIAN MINISTRY OF HEALTH (2011)

The cost of funding health care is, however, a huge challenge; demand for care is insatiable and difficult decisions have to be taken over the prioritisation of services.

Professionally qualified accountants have a key role in supporting fulfilment of the health agenda. It is not enough for them to be simple number crunchers: they must ensure sound financial management and continually offer support to the decision-making process through the provision of relevant, timely and accurate information.

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