HUMAN RESOURCES IN HEALTH: AN ANALYSIS OF COSTS OF TRAINING, CERTIFICATION REQUIREMENTS & MIGRATION ISSUES IN BELIZE

There can be no healthcare without the workforce

The Ministry of Health
BELIZE, C.A.

Pan American Health Organization
Regional Office of the World Health Organization

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ACRONYMS

BDA	Belize Diabetes Association
BMDA	Belize Medical and Dental Association
BMDC	Belize Medical and Dental Council
CA-4	Central America Four
CARICOM	Caribbean Community
CBB	Central Bank of Belize
CHW	Community Health Workers
CSME	Caribbean Single Market and Economy
EU	European Union
FBP	Foreign Born Population
GDP	Gross Domestic Product
HIV/AIDS	Human Immunodeficiency Virus/Acquired Immunodeficiency Syndrome
HRH	Human Resource in Health
LSMS	Living Standards Measurement Survey
MCB	Medical Council of Belize
MOH	Ministry of Health
NGO	Non-Governmental Organization
NHIS	National Health Insurance Scheme
NHR	Northern Health Region
ODECA	Organización de EstadosCentroamericanos
SIB	Statistical Institute of Belize
SICA	Sistema de la IntegraciónCentroamericana
TAC	Technical Aid Corps
TOEFL	Test of English as a Foreign Language
UB	University of Belize
UN	United Nations
USA	United States of America

Unless otherwise specified $ refer to Belize currency.

EXECUTIVE SUMMARY

The terms of reference required, inter alia, an analysis of the dynamics of the formation of health professionals in Belize, including available information on the immigration and emigration of these personnel into Belize and the resultant impact on HRH production, deployment, absorption, retention, performance and motivation. To undertake the study, it was initially required to focus on the existing clinical science training institutions locally to obtain completion rates for health care professionals, the costs of training, the systems for certification of these professionals and issues regarding migration as a prime determinant of the existing stock of these health care professionals.

Acknowledging that there are multiple categories of health care workers, the study focused mainly on nurses and doctors. The former are trained locally at the University of Belize in Belmopan, where after a four year course of study conservatively costing some $20,000 and sitting a regional examination, a student qualifies to practice as a nurse in Belize. Being a national university in receipt of a government subsidy that forms the single largest component of its budget, UB's student fees are deliberately maintained at below market costs. These costs exclude ancillary costs related to academia, such as boarding and lodging, which are substantially more market determined, and when included, costs are easily doubledthe various school fees. Doctors are not trained at UB, though Government does provide scholarships for locals to study medicine at the University of the West Indies, a regional institution also supported by GOB due to its membership in CARICOM.

Globally, the market for health professionals is fluid, unregulated and largely undocumented, and Belize is impacted by its fluidity. Belizeans have a long history of emigrating mainly to the USA and while it is believed that health professionals have been among the migrants, there is a paucity of data in this regard. For these professionals immigrating into Belize though, a CSME Skills Certificate must be sought if the person is from any CSME country and if not, then a work permit must be sought. Most recent data from the Labour Department indicate that various categories of health professionals from as many as twelve countries spanning four continents are an integral component of Belize's existing health workforce.

The reasons for the migration of health professionals continue to be many and varied, and there is an active and targeted recruitment programme in the USA. While the migration of these professionals must be regarded as a loss of much needed and scarce human resources in health, there are some positives. Capacity strengthening canoccur as the local health system can be enhanced by partnerships that contribute in specific areas, for example the

DangrigaCancer Centre is owned and operated by a Belizean doctor who practices in the USA and occasionally brings fellow specialists to provide treatment services at minimal costs.

Acknowledging though that health workers have an inherent right to migrate, the Government of Belize is advised to adopt the WHO's 2010 Code of Practice on the International Recruitment of Health Personnel. The Code of Practice seeks to regulate the migration of health personnel in a way that mitigates the damage to developing countries such as Belize. Other main recommendations focus on increasing the production of HRH. This can be accomplished via the provision of bursaries to students in these areas. Retention strategies are also required to provide pathways for these health professionals.

Also being recommended is technical assistance to the Ministry of Health, the Belize Medical and Dental Council and the Nurses and Midwives Council to strengthen the regulatory framework so that they are all able to better keep abreast in tracking their members. At the present time, should a nurse or a doctor leave public employment, the Ministry of Health is not mandated to inform the respective council. Under a strengthened regulatory framework, this would be mandatory. Also mandatory would be the health professional informing in writing the respective council of any changes to his/her employment status or location of employment. This would greatly assist in tracking private doctors and nurses as they relocate to other areas of the country as well as if they migrate abroad.

Finally, given Belize's focus on a primary health care model as the basis of its health care system, some consideration ought to be given to further strengthening of the Community Health Workers. These health volunteers are at the base of the local health system and are the most widely dispersed health worker. Consideration is justified because these unheralded workers are most unlikely to migrate since destination countries are selective in their recruitment efforts and exclusively require credentialed professionals as migrants.

PART 1 – INTRODUCTION: POLITICAL, ECONOMIC & SOCIAL CONTEXT

Belize is the only English - speaking country on the Central American isthmus. It is more similar to the other English–speaking Caribbean islands in culture and politics. Though English remains the official language, due to its location, Spanish is widely spoken and is the first language for substantial numbers of the country's population. The country is bordered on the north by Mexico and on the west and south by Guatemala. Based on its historical experiences and its location, Belize is a member of both CARICOM and SICA.

