



## Health Worker Migration Policy Council Council Conversation Series: Stories and Solutions

### Human Resources for Health, Health Worker Migration, and the Role of the UK and the International Community in Zambia

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#### Human Resources of Health and Health Worker Migration in Zambia

Zambia's public health sector (comprising 92% of the health system) operates on half the number of workers suggested by the World Health Organization (WHO), a veritable HRH crisis manifested by the country's growing burden of both communicable and non-communicable diseases. It is forecasted that with no changes to current training, hiring, and attrition conditions the total number of doctors, clinical officers, nurses, and midwives would decrease to 59% of the minimum necessary staff by 2018.<sup>1</sup> Several health indicators threaten failure to achieve the global health community's Millennium Development Goals. The health indicators in Zambia remain high: infant mortality rate (69 per 1,000 live births), under-five mortality rate (111 per 1,000 live births)<sup>2</sup>, and maternal mortality rate (470 per 100,000 live births)<sup>3</sup>. Equally significant, is Zambia's high prevalence rate for HIV/AIDS (13.5% among adults aged 15 to 49)<sup>4</sup> and low Human Development Index ranked at 164 (0.430), ranking amongst the worst in the world.<sup>5</sup>

The current doctor to population ratio in Zambia is at 1:23,000<sup>6</sup>, standing in stark contrast to the 1:5,000 population ratios recommended by WHO<sup>7</sup>. In December 2005 Zambia's Ministry of Health developed a comprehensive strategic plan for Human Resources for Health with the consultation of key domestic and international stakeholders; This included the European Union (EU), WHO, the United Kingdom's Department for International Development (DFID), Swedish International Development Agency (SIDA), and the Canadian International Development Agency (CIDA). This focused on initiatives to address factors to which human resources of health (HRH) shortages are attributed, specifically: inadequate conditions of service, poor working conditions, weak human resource management systems and inadequate education and training systems<sup>8</sup>. Similar to its Sub-Sahara Africa (SSA) neighbors, Zambia's health sector is plagued by a misdistribution of practitioners between rural and urban areas, the departure of workers from the public sector towards the private sector (often paradoxical to NGOs where salaries are up to 43% higher), the emigration of health workers to more developed countries, and high attrition rates from training programs or the health sector within five years of clinical work<sup>9,10,11</sup>. Another contribution is the enormous burden to the health system that the AIDS epidemic has imposed. Health workers who staff HIV/AIDS clinics experience a disproportionately high burn out rate, and infection with HIV/AIDS infection is responsible for high-mortality, illness, and absentee rates that have additionally deterred future generations of health professionals from entering the field<sup>12</sup>.

According to 2006 World Bank data, Zambia's poverty headcount ratio at the national poverty line was 59.3% of the population.<sup>13</sup> Zambia's economy can only support the health sector with 11.9% of its discretionary budget (below the

<sup>1</sup> Tjoa et al.: Meeting human resources for health staffing goals by 2018: a quantitative analysis of policy options in Zambia. *Human Resources for Health* 2010, 8:15.

<sup>2</sup> World Health Organization Global Health Observatory Data Repository 2010 <http://apps.who.int/ghodata/?vid=21500&theme=country>

<sup>3</sup>Based on 2008 Data World Health Organization Updated April 4, 2011 <http://www.who.int/gho/countries/zmb.pdf>

<sup>4</sup> World Health Organization Global Health Observatory Data Repository 2009 <http://apps.who.int/ghodata/?vid=21500&theme=country>

<sup>5</sup> UNDP International Human Development Indicators 2011 <http://hdrstats.undp.org/en/countries/profiles/ZMB.html>

<sup>6</sup> Matt McAllester, "America Is Stealing the World's Doctors" *The New York Times* <http://www.nytimes.com/2012/03/11/magazine/america-is-stealing-foreign-doctors.html?pagewanted=2&r=4&ref=general&src=me> p.2 March 7, 2012

<sup>7</sup> Makasa, E.: The Human Resource crisis in the Zambian Health Sector- a discussion paper. *Medical Journal of Zambia*, 2009 35:3.

