

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

### Bilateral Agreement: The Case of US and Ghana

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Among Ghana's efforts to address its health workforce challenges are the establishment of medical partnerships with countries where Ghanaian medical professionals often migrate, such as the United States. This case study highlights how the University of Michigan and a variety of stakeholders in the Ghanaian health community have made efforts to adhere to the World Health Organization (WHO) Global Code through training health personnel, capacity-building and strengthening services and specialties. The particular focus of this case study is the Ghana Emergency Medicine Collaborative ("Collaborative"), a partnership aimed at developing Ghana's first medical residency program in emergency medicine.

#### Context

Despite its recently achieved status as a middle-income country and a more robust health care system than many of its neighbors, Ghana is still experiencing a national shortage of skilled health workers, with only 1.14 nurses and 0.10 doctors per 1,000 population as of 2010. This ratio is significantly below the WHO standards of 2.20 nurses and 0.20 doctors per 1,000 population.<sup>1</sup>

With a population of over 24 million, and a population growth rate of 2.4%,<sup>2</sup> Ghana faces a growing challenge in meeting the current and future health care needs of its people. The Ghana Health Workforce Observatory estimates 69,000 people currently work in the health care delivery system.<sup>3</sup> According to projections by IntraHealth International, by 2050 Ghana will need a 29% increase in health workers to meet the health needs of its population.<sup>4</sup>

In addition to a general shortage of skilled health workers, Ghana also suffers from a maldistribution of its health workforce, which limits access to health services for many Ghanaians. Although 65% of the population lives in rural areas, the highest concentration of highly skilled health professionals is in the greater Accra region in southern Ghana. In fact, two teaching hospitals – Korle Bu in Accra and Komfo Anokye in Kumasi – employ 45% of all the nation's doctors, with only 15% of doctors working in outlying district hospitals.<sup>5</sup>

#### Ghana Health Indicators in Comparison to Neighboring and Destination Countries<sup>6</sup>

Indicators	Ghana	Cote D'Ivoire	Nigeria	Togo	Burkina Faso	Cameroon	UK	US
Doctors/Pop (10,000)	1	1	4	1	1	2	21	27
Nurses / Pop (10,000)	10	5	16	3	7	16	63	98
Infant Mortality	76	114	186	88	169	131	6	8
Maternal Mortality	451	810	1100	510	700	1000	8	11
%Skilled Delivery	57	57	39	62	54	63	>99	>99

Recognizing these challenges, Ghana has made notable strides to address its shortage of health personnel and improve health care delivery. Particular focus has been the issue of health worker outmigration from Ghana to Europe and the

United States, which reduces the country's already small pool of skilled health workers. Ghana's efforts on this issue have been guided and supported by the establishment of the WHO Global Code of Practice on the International Recruitment of Health Personnel in 2010, which marked an international commitment by 193 Member States to take action in addressing health personnel shortages.

Ghana has implemented numerous innovations designed to strengthen the Ghanaian health system, develop a larger health workforce and incentivize skilled health care workers to remain in Ghana including:

- Creation of the Ghana College of Physicians and Surgeons, a government body managing all post-graduate medical education;
- Establishment of 21 health worker training institutions between 2001 and 2006, including seven specifically for nursing and health assistant training;
- Policy changes by Ministry of Health that resulted in a 50% increase in admissions to health training institutions since 2001;
- Establishment of a fund to provide vehicles for health personnel in order to increase coverage in rural and underserved communities; and
- Development of a national Human Resource Policy & Strategy for the Health Sector four-year plan.

In addition to the internal efforts and policy changes, Ghana has also looked externally to form international medical partnerships that could help to stem the outmigration of health workers and strengthen Ghana's health system. In particular, Ghana has worked with medical schools in the United States including the University of Utah, Brown University, Yale University, Tufts University and the University of Michigan, which is the focus of this case study and has partnered closely with Ghanaian universities and health institutions since the late 1990s.

The inaugural partnership program linked the University of Michigan with University of Ghana in Accra in the establishment of a medical residency program in obstetrics and gynecology at the University of Ghana. As part of the program, which is still active, the University of Michigan sends doctors from its staff to teach courses at the University of Ghana Medical School. The success of the obstetrics and gynecology partnership served as a springboard for the creation in 2008 of the Ghana Emergency Medicine Collaborative.

Established in 2008 by the Ghana College of Physicians and Surgeons and the University of Michigan, the Ghana Emergency Medicine Collaborative is an emergency medicine residency program housed at the Komfo Anokye Teaching Hospital (KATH) in Kumasi and serving medical and nursing students from Kwame Nkrumah University of Science and Technology (KNUST).