The Caribbean Community (CARICOM) is an organisation of 15 Caribbean nations and dependencies. CARICOM's main purposes are to promote economic integration and cooperation among its members, to ensure that the benefits of integration are equitably shared, and to coordinate foreign policy. Its major activities involve coordinating economic policies and development planning; devising and instituting special projects for the less-developed countries within its jurisdiction; operating as a regional single market for many of its members (CARICOM Single Market); and handling regional trade disputes.

CARICOM Single Market and Economy, also known as the Caribbean Single Market and Economy (CSME), is an integrated development strategy envisioned at the 10th Meeting of the Conference of Heads of Government of the Caribbean Community which took place in July 1989 in Grand Anse, Grenada. The Grand Anse Declaration had three key Features:

1. Deepening economic integration by advancing beyond a common market towards a Single Market and Economy.
2. Widening the membership and thereby expanding the economic mass of the Caribbean Community (e.g. Suriname and Haiti were admitted as full members in 1995 and 2002 respectively).
3. Progressive insertion of the region into the global trading and economic system by strengthening trading links with non-traditional partners.

The Central American Integration System (Spanish: *Sistema de la IntegraciónCentroamericana*; SICA) is the economic and political organization of Central American states since February 1, 1993. It was on December 13, 1991, however, when all the countries of the ODECA (Spanish: Organización de EstadosCentroamericanos; ODECA) signed the Protocol of Tegucigalpa which extended the earlier cooperation in search for regional peace, political freedom, democracy and economic development.

In 1991, the institutional framework of SICA included the States of Guatemala, El Salvador, Honduras, Nicaragua, Costa Rica and Panama. Belize joined in 2000 as a full member, while the

Dominican Republic became an associated state in 2004 and a full member in 2013. Recently, Mexico, Chile and Brazil became part of the organization as regional observers; while the Republic of China, Spain, Germany and Japan became extra-regional observers. The SICA has a standing invitation to participate as observers in the sessions of the United Nations General Assembly and maintains permanent offices at UN Headquarters.

Four countries, Guatemala, El Salvador, Honduras, and Nicaragua, are going through a process of political, cultural, and migratory integration and have formed a group called The Central America Four or *CA-4*, which has introduced common internal borders and same type of passport. Belize, Costa Rica, Panama and Dominican Republic join the *CA-4* only in matters of economic integration and regional friendship.

Membership of CARICOM's CSME features freedom of movement for certain categories of skilled labour among the member countries. A clear implication of this is that qualified health professionals from CSME countries can practice their profession in Belize. The situation is different with SICA, where in the absence of a freedom of movement, heath professional from those countries and all other non- CSME countries need a work permit to secure employment in Belize.

The most recent population estimates record 342,636 persons (LFS, SIB 2012). Given a land area of 8,867 square miles, the country has one of the lowest population densities in the region. One implication of this is that infrastructural costs of development, including per capita health care expenditures tend to be high since small numbers of persons are spread out across a geographical wider area. The hundreds of miles of unprotected and porous national borders, specifically with Guatemala, pose a challenge to health care authorities in dealing with unregulated migration and diseases being transmitted by mobile populations. The country has several different ethnic groups. The most recent census estimates are that Mestizos (a mixture of Spanish settlers and Maya) are 50% of the population, followed by Creoles (a mixture of English settlers and African slaves) at 21%, the indigenous Maya at 10% and Garifunas (a mixture of African slaves and Carib/Arawak Indians of the Caribbean) at 4.6%. Other ethnic groups include the Mennonites, East Indians, Arabs and Indians. Some 6% of the population is of mixed origins. The existence of various ethnic groups challenge the health care system to deliver care in a manner that is respectful of cultural norms and traditions.

ECONOMIC CHARACTERISTICS

Belize has a small open economy. While the country's exports have traditionally been agricultural, with sugar, citrus, bananas and marine products being its main exports as it transacts with its main trading partners, the United States of America, Mexico the United Kingdom and other EU countries. The agricultural exports depend substantially on migrant labour, some of whom are undocumented. This again poses specific challenges for health care authorities. The discovery of petroleum in 2005 contributed greatly to the stabilization of export earnings and Government revenues at a time when the global economy entered a recessionary phase. One result was that even though Belize felt the impact of the global recession, real economic growth continued and averaged marginally over 2%, since 2008, with the rate being highest at 5.3% in 2012.

The country remains dependent on imports and over the period 2005 to 2012, the trade gap widened considerably. One result of being so dependent on imports, including fuel, is that imported inflation increases several costs, including medical equipment and supplies, almost all of which are imported.

The most recent economic outlook report published by the Central Bank of Belize forecasts growth in GDP fueled by Government's capital spending programme and supplemented by buoyancy in the tourism, construction, and fishing subsectors. The CBB reports buoyancy in tourism is supported by broad based economic activity as a healthier US economy June 2012. Meanwhile, buoyancy in tourism supported broad-based economic activity as a healthier US economy reduced uncertainty in the European Monetary Union and sustained marketing efforts by the Belize Tourism Board resulted in an 8.1% increase in overnight tourism arrivals. The cruise segment also benefitted, and with the deployment of larger ships, disembarkations rose by marginally in excess of 4 percent. An importance of tourism to the field of health is that Belize is seriously considering medical tourism and national consultations with stakeholders in that regard are advanced.

Belize relies substantially on various forms of taxation, whether on international trade and income and consumption based taxes, for the bulk of its revenues. These taxes are the principal source of funding for Government's national budget, which funds the Ministry of Health and all the other line ministries.