<sup>8</sup> Human Resources for Health Strategic Plan (2006-2010). Republic of Zambia, Ministry of Health 2005.

<sup>9</sup> Ferrinho, P et al. : The Human Resources for Health Situation in Zambia: Deficit and Maldistribution. *Human Resources for Health* 2011 9:30.

<sup>10</sup> Kruse, G et al.: Burnout and use of HIV Services Among Health Care Workers in Lusaka District, Zambia: A Cross-Sectional Study. *Human Resources for Health* 2009 7:55.

<sup>11</sup> Ngulube, T.J.: The Zambian Country Case Study on Positive Practice Environments (PPE), Quality Workplaces for Quality Care (see footnote 1)

<sup>12</sup> Ngulube, T.J.: The Zambian Country Case Study on Positive Practice Environments (PPE), Quality Workplaces for Quality Care. (see footnote 1)

<sup>13</sup> The World Bank <http://data.worldbank.org/country/zambia> 2006



recommended Abuja target of 15%) and its remuneration to civil service health workers is limited to personal emoluments set by government targets<sup>14</sup>. An increase in wages for the health sector in Zambia has proved politically unfeasible, as proposals have provoked an outcry from other civil service workers for equal treatment. The government attempted to de-link the health sector from the Ministry of Health between 1992 and 2006 however the decentralization scheme was abandoned due to issues of cost, efficiency and poor performance<sup>15</sup>. Zambian health worker salaries are extremely low. A comparison of nursing wages reveals that Canadian and Australian nurses are paid 25 times more than Zambian nurses; 14 times more than Ghanaian nurses; and twice more than South African nurses. Similarly, doctors from the USA are paid 25 times more than Zambian physicians; 22 times more than Ghanaian physicians; and 4 times more than South African physicians<sup>16</sup>.

Accordingly, high levels of brain drain internally, within the region and to developed countries abound. The overall emigration rate for qualified health workers is 10%, with nurses emigrating at 9.2% (in comparison to 28% in Zimbabwe) and physicians emigrating at a shocking 57% (a rate surpassed only by three other SSA neighbors)<sup>17</sup>. A 2008 study indicates that Great Britain, the United States, and South Africa receive the highest number of Zambian-born nurses working out of country: 45.87%, 22.98%, and 14.72%, respectively. Great Britain and the United States also receive the highest proportion of Zambian-born physicians working abroad, at 59% and 26.9%, respectively<sup>18</sup>.

The share of Zambian nurses working in South Africa may be demonstrative that South Africa functions somewhat as a “holding ground” throughout Africa for those wishing to eventually migrate to the UK, Canada, or the USA. After a year or two of work in South Africa, a registered nurse migrating to the UK may gain full registration status immediately<sup>19</sup>.

With little freedom to adjust salaries to plug the brain drain, the Ministry’s HRH Strategic Plan focuses on initiatives tailored to address the systemic and specific challenges faced with the training, retention, and hiring the more prominent health worker cadres in Zambia. Further, the plan addresses current health system weaknesses and is driven by four core objectives underlying its initiatives: “a coordinated approach to planning across the sector; and increased number of trained and equitably distributed staff; improved productivity and performance of health workers; strengthened human resource planning, management and development systems at all levels”<sup>20</sup>. While doctors are most scarce, and Zambian enrolled nurses (a regionally recognized cadre) most abundant, it is the shortage of skilled nurses that is most consequential according to a 2008 census on government health workers. Skilled nurses could better balance the health workforce with task shifting/skill mixing and substitute for other nursing cadres, purposes which have not been effectively exploited to date in Zambia<sup>21,22</sup>.