The Ghana EM Collaborative is comprised of the University of Michigan, the Ghana College of Physicians and Surgeons, MOH, KNUST, KATH and other Ghanaian stakeholders within the health sector. In particular, the Ghana College of Physicians and Surgeons and the Ministry of Health have been instrumental in trying to develop EM as a medical specialty and to improve the overall delivery of acute accident and emergency care in Ghana. EM was established as a specialty by Professor Paul Nyame, former Rector of the Ghana College of Physicians and Surgeons, and the work of Dr. Ahmed Zakariah was vital in the development of a National Ambulance Service and a federal commission on the state of EM in Ghana.<sup>7</sup> The establishment of the Collaborative coincided with the construction in 2008 of an emergency center for management of traumatic injuries and acute medical emergencies at KATH.

Until the establishment of the Collaborative, Ghana had no specialized health worker training programs in emergency medicine, although Ghanaian hospitals did have emergency departments. A variety of factors, including the lack of specialized medical training in emergency medicine, a rise in prevalence of non-communicable diseases, an increase in traffic incidents and a major stampede incident at Accra Sports Stadium<sup>8</sup> caused the health community to examine ways to improve the health system's capacity to provide emergency care services. Additionally, the MOH has identified emergency care as one of its seven priority areas. "Current emergency care in Ghana is sub-optimal with significant delays to definitive care and high morbidity and mortality. The Ghanaian government has recently invested in physical infrastructure for emergency care at major teaching hospitals, but the human resources to provide care are inadequate. To address this need, the Ghana EM Collaborative has proposed an innovative training program focused on medical

students, nurses, and residents with the formation of a new faculty for sustainable training.”<sup>9</sup> At present, Dr. George Oduro is the only Ghanaian staff member with a specialization in emergency medicine working at KATH’s Accident and Emergency Center.<sup>10</sup> Dr. Oduro and the department are supported and staffed by residents and nurses undergoing training through the Collaborative.

The successful implementation of the partnership between the University of Michigan and the Ghanaian stakeholders can be attributed to a number of factors, including:

### **Country Ownership**

The need for specialized medical training in emergency medicine was identified by the Ghana College of Physicians and Surgeons and as such, the foundation of the partnership is based upon country ownership. Numerous stakeholders in the Ghanaian health community have invested resources into the setup and implementation of this program with the objectives of increasing medical personnel capacity, reducing the migration of health personnel and decreasing the number of emergency cases.

### **Adaptable Framework**

Because this collaboration involves the Ghana College of Physicians and Surgeons, it is modeled within the framework of other Ghanaian residency programs and adheres to the same requirements and curriculum standards. Although the University of Michigan conducts most of the trainings (with assistance from medical staff at other American universities), it has worked in tandem with the University of Ghana and KNUST to develop curriculums that fit within Ghanaian medical education parameters. The collaboration is successful because, while it pulls from an American model, the residency program has been adapted and modified to fit within the Ghanaian context.

### **Sustainability**

Ghanaian doctors wishing to become university medical teaching staff are mandated by the Ghana College of Physicians and Surgeons to have training at both the specialist level (e.g. emergency medicine) and as part of a Training of Trainers model. The Collaborative has incorporated this aspect into the residency program. Upon completion of the residency, doctors and nurses are encouraged to become certified as university staff in order to build the cadre of Ghanaian emergency medicine staff who will train future residents. The current goal is for half of the trained emergency medicine specialists to participate in a Training of Trainers program by 2015.

### **Stakeholder Involvement**

The initial engagement of multiple stakeholders was vital to establishing the Collaborative. While the Ministry of Health is the oversight body for the health sector, a variety of service agencies, public and private partners and government institutions also play a role in implementing Ghana’s health vision and goals for human resources. Involving important institutions from the beginning enabled all parties to have input and advise on the way forward.

## **RESULTS**

The first class of seven doctors to participate in the Collaborative is now in its third and final year of training. The second class of six doctors is currently in its second year. In addition, a one-year emergency nursing course is underway for 30 promising nurses.

The Collaborative plays an important role in reducing the emigration of health workers by improving the education and training opportunities available in Ghana. By addressing a gap in the greater health system and offering medical professionals vital training and education, the Collaborative helps facilitate economic and educational opportunities within Ghana, which mitigates the pull effect for health professionals to migrate to other countries.

## **CHALLENGES/LESSONS LEARNED**

The Collaborative has become well integrated within the Ghanaian medical setting, yet emergency medicine is still a relatively new and unknown specialty among Ghanaian health workers and students. In an effort to introduce students to emergency medicine earlier in their medical education, KNUST is working to incorporate lectures by the emergency medicine department into student orientation at the pre-clinical stage and during training at the clinical stage.