SOCIAL CHARACTERISTICS

Poverty in Belize is officially defined as a consumption level not exceeding $10.00 per day for a family of five or an annual consumption of some $3587.00. Based on that definition, some 41.3% of the Belizean population was deemed to be poor in 2009, the last year that a Living Standards Measurement Survey was undertaken. Of the 41.3%, some 15.8% were regarded as indigent. Poverty and indigence are unevenly distributed across the country with the greatest concentration being in rural Toledo District and urban Belize City. Poverty and indigence also affect some ethnic groups worse than others.

The high levels of poverty and indigence pose particular problems for the health care system. There is a Government funded National Health Insurance Scheme (NHIS) for the Southern Districts and Southside Belize, already identified as among the poorest areas, but this programme has yet to be extended countrywide. There are also specific programmes to assist the indigent including a Conditional Cash Transfer programme, where money is provided to poor families on the condition that their children attend school and are immunized on schedule. Government funds a food pantry programme whereby a basket of basic food items is sold at half price to targeted recipients. There is also a level of financial assistance to the elderly, and to counter observed levels of malnutrition, the Ministry of Health provides Incaparina, a protein food nutrition supplement, mainly to families in southern Belize.

Belize's homicide rate is among the highest in the region. In 2012, the country's homicide rate per 100,000 population earned a 6th place ranking on the list of the most violent countries prepared by the UN Office on Drugs and Crime. Most of the perpetrators and victims of homicide are young males based in urban locations. The high homicide rate imposes huge costs on the tertiary health care system as most of the victims interface with the Karl Heusner Memorial Hospital, the country's only tertiary care facility.

A recently concluded assessment of the country's Millennium Development Goals found that Belize will not meet many of its health indicators before the end of the MDGs in 2015.

PART 2 – BELIZE'S NATIONAL HEALTH SYSTEM

The national Public Health System in Belize provides universal access to personal and population based services, essentially at no direct cost to the individual. Belize has decentralized administrative authority for health services to bring decision making functions closer to the stakeholders. Based on the decentralization, there are now four (4) health regions that cover the entire country: the Northern Region which encompasses the northern districts of Corozal and Orange Walk, the Southern Region which covers Toledo and Stann Creek, the Western Region which covers the Cayo District and the Central Region, which covers the Belize district.

The Northern Health Region (NHR) serves two districts with a total estimated population of 90,524 (SIB 2012). The NHR is composed of two (2) public Health Institutions (Northern Regional Hospital and Corozal Community Hospital), eleven (11) Health Centres and sixteen (16) Health Posts. The Regional Hospital has 57 beds and Corozal Community Hospital (CCH) has 30 beds. The Southern Health Region has two (2) Public Hospitals, fourteen (14) Health Centres and twelve (12) Health Posts and the region serves a population of 69,371 persons (SIB 2012). The two public hospitals are Southern Regional Hospital (formerly Dangriga Hospital), which has 52 beds and Punta Gorda Hospital/ Community Hospital, which has 30 beds. The Western Region has 2 public hospitals - the Western Regional Hospital in Belmopan and the San Ignacio Community Hospital and serves a population of 80,694. The Central Region serves a population of 102,047 and has the Karl Huesner Memorial Hospital, the country's only referral hospital, three Polyclinics II: Matron Roberts, Cleopatra White and San Pedro, ten health centres: Port Loyola, Queen Square, Hattieville, Double Head Cabbage, Ladyville, Maskall, Crooked Tree, Burrell Boom, Gales Point and Caye Caulker and the Port Loyola Mental Health Acute Day Hospital).

A comprehensive package of health services is now delivered through these four administrative regions. The provision of hospital based care in these four regions includes inpatient and outpatient care, including accident and emergency, paediatrics, obstetrics and gynaecology, internal medicine and surgical care. Clinical and non-clinical support services and some specialized tertiary services are also provided. A network of clinics, permanently staffed health centres and un-manned health posts is available to address the primary health care needs of the population. These are supplemented by mobile health services, community nursing aides, community health workers and traditional birth attendants working throughout the rural communities of the country.

Belize's health system is challenged by the increasing burden of chronic non-communicable diseases and lifestyle ailments. For many years now according to various annual issues of SIB's Abstract of Statistics, the five leading causes of death have been lifestyle related. The most recent publication (Abstract 2012) cites the leading causes of death in 2011 as Diabetes, Homicides & Injury purposely inflicted, Ischaemic Heart disease, HIV/AIDS and Cerebrovascular disease. (SIB, Abstract of Statistics 2012: 97).

Regarding Diabetes, recent data from the International Diabetes Foundation reveal that in the age cohort 20 to 79 years, there are some 45,000 Belizeans living with Diabetes. On a per capita basis, these numbers translate into Belize having a diabetes rate that is regarded as the highest in North American and the Caribbean. The Belize Diabetes Association (BDA) reports there are no data on the amount of Belizeans under 20 years who are living with Diabetes, but its membership rolls have only 50 persons registered in the under 20 age cohort. A recent study revealed that Belize spends some US $377 per person annually treating diabetes.

Data provided by the Ministry of Health indicated that a recent survey noted that 6 in every ten Belizeans are either overweight or obese. These conditions can lead to other health complications, including diabetes, hypertension and heart disease, all previously cited as among the leading causes of death.

Also to be included as a challenging facing the health system in Belize is the cost of treating violence and related injuries. On a per capita basis, Belize has one of the highest homicide rates on the world and most of the victims are as a result of gunshots. The overwhelming majority of end up at the country's only tertiary health care facility Karl Heusner Memorial Hospital, where the costs of treating every gunshot victim has been estimated at thousands of dollars.