### The International Community’s Role in Zambia

Initiatives involving cooperating partners delineated in the 2005 strategy include the Zambia Health Workers Retentions Scheme, “ZHWRS”, in conjunction with the Royal Netherlands; the USAID recruitment of Clinical Care Specialists for provincial offices and the renovation/construction of medical staff housing in Luapala\*; UNFPA training and scholarship provision of midwives in the North Western province\*; WHO salary supplementation for lecturers at University of Zambia’s Medical School\*; SIDA support for training of nurse tutors, curricula review, and general strengthening of training institutions\*.

Started in 2003, the ZHWRS is an interim measure to attract front line health care workers to rural and under resourced areas via salary top ups and other, non-cash incentives. It aims to retain up to 10% of doctors, nurses, midwives, clinical officers, medical licentiates, and environmental health technicians in these regions. Preliminary results appear promising with 31% of targeted cadres retained as of 2010. The program gained USAID, HSSP, EU, SIDA, DFID, CIDA, and the Zambian government as additional funders<sup>23, 24</sup>. Of all cadres, the program has been most successful

<sup>14</sup> Human Resources for Health Strategic Plan (2006-2010). Republic of Zambia, Ministry of Health. (see footnote 3)

<sup>15</sup> Ngulube, T.J.: The Zambian Country Case Study on Positive Practice Environments (PPE), Quality Workplaces for Quality Care. (see footnote 1)

<sup>16</sup> Vujicic, M et al.: The role of wages in the migration of health care professionals from developing countries. *Human Resources for Health* 2004 2:3.

<sup>17</sup> Ngulube, T.J.: The Zambian Country Case Study on Positive Practice Environments (PPE), Quality Workplaces for Quality Care. (see footnote 1)

<sup>18</sup> Clemens, M and Pettersson, G. New data on African health professionals abroad. *Human Resources for Health* 2008 6:1.

<sup>19</sup> Vujicic, M.: The role of wages in the migration of health care professionals from developing countries. (see footnote 11)

<sup>20</sup> Human Resources for Health Strategic Plan (2006-2010). Republic of Zambia, Ministry of Health. (see footnote 3)

<sup>21</sup> Ferrinho, P et al. : The Human Resources for Health Situation in Zambia: Deficit and Maldistribution (see footnote 4)

<sup>22</sup> Brugha, R et al.: Health workforce responses to global health initiatives funding: a comparison of Malawi and Zambia. *Human Resources for Health* 2010 8:19.

<sup>23</sup> Ngulube, T.J.: The Zambian Country Case Study on Positive Practice Environments (PPE), Quality Workplaces for Quality Care. (see footnote 1)

\* further data on implementation, evaluation and efficacy of measures could not be found.

<sup>24</sup> Makasa, E.: The Human Resource crisis in the Zambian Health Sector- a discussion paper. (see footnote 2)

attracting and retaining doctors.

An USAID study *Caring for Caregivers* focused on creating a safer workplace for Zambian practitioners delivering HIV/AIDS care and provoked the Ministry of Health to develop and implement an HIV/AIDS workplace policy addressing the more complex needs of health workers affected by the pandemic<sup>25</sup>. Another initiative geared towards mitigating the impact of HIV/AIDS on the health sector is a WHO/PEPFAR task-shifting project aiming to transform delivery of HIV prevention, care and treatment services by reallocating tasks from mid/high level practitioners to other health workers<sup>26</sup>.