Another challenge the Collaborative faces is coordination among stakeholders. Initially, the program included a small number of major partners and institutions, but over time new collaborators have been identified. Recent additions to the coalition have included the University of Utah and the Ghana Medical and Dental Council, which is responsible for certifying and registering doctors. Programs of this magnitude and scope cannot be implemented without stakeholder involvement and greater buy-in will improve the effectiveness of the program, but coordinating the interests and capacities of numerous stakeholders can be a challenge.

### LOOKING FORWARD

In 2010, the Collaborative received funding for a five-year period from Fogarty International Center at the U.S. National Institutes of Health to continue its work under the Medical Education Partnership Initiative (MEPI). “It is anticipated that 100 nurses, 100 residents, 900 medical students and 40 EMS [Emergency Medical Services] providers will undergo training over the five-year period. Ultimately, the in-country program will improve retention of emergency medical providers and decrease preventable acute injury and illness related deaths in Ghana.”<sup>11</sup> Going forward, the main goals and objectives of the Collaborative are:

1. Increase training of nurses in emergency medicine.
2. Introduce and expose medical students to the specialty of emergency medicine.
3. Teach Research 101 course for residents (e.g. research principles, statistical analysis).
4. Emphasize team-based training approach to facilitate working more collaboratively.
5. Conduct Emergency Medical Technicians needs assessment in coming months.

By 2015, KNUST aims to make the emergency medicine specialty program financially independent. The Collaborative is considering possible methods for encouraging residents engage in further training to become teaching fellows. The process would take an additional two to three years for residents to become trainers and a curriculum would need to be developed.

While the partnerships between the University of Michigan, the University of Ghana, KNUST and KATH focus on a medical specialty, they demonstrate the time, resources and commitment required to develop and implement successful programs designated to improving the quality of training for health workers and improving the health system they operate within. By establishing program goals, building a coalition, operating within existing frameworks and providing opportunities for staff capacity-building, these bilateral collaborations between the U.S. and Ghana medical and health communities have resulted in a sustainable model for replication.

**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>1</sup> Ghana Draft HR Policy and Plan 2012-2016 p12 (originally cited from GWA 2010).

<sup>2</sup> Ghana Health Workforce Observatory, “Human Resources for Health Country Profile,” Ministry of Health, 2011, 9, [http://www.hrh-observatory.afro.who.int/images/Document\\_Centre/ghana\\_hrh\\_country\\_profile.pdf](http://www.hrh-observatory.afro.who.int/images/Document_Centre/ghana_hrh_country_profile.pdf).

<sup>3</sup> Ghana Health Workforce Observatory, “Human Resources for Health Country Profile,” Ministry of Health, 2011, 10, [http://www.hrh-observatory.afro.who.int/images/Document\\_Centre/ghana\\_hrh\\_country\\_profile.pdf](http://www.hrh-observatory.afro.who.int/images/Document_Centre/ghana_hrh_country_profile.pdf).

<sup>4</sup> Pacqué-Margolis, Sarah et al., “Population Growth and the Global Health Workforce Crisis,” Appendix: Projected Population and Health Worker Needs in 2050 for the 57 Human Resources for Health Crisis Countries, November 2011, 5, IntraHealth International and CapacityPlus <http://www.intrahealth.org/files/media/population-growth-and-the-global-health-workforce-crisis/population-growth-global-health-workforce-crisis.pdf>.

<sup>5</sup> Ghana Health Workforce Observatory: Human Resources for Health Country Profile 2011 p. 10 [http://www.hrh-observatory.afro.who.int/images/Document\\_Centre/ghana\\_hrh\\_country\\_profile.pdf](http://www.hrh-observatory.afro.who.int/images/Document_Centre/ghana_hrh_country_profile.pdf)

<sup>6</sup> Table A3: Country Comparators Original Source: Global Health Workforce Alliance, 2010 Ghana Draft HR Policy and Plan 2012-2016, 12

<sup>7</sup> University of Michigan, “Ghana Emergency Medicine Collaborative,” University of Michigan.

<sup>8</sup> The stadium incident resulted in approximately 126 deaths. BBC News, “Ghana mourns after football tragedy,” BBC News, May 10, 2001, <http://news.bbc.co.uk/2/hi/africa/1322433.stm>.

<sup>9</sup> National Institutes for Health, “Project Information: Ghana EM Collaborative Training Program,” April 13, 2012. [http://projectreporter.nih.gov/project\\_info\\_description.cfm?aid=8073321&icde=5558570](http://projectreporter.nih.gov/project_info_description.cfm?aid=8073321&icde=5558570)

<sup>10</sup> The Center opened in May 2009 and was spearheaded by Dr. Anthony Nshiah-Asare. University of Michigan, “Ghana Emergency Medicine Collaborative,” University of Michigan. <http://www.med.umich.edu/em/education/ghana/ghanacollaborative.htm>.

<sup>11</sup> National Institutes for Health, “Project Information: Ghana EM Collaborative Training Program,” April 13, 2012.