COSTS OF TRAINING HRH PERSONNEL

To ascertain costs spent by Belize on training medical personnel, focus only on doctors and nurses. Belize has no medical facility where physicians are trained. However various categories of nurses are trained at Belize's national university, the University of Belize.

Data accessed from the University records indicate that since 2005, nurses have been trained; detailed in Table 1.1.

Table 1.1: Nurses Trained at the University of Belize 2006 -2012

Year	Enrolment	Graduated
2006	128	4
2007	133	21
2008	197	20
2009	201	15
2010	204	14
2011	226	31
2012	270	21

Source: University of Belize

The nursing programme at the Faculty of Nursing & Allied Health of the University of Belize is a four year Bachelors programme that qualifies successful students to practice nursing in Belize after a qualifying examination set by the Nursing Association of Belize. As noted from the above table, graduation rates appear to be abysmally low since given the four year duration of the course of study, the 128 students who enter in 2006 would have expected to graduate in 2010. However in 2010, there were only 14 graduating nurses. Of the 133 student nurses enrolled in 133, 31 graduated. And of the 197 enrolled in 2008, 21 graduated in 2012.

Therefore for the three years from 2006 to 2008, inclusive, the completion rate averaged marginally less than 15%. This amount is regarded as a maximum since the repetition rate is unknown. Hence while 2010 remains the earliest graduation date for students who entered in 2006, these students could have repeated and therefore graduated after 2010.

The University has also provided data indicating the approximate costs of training its nurses and other students.

Table 1.2: Cost of Training at the University of Belize

UNIVERSITY OF BELIZE

Estimated cost to attain a Bachelors Degree at UB for two regular years plus one summer (except for Nursing and History Programs)
These are approximate figures – additional fees may be added.

ITEM	SEM I	SEM II	SEM III	SEM IV	SUMMER	TOTAL
Tuition (@ $90.00 per contact hour) 18 cr.	$1,620.00	$1,620.00	$1,620.00	$1,620.00	$540.00	$7,020.00
Registration	$20.00	$20.00	$20.00	$20.00	$20.00	$100.00
Administrative Fee	$20.00	$20.00	$20.00	$20.00	$20.00	$100.00
Security Fee	$20.00	$20.00	$20.00	$20.00	$20.00	$100.00
Student Activity Fee	$25.00	$25.00	$25.00	$25.00	$25.00	$125.00
Computer Lab per Semester	$165.00	$165.00	$165.00	$165.00	$165.00	$825.00
Exam Fee ($5.00 per course)	$30.00	$30.00	$30.00	$30.00	$10.00	$130.00
Student ID (annual)	$10.00	$10.00	$10.00	$10.00		$40.00
Campus Development	$100.00	$100.00	$100.00	$100.00	$100.00	$500.00
UB External Relations	$10.00	$10.00	$10.00	$10.00	$10.00	$50.00
Library Fee	$20.00	$20.00	$20.00	$20.00	$20.00	$100.00
Wellness Services	$20.00	$20.00	$20.00	$20.00	$20.00	$100.00
Books	$250.00	$250.00	$250.00	$250.00	$80.00	$1.080.00
Total	**$2,310.00**	**$2,310.00**	**$2,310.00**	**$2,310.00**	**$1,030.00**	**$10,270.00**

Description of Calculated Fees (Specific to individuals)

Science Lab	**$100 per Science course** (chem, bio, phys, engineering, architecture, marine science
Info Tech Advanced System Dev Lab	$100
ATLIB	$7.00 Full_time & $3.50 Part-time

Total: $10,270.00 ***(all the fees and tuition for the entire period)***

FEES NOT PAID EVERY SEMESTER

Application Fee	$30
Graduation Fee	$125
Late Registration	$200

Source: University of Belize

Data in Table 1.2 is cited per semester and there are at least two semesters in one year, excluding the summer semester. The over $10,000 annual school fees estimated by UB would have to be doubled for Nursing students since that is not two year programme, but a four year programme. Even the doubling of the costs to $20,000 remain conservative since these are limited to tuition fees costs only and the many other student related costs including accommodation in Belmopan for out-district students, food, transportation etc. would easily double the UB costs. The source of funds may also impose additional costs on the family since student loan rates start at 8%, but are as high as 11% at some institutions.

From the above tables, total expenditures on training nurses at the University of Belize over the period are detailed in Table 1.3.

Table 1.3:Total Public & Private Costs of Training Nurses in Belize

Year	Number of Graduates	UB – Public Sector costs	Private costs	Total costs
2006	4	80,000	160,000	240,000
2007	21	420,000	840,000	1,260,000
2008	20	400,000	800,000	1,200,000
2009	15	300,000	600,000	900,000
2010	14	280,000	560,000	840,000
2011	31	620,000	1,240,000	1,860,000
2012	21	420,000	840,000	1,260,000

Notes * Private costs are estimated at twice public costs since they are not subsidized.

HEALTH PROFESSIONAL REGULATORY ENVIRONMENT IN BELIZE

Similar to many other developing countries, Belize's health professional regulatory environment and framework are still at infancy. Of all the healthcare professions, only pharmacy, nursing and medical profession have a regulatory body established by an Act of Parliament.