In partnership with the Clinton Health Access Initiative (CHAI), the Ministry of Health forecasted that meeting the minimum need for health workers in Zambia this decade will require an increase in health training school enrollment. No combination of changes in staff retention, graduation rates, and public sector entry rates of graduates by 2010, without including training expansion, is sufficient to meet staffing targets by 2018 for any cadre except midwives.<sup>27</sup>

The Ministry of Health and CHAI conducted individual school assessments on 39 public and private health training institutions in 2008 to determine the feasibility and resources needed to double training graduate output over a five year period<sup>28</sup>. With sufficient funding (US \$116 million, including one-time and recurring costs), resources and implementation support, this operational plan could result in significant graduate increases: +82% for nurses, +155% for midwives, +120% for laboratory staff, +150% for Environmental Health Technicians, +124% for Doctors. Increasing training enrollment is a most expensive option, and it takes several years for training enrolment changes to have an impact on the public workforce. Policy options could address the duration of the pipelines: Fast-tracked training programs could produce staff more quickly; new cadres could be created that require less time to train; or the Ministry of Health could decrease the amount of time that it takes to recruit and hire graduates.

Since 2009, the MOH has been organizing recruitment fairs, these have been used to mobilize over 2,000 new graduates to join the health workforce through a streamlined hiring process. After identifying the areas with the highest current to optimal vacancy rates, the MOH prioritized recruitment strategies for areas most in need and reorganized their recruitment and hiring processes so new graduates can quickly absorbed into the public sector workforce and deployed accordingly. This purposeful allocation has increased the number of health workers deployed to remote provinces. Between 2009 and 2011, the MOH's efforts to strategically deploy health workers to districts struggling to meet demands for health services resulted in a 25% increase in health workers in districts that previously had less than one health worker per 1,000 persons, compared to 13% for the rest of the country.<sup>29</sup>

Reducing the number of nurses who leave the workforce to go back to school to get advanced training also helps reduce the immediate shortage. For example, by removing prerequisites to advanced nursing degrees (by allowing direct-entry) reduces back-to-school attrition. Zambia has introduced two such programs: direct-entry midwifery diploma and the direct-entry nursing bachelor's degree.<sup>30</sup>

Trade professionals were extensively engaged in verifying the viability and potential impact program components and included such prominent groups as the General Nursing Council, Medical Council of Zambia, the University of Zambia's Student Union, and the Churches Health Association of Zambia. Further, the Ministry of Health worked closely with the Ministry of Works and Supply (MoWS) and the Ministry of Science, Technology and Vocational Training (MSTVT) to assess scale-up plans and implementation. The government has also involved CIDA, DFID, EU, JICA, SIDA, UNICEF, and WHO as international partners for the purpose of building funding support and soliciting operational plan input. Partners have recommended strengthening of the training institution graduate retention scheme and subcontracting training capacity to private institutions and building public-private partnerships in the Ministry of Health's plan<sup>31</sup>. A progress report for the program has not been published, though financially the government raised US \$16 million in

<sup>25</sup> Ngulube, T.J.: The Zambian Country Case Study on Positive Practice Environments (PPE), Quality Workplaces for Quality Care. (see footnote 1)

<sup>26</sup> Makasa, E.: The Human Resource crisis in the Zambian Health Sector- a discussion paper. (see footnote 2)

<sup>27</sup> Tjoa et al.: Meeting human resources for health staffing goals by 2018: a quantitative analysis of policy options in Zambia. *Human Resources for Health* 2010, 8:15.

<sup>28</sup> Tjoa et al.: Doubling the number of health graduates in Zambia: estimating feasibility and costs. *Human Resources for Health* 2010, 8:22.

<sup>29</sup> Paper forthcoming co-authored by Zambia MoH and CHAI.

<sup>30</sup> Tjoa et al.: Meeting human resources for health staffing goals by 2018: a quantitative analysis of policy options in Zambia. *Human Resources for Health* 2010, 8:15.

<sup>31</sup> Government of Zambia Ministry of Health: *National Training Operational Plan 2008: Field Assessments, Analysis and Scale-up Plans for Health Training Institutions* 2008.

2008 and US \$10 million in 2009 towards its implementation.