The Belize Medical and Dental Council, otherwise known as the Council, is established by the Medical Practitioners' Registration Act, Chapter 318 of the Substantive Laws of Belize, Revised Edition 2000 – 2003. The BMDC is responsible for regulating the practice of medicine in all its aspects and ramifications. It is a body corporate with perpetual succession and a common seal. It is composed of seven members drawn in accordance with the Act, who could be tenured or non-tenured. The Chairman presides over the council meetings while the administrative functions are handled by a Registrar, both appointed on the recommendation of the Minister

for Health. The Registrar maintains and updates the medical practitioners register and publishes the list of registered persons annually in the Gazette in accordance with the Act. A person is qualified to be registered as a medical practitioner if he or she holds a diploma, degree, fellowship, membership, license, certificate or other status or form of registration or recognition granted by a university, college or board empowered to confer authority to practice medicine by the law of the country or place where it is granted provided that such diploma, degree, fellowship, membership, license, certificate or other status or form of registration or recognition is in the opinion of the Medical Council, evidence of satisfactory medical training (Medical Practice Act, 2000).

A certificate of registration is issued upon the payment of the prescribed fee once the council is satisfied that the individual has met the requirements of the Act. Every registered member is required to pay annual fee at prescribed dates to the Council for the renewal of license to practice and such renewal is granted as long as the applicant is in good professional standing. The Council in certain cases could grant provisional or temporary registration to interns, volunteers etc. in accordance with the Act.

The CSME confers on applicants registered in any CARICOM member states automatic recognition and licensure to practice medicine in Belize. Reciprocal recognition also exists for qualified individuals from countries that have mutual agreements with Belize. For all other applicants, they are required to submit to an examination prepared and administered by the Council in order to be registered. There was 390, 29 and 37 full registration, temporary and provisional registered Medical personnel, respectively as published by the Belize Gazette supplement dated February 16th, 2013.

Besides the BMDC there exist the Belize Medical and Dental Association reorganized by the Medical Council. The BMDA membership is voluntary but open only to registered medical practitioners. The aims and objectives of the Belize Medical and Dental Association include:

- To compile a comprehensive directory of physicians and dentists residing in Belize;
- To promote the interest of physicians and dentists in Belize;
- To support physicians and dentists, as well as other and deserving professionals pursuing their careers in those fields or any other fields in Belize and elsewhere.

The BMDA is represented at the Council through the substantive President thus ensuring mutual relationship between these two bodies in the interest of medical practice in Belize. Both the BMDA and the BMDC do not have an office set aside specifically for their operations but

rather rely on the contact address of the Chairman and Registrar for all correspondence and businesses.

The Nursing and Midwifery Council of Belize is a statutory body responsible for the regulation of nursing practice in Belize. It was established by the Nurses and Midwives Registration Act Chapter 321 Revised Edition 2000, Laws Revision Act, Chapter 3 of the Laws of Belize. The Council is a body corporate with perpetual succession and common seal. The Council is comprised of 13 members selected in compliance with the Act and is headed by a Chairman who presides over all council meetings while the Registrar who holds administrative position performs the day to day administrative duties. The Registrar therefore maintains and updates the register of professional nurses, nurses with expanded roles, midwives and practical nurses subject to and in accordance with the Act.

It is noteworthy that to practice in the region, graduate nurses in all CARICOM states have to sit an examination to acquire the appropriate license to practice their profession. It is a four-paper examination that is prepared by the Regional General Nursing Councils. Nurses who take and pass this exam can practice in their country and anywhere in the Caribbean where this exam is administered. This exam ensures that the standard of nursing care and health care are of the highest level and they all can practice at established standards. Registration could also be conferred on nurses by virtue of existing reciprocal registration between Belize and other international countries as long as the applicant satisfied the Council that he or she is dully registered in such country that has such reciprocal agreement with Belize. Also at the discretion of the Council, an applicant may be endorsed into the register on the account of professional standing. There is also the temporary registration status that can be granted to some categories of applicants such as volunteers or to those that possess skills or qualifications that are in critical demand in Belize or based on professional status until the individual sits and pass the prescribed exam. Other than that, the applicant will have to submit himself to the Regional Examination for Nursing Registration for the CARICOM. In order to apply for a nursing license in Belize, one needs to fill out an application and should include the following:

- Proof of citizenship (birth certificate). If you are a US citizen you need to submit a copy of your birth certificate only.
- Valid identification document (Passport or Social Security Card)
- Notarized and authenticated original degree, diploma or certificate. The final authentication must be that of the Embassy of Belize or British High Commission of that country.
- Official un-tampered transcript mailed directly to the Nurses and Midwives Council at P.O. Box 933, Belize City, Belize.

- Official translation to English if documents are in any other language.
- Proof that applicant is able to read and write English.
- Non-refundable Application Registration Fee of $150.00Bze made payable in cheque or cash deposit to the Nurses and Midwives Council account.
- Be prepared to provide any other information or record as requested by the Registrar of the Nurses and Midwives Council from time to time.

Since English is the official language of communication in Belize, nurses that are from non-English speaking countries must sit and pass Test of English as a foreign language (TOEFL) before licensure. There is a mandatory orientation program organized for every nurse including immigrant nurses, before induction into the nursing profession in Belize. The Council prescribes mandatory continuous education for recertification of all registered nurses on annual basis. This is to ensure that nurses are abreast of new trends in the profession as well as update their skills and knowledge at all time and in line with international best practices.

On the other hand, there is the Nursing Association of Belize reorganized by the Act. The Presidents of the various nursing cadres in Belize sits in the Council such that there is mutual relationship between these two bodies. Membership of the NAB is voluntary. There are about 423 registered nurses in Belize as at December, 2013.

It is noteworthy that medical practitioners and nurses wishing to visit Belize on a temporary basis as part of medical and humanitarian missions must receive approval from the Medical Council of Belize and the Nursing Council of Belize prior to arrival in the country. The next step involves an application for temporary registration by the Medical Council of Belize (MCB) and/or the Nursing Council. The form must then be filled out and submitted to the Secretary of the Medical Council Belize and/or Registrar of Nurses and Midwives Council of Belize at least three (3) months in advance (MOH, 2013). A fee of $25.00 per nurse is required. The Medical Council of Belize and/or the Nursing Council review the application form with accompanying documents. The Council will decide whether or not a personal interview is necessary or not.

The practice of pharmacy in Belize is currently regulated by the Chemist and Druggist Act, Chapter 311 of the Laws of Belize, enacted on January, 1940 and the Antibiotic Acts, Chapter 33 which was first enacted in May, 1948. The Pharmacy Board is established through that act of parliament and comprises five members. Under the Act, it is mandatory that all pharmacy graduates regardless of country of origin sit and pass the Belize Pharmacy Board exam to qualify for licensure. The exam is usually taken twice in a year, in the months of July and January and comprises of four papers: Pharmacy laws, Pharmacology and Therapeutics, Pharmacy Calculation, Dispensing and Oral examination. In order to be a licensed pharmacist in

Belize, a formal written application and supporting document should be submitted to the Board through the registrar, this is followed by the payment of prescribed fee of $25 per paper.

The Board at the end of verification of the application and supporting documents and having satisfied itself that the applicant is qualified in accordance with the act, administers the prescribed pharmacy board exam to the applicant. On successful completion of the prescribed exam, the applicant pays a sum of $10 to the Council for issuance of license certificateand for the admission of his/her name in the register. The Registrar maintains and updates the name of all registered members and publishes same on an annual basis in the Gazette. As at November, 2013, there are 122 registered members of Pharmacy profession in Belize.

Established in the 1950s, the Pharmacist Association of Belize became a legal body in 1992. Besides representing the interest of pharmacists, the organization also protects the public health. Membership is voluntary but open to registered pharmacists with a total of about 78 members as at December 2012. It is noteworthy that there was a new pharmacy bill introduced in 2006 to repeal and amend the Pharmacy Act in line with current realities but that bill is still pending at the Parliament.

As noted earlier, but for the Nursing, Medical and Pharmacy professions, all other healthcare professions in Belize have no standards and regulatory framework. In 2009, the Allied Health Professions bill was introduced in Parliament to provide for the control and regulation of Radiographers, Physical Therapists, Medical Laboratory Technologists and other health professionals, who are not controlled or regulated under any other law. However, that bill is still awaiting passage at the parliamentary level.

The table below provides a listing of the selected registered medical personnel in Belize from 2007 to 2012.

Table 1.4: Registered Medical Personnel 2007-2012

Year	2007	2008	2009	2010	2011	2012
Physicians	256	259	241	241	241	395
Physicians per 10,000 population	8.2	8.0	7.2	7.5	7.5	11.5
Dentists	31	26	12	12	12	44
Dentists per 10,000 population	1.0	0.8	0.4	0.4	0.4	1.2
Nurses	522	499	469	469	469	423
Nurses per 10,000 population	16.8	15.5	14.1	14.5	14.5	12.3
Community Health Workers	204	181	208	208	208	287
CHW per 10,000 population	6.5	5.6	6.2	6.4	6.4	8.4
Pharmacists/ Dispensers	49	41	112	112	112	112
Pharmacists/ Dispensers per 10,000 population	1.6	1.3	3.4	3.5	3.5	3.5

Source: Abstract of Statistics 2012, SIB (90)& MOH

MIGRATION

With its low population density, Belize has long been a magnet for immigrants. Immigration inflows increased considerably in the 1980s with civil strife in many of the neighbouring Central American republics. The most recent census reports that the Foreign Born Population (FBP)

represented 14.8% of the national population and that some 38% of this FBP arrived in the decade commencing in year 2000. Detailed SIB estimates indicate that some 1500 immigrants are added to the national population on an annual basis.

A recent study found an overwhelming majority of the migrants are agricultural labourers. While it is not known how many of these migrants are health workers, given the reality that these health workers must apply to existing national regularity agencies in order to practice medicine.

The history of Belize is a story of people on the move. Caribbean migration is not a new phenomenon. Historically most Belizeans have migrated to the USA and this was facilitated by push and pull factors. These included but may not be limited to wages and increased earning capacity, commonality in language (English) and social and family networks resident in the United States. More recently, the United States has engaged in targeted active recruitment of specific health professionals for example, physicians, nurses and health researchers. With the passage of the Patient Care &Affordable Care Act in 2010 and its on-going implementation, it is anticipated that the demand for physicians in that country will continue as will, what the New York Times regard as “poaching of doctors” from developing countries, including Belize. (New York Times, November 26, 2004).

Immigration into Belize increased considerably in the 1980’s when civil war in many of the neighbouring republics caused huge inflows of refugees into Belize. While the end of the conflicts resulted in noted reduction in the inflows, the number of immigrants has never completed stopped and the most recent SIB data indicate that some 14.8% of persons in Belize are foreign born, with the Guatemalans – at 19,000 – being the single largest majority of the foreign born population. No data are available on the others who immigrated but have not sought official documentation.

While migration trends into and out of Belize can be clearly defined, no data existed on the health professionals involved. In the recent past though, since Belize approved the CSME freedom of movement, the movement of health professionals to CSME can be traced since they must apply for a CARICOM Skills Certificate. Table 1.5 below shows the category of persons who can apply for the Skills Certificate.