A World Bank report documented that a third of investment in Zambia's health sector (2007) is derived from international aid<sup>32</sup>. A significant portion of financing is dedicated towards shorter term preferred activities rather than supporting a longer-term, sustainable approach to building the necessary HRH infrastructure for Zambia. However, more recently, the international community has acknowledged and begun to actively manage its critical role in mitigating further HRH loss to Zambia and other developing economies by adopting more responsible policies towards international health personnel recruitment.

### The UK's Role in Zambia

The UK has been ahead of its contemporaries in developing codes of practice, bilateral agreements/memos of understanding and position statements that would stem health workers from poor countries<sup>33</sup>. Zambia is amongst the UK's list of SSA countries from which it does not actively recruit health workers. Britain enacted new laws under the European Union that discouraged the immigration of health workers, by such measures as granting work permits only for foreign nurses if they can prove no suitable British or EU equivalent exists. National Health Service's Code of Practice for the International Recruitment of Healthcare Professionals (developed in 1999) has since evolved into memoranda of understanding that negotiate recruitment terms with the governments of South Africa, Philippines, China, Pakistan and India.

As its largest single donor, the UK has been and continues to be integral to shaping health systems and setting precedence for what aid "looks like" in Africa. A summary entitled "Global Health Partnerships: the UK contribution to health in developing countries" by former NHS CEO, Lord Nigel Crisp, proposes the reform of how aid is administered, emphasizing a partnership approach where programs are country-led and underlined by broader health system objectives. Aligned with these principles is the vision of the Zambia UK Health Workforce Alliance (ZUHWA). In 2009, Lord Nigel Crisp founded the organization in conjunction with 35 UK and Zambian member organizations. By providing a focal point to ensure that Zambia's (and the UK's) health needs and requests are known and better coordinated between multiple stakeholders (universities, hospitals, diaspora groups, NGOs, private companies, government departments, etc.) in both countries, the partnership hopes to contribute to realization of the MGD goals and provide opportunities for learning and development for health workers in both countries, and support the MoH in their implementation of the National Health Strategic Plan<sup>34</sup>.

In 2011 ZUHWA initiated HIFA-Zambia, a global email forum to connect professionals, academics, and representatives from all sectors working in health related functions for the purpose of sharing best practices on health issues and initiatives in Zambia. The one-year pilot aims to increase effectiveness and efficiency in coordinating health system efforts amongst multiple stakeholders in Zambia<sup>35</sup>.

Perhaps more significantly, ZUHWA has partnered with DFID and the Zambian Ministry of Health in an initiative lead by the UK's Tropical Health Education Trust (THET) to build health worker training capacity in Zambia. THET's International Health Links Funding Scheme provides grants to support new and existing partnerships (termed "links") between UK healthcare organizations and those in developing countries<sup>36</sup>. Zambian training capacity is being supplemented by the UK via the: provision of volunteer nursing/midwifery tutors posted in understaffed rural/provincial schools; issuance of nursing/midwifery scholarships to local staff for the education necessary to become future tutors; provision of volunteer physician lecturers to develop curricula and teach courses in anesthesia, pathology and psychiatry; provision of a volunteer specialist to support the development of a curriculum in biomedical engineering; and construction of housing for tutors in five provincial nursing schools<sup>37</sup>.

In 2010, with DFID's catalytic support, the MoH and CHAI successfully began Zambia's national Community Health Assistant (CHA) program, which lays the foundation to operationalize the MoH's 2010 National Community Health Worker Strategy. CHA's will be critical to increasing rural access to basic health services at the community level. CHAs

<sup>32</sup> World Bank. *The Human Resources for Health Crisis in Zambia: An Outcome of Health Worker Entry, Exit and Performance within the National Health Labor Market*. Working Paper 214, Human Development Series 2011.

<sup>33</sup> Padgett, C, Padarath, A (2008).: A review of codes and protocols for the migration of health workers. Equinet Discussion Paper 50.