Table 1.5:Certification of Recognition of CARICOM Skills Qualification (Skills Certificate)

Categories	Definition of for free movement of skills
Graduates	Graduates are persons who have obtained at least a Bachelor's Degree from a recognised university.
Media Persons	Media Persons are persons whose primary source of income is drawn from media and media-related work or persons who are qualified to enter this field.
Artists	Artists are persons who are active in or qualified to enter a particular field of art with the specific purpose to earn a living.
Musicians	Musicians are persons who are active in or qualified to enter a particular field of music with the specific purpose to earn a living.
Sportspersons	Sportspersons are persons who are active in or qualified to enter a particular field of sports with the specific purpose to earn a living as a professional or semi-professional.

For non–CSME nationals immigrating to Belize and seeking employment, they require a work permit provided by the Ministry of Labour. While there are no data on the number of health professionals in possession of CSME skills certificate, data on HRH in possession of work permits are detailed in Appendix 6. Some general impacts of the loss of health professionals are loss of skilled and professional labour categories , loss of public investments since education in Belize is publicly funded in varying degrees at all levels, and brain drain.

Belize relies on international healthcare volunteers to shore up health workforce shortages most especially in the rural areas. Notable among the healthcare volunteers in Belize are the Cuban Medical Brigades and the Nigerian Technical Aids Corps. The TAC Volunteer program and the Cuban Medical Brigades are both coordinated by a Technical Advisor in charge of international cooperation within the Ministry of Health.

The Nigerian TAC program is coordinated under a bilateral agreement between the Governments of Nigerian and Belize. This agreement is renewed every two years and the most recent renewal was signed in October 2012. Under that agreement, Nigeria sends healthcare professionals based on a request from Belize and in support of HRH that is in critical demand. The tenure of TAC volunteers, unless otherwise specified, is usually two years.

Under the agreement, the Nigerian Government is obligated to provide the following:

Table 1.6: Obligations of the Nigerian Government underthe agreement with the Belize Government

• TransportvolunteersfromNigeria's capital city Abuja to Philip Goldson International Airport, Belize City.
• Provideeachvolunteerwitha onetimesettlementallowance of USD $500 onarrival in Belize.
• A monthlystipend of USD $1200 if a doctor and USD $1000 toother cadres.
• Anadditionalmonthlypayment of N20,000intothe individual volunteer'saccountdomiciled in Nigeria forupkeep of familymembersleftbehind.
• A sum of USD $100 annuallyforleaveallowance.
• A return ticket at thecompletion of thetwoyeartenure.

On arrival, the Belize Government is responsible for hotel accommodation of the TAC volunteer until they are deployed to areas of primary assignments. Usually, a one day orientation program is organized to help volunteers integrate and adapt to the Belize socio-cultural environment prior to departure to area of posting. A reasonably furnished housing accommodation is provided by Belize Government, through the primary employer, as well as transportation to and from work place throughout the two year period. Volunteers do not go through the normal registration procedures with professional bodies but may be issued a temporary registration status to practice. Belize bears all the costs of immigration procedures upon their arrival, such as work permits for the two years period.

There are currently about 23 TAC volunteers serving across the six districts of Belize. Volunteers may opt to stay behind and join the Belize workforce after the two years tenure. Under that circumstance, all existing laws will be applied including sitting and passing the relevant professional exams and all public service rules in Belize. Today, several ex-Nigerian TAC volunteers make up the current Belize workforce.

The Cuban Medical Mission in Belize dates back to 1998 and is based on a bilateral agreement between Belize and Cuban governments. The agreement is usually renewed on biannual basis and the latest renewal was signed in July, 2013. The Belize Government, under this agreement, is responsible for the following:

Table 1.7: Responsibilities of the Belize Government under the Agreement with Cuban Governments

• Air passage of brigades.
• Allimmigrationprocessessuch as visa and workpermits.
• Accommodation of volunteers.
• Transportationtowork, meetings and anyofficialfunctionsrelatedtotheirduties.
• Payment of a monthlystipend of $1200.
• Return air passage at theend of thetwoyearperiod.

It is noteworthy that the credentials of volunteers are vetted before deployment to ensure that training and experience meets the HRH needs of Belize. Similar to the Nigerian TAC, the Cubans are exempted from licensing procedures.

There are about 88 Cuban brigade members currently serving across the six districts of Belize. It is mandatory that volunteers return home after the two year period but there have been some exceptions where by a number of ex-Cuban Brigades stayed behind and joined the Belize workforce. In such circumstances, they lose all volunteer privileges and are subject to all relevant laws and regulations including presenting themselves for relevant professional regulatory exams.

IMPACT OF HRH MIGRATION ON HEALTHCARE DELIVERY IN BELIZE

The migration of health workers impacts all affected countries in some way or the other. While this report has focused on intra country migration between Belize and other countries, there is also inter country migration – within Belize – that needs to be addressed to enhance the equity of access to health care within the country, specifically the urban and rural areas. Focusing on migration between countries though, there are multiple impacts, but these have not been measured. First is the loss of investments in scarce human resources. It costs some $20,000 to train a nurse in Belize and every nurse that leaves represent an investment loss.