<sup>34</sup> Zambia-UK Health Workforce Alliance. N.d. *About*. Retrieved from <http://www.zuhwa.com/about>. Accessed 12/28/2011

<sup>35</sup> Zambia UK Health Workforce Alliance. N.d. *Healthcare for All HIFA-Zambia*. Retrieved from <http://www.zuhwa.com/resources/hifa-zambia>

<sup>36</sup> 23Mar2010. *The Framework for NHS Involvement in International Development*. NHS, Department of Health.

<sup>37</sup> THET Partnerships for Global Health. N.d. *Zambia*. Retrieved from <http://www.thet.org/about-thet/our-programmes/zambia/>

will be placed in the most under-served, rural catchment areas – home to 61% of Zambia’s population (or 8 million Zambians). The health workforce shortage in these rural areas is staggering; currently 7 health workers per 10,000 persons.

The MOH’s vision is to create a new civil service cadre through these CHAs incorporating them as a formal part of the government workforce. The MOH and CHAI are working in partnership to pilot the first phase of this national strategy. In collaboration with other partners, the MoH have committed to generating evidence on the pilot program to inform the national scale-up to at least 5,000 CHAs.

Since the program launch, Zambia has built its first Community Health Training Institution, trained over 300 students from rural and remote communities (over 50% of whom are women), recruited and trained ten tutors, engaged academic institutions to support the national pilot’s monitoring and evaluation framework, and secured additional funding for scale-up from donors.

## Conclusion

In November 2011 the second medical school in Zambia was opened at Copperbelt University, which is a further demonstration of Zambia’s serious commitment to invest in its future health workers<sup>38</sup>. Collaborating with international partners like the UK to ensure that donor funding is used in a way that would strengthen Zambia’s health work force and contribute to long-term health system objectives will hopefully mitigate some of the push factors that are enticing Zambian health care workers to leave the country. However, this must be met with policies in the international community to ethically manage and monitor the immigration of Zambian health workers to developed countries. With the amount being invested in Zambia’s health capacity infrastructure for the foreseeable future, the cost of its health workers becomes more expensive, and further losses of these precious resources.

The creation of the Zambian National Health Strategic Plan (NHSP) 2011-2015 outlines the government’s healthcare plan to improve the country’s health system. The NHSP shows a re-commitment toward meeting the Millennium Development Goals, as well puts resources toward human resources for health, improving service delivery, infrastructure, equipment and commodities, developing a health management information system, reforming and promoting health care financing, and ensuring good governance and leadership.

**The Council Conversation Series: Stories and Solutions** is a program of The Health Worker Migration Policy Council (the “Council”). The Series includes case studies, policy briefs and films based on narratives, interviews and research that shares solutions and inspires action among the decision makers who are faced with addressing the challenges of health worker migration. The series features Council members, in addition to health workers and policy makers while showcasing best practices and examples of innovation and action towards addressing health worker migration.

The Council was established as an independent body of high-level policy makers and experts from source and destination countries dedicated to promoting solutions that address the challenges posed by health worker migration. The Aspen Institute’s Global Health and Development program serves as the Secretariat for the Council as part of the Health Worker Migration Initiative. The Council believes that globally respected ethical norms, innovative collaborations between source and destination countries and efforts to develop sustainable workforce solutions will encourage better health worker migration governance while facilitating a more equitable distribution of health workers across the globe. The Council aims to ensure that the ethical principles, outlined in the WHO Global Code and other policy mechanisms, result in the development of policies and efforts that better manage the gains and losses associated with the international migration of health workers while ultimately striving to improve health outcomes for all. The Council works in partnership with WHO, Global Health Workforce Alliance (GHWA), The African Platform on Human Resources for Health, Health Workforce Advocacy Initiative (HWA) and International Organization for Migration (IOM).

To learn more please visit [www.aspeninstitute.org/councilconversationseries](http://www.aspeninstitute.org/councilconversationseries)

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<sup>38</sup> Copperbelt University School of Medicine <http://www.cbu.edu.zm/schools/medicine>