According to the World Health Organization (1946), health is a complete state of physical, mental and social well-being and not merely the absence of disease or infirmity. However, it is noteworthy that there cannot be healthcare without health workforce; a very important component of the health care system. Belize, like most other countries of the world, is grappling with critical shortage of health workers. The Belize HRH core data set published in 2009 revealed that about 2,283 workers were employed in the health sector. According to the baseline report on the 20 HRH goals published that same year, health professional to

population density ratios were 7.5 for physicians, 10.2 for nurses, 1.1 for midwives, for a country total of 18.8. From the 2013 report on the status of Belize with respect to the 20 HRH regional goals, there were 11.53 physicians, 11.2 nurses, and 1.2 midwives per 10,000 populations respectively, for a country total of 23.87. While that could be considered a modest improvement from the 2009 report, Belize is yet to attain the WHO minimum standard of 25 professionals per 10,000 of the population. Several factor could account for health workforce shortages, notable among them is migration.

The strategic location of Belize at the Central American isthmus and close to the major economies like Canada and United States of America places Belize as a transit route for potential migrants. The country's economic climate and relative better wage structure when compared to other Central American and Caribbean countries as well as the CSME that allows for free movement of professionals attracts health workforce to Belize. The reliance on migrant workforce has its pros and cons. Based on the 2009 core date set for the Belize HRH, migrants make up 32percent of the total workforce. They are professionals in various fields contributing to the healthcare delivery. It is important to note that Belize also relies on Cuban Medical Brigade, Nigerian TAC volunteers, the US Peace Corps etc. to shore up health human resource needs.

Whether migrants, mission groups or volunteers these health workforce brings with them their expertise and international experience to bear upon health care delivery in Belize. Although not quantifiable, their individual and collective contribution improves the health outcomes and by extension the overall health status of Belizeans. There is also the possibility of knowledge transfer to Belizeans while working as a team with migrants. It is important to mention the fact that immigrants may not be in a better position to provide a culturally sensitive care due to their foreign background unless there is an orientation program given at inception to bridge such gaps. The impact on retention may not be desirable given that immigrants are also not suited for service delivery in rural remote areas. Available evidence supports the fact that health workforce recruited from their own community would most likely return to their community and most often are retained for long and are more capable of providing a culturally sensitive healthcare. Immigrants, besides providing healthcare services, pay income tax and make daily expenditure, all of which adds to the Belize's GDP as well as economic growth. Since there is a cyclical interaction between income and health, improved economic conditions will likely translate to a healthier nation.

While Belize is a hub for migrants coming from other regions, it is difficult to determine the accurate number of health workforce that leaves the country at any given period of time. It is possible to estimate the number of workforce that moved to other CARICOM countries but no

records exist on outmigration to other countries. It is obvious that various push factors could act as incentive for outmigration to US and Canada. Outmigration has far reaching impactson Belize's capacity to deliver healthcare. It aggravates the already existing workforce shortages thus further undermining the country'seconomic and social resilience. It represents an economic loss to the health system given the investment done to provide formal and in-service trainings. It also has a negative psycho-social impact on the remaining professional colleagues due to break in team spirit as well as the impression that there are places out there better than the status quo.

It is also to be mentioned though that outmigration has its positive impacts on the Belize healthcare system as is the case with other countries. Out-migrants acquires new skills and knowledge from the destination countries which they bring back home with them at the end of their sojourn. Out migrants make remittances to family members which could be considered as part of the country's return on investments since such remittances eventually end up in the national economy and eventually trickle down to the health sector. In addition, there have been instances where health professionals assisted the Belize health system through medical missions or direct donation to the health sector. So even as migration has its negatives, the emphasis should be how best to harness it in order to improve the Belizeanhealth sector. Perhaps Belize could learn from the experiences of countries such as The Philippines that rely on health workforce migration as a strategic labour market while still maintaining self-sufficiency in health human resources at home.

RECOMMENDATIONS

A first recommendation would be to increase production of HRH personnel. This can be accomplished by providing bursaries to student nurses at UB and thereafter bonding them to serve for a specified time after the completion of their studies. This strategy has been effective in increasing the number of trained teachers both at the primary and secondary level and will likely be similarly successful if applied to the nurses studying at UB.

Belize does not have any educational facility where physicians are trained and it would not be feasible at this time to establish such a facility. However the number of local physicians can be increased by similarly providing bursaries and financial assistance to qualified locals willing to study medicine at regional universities. Due to its membership in CARICOM, Belize already provides annual funding assistance to the University of the West Indies, which has an established Faculty of Medicine. In addition to bursaries, Government can also require the student to have a guarantor. This requirement may enhance the likelihood of the newly qualified physician returning to Belize after graduation.

While the provision of bursaries will likely enhance HRH production, additional focus must also be placed on HRH retention strategies. These include enhanced benefits, creating professional pathways for health care providers, and a supportive work environment.

Regarding enhanced benefits, these may be pivotal at the lower levels or junior categories of health professionals whose remuneration places them above the national poverty line, though they could be regarded as the working poor. As noted in Table 1.8 below, the newly designated post of Patient Care Assistant (formerlyNurse's Aide) now starts at Pay Scale 7 having been moved only last year from Pay Scale 3.

The table also shows that doctors, specifically medical officers, start at Pay Scale 21.While it can be argued that this level of remuneration may be incompatible with their wide ranging duties and responsibilities, it is also a fact that unlike nurses, doctors have more options to enhance their salary.

Table 1.8: Salary Scales for Selected HRH Professionals

HRH Category	Salary Scale	Salary range
Patient Care Assistant (formerly Nurse's Aide)	Pay Scale 7	
Nursing Assistant 11 (formerly Practical Nurse)	Pay Scale 10	$16,464 X $756 - $30, 828
Nursing Assistant 1 (Midwife) formerly Practical Nurse Midwife	Pay Scale 12	$18, 204 X $828 - $33,936
Nursing Assistant 1 (Rural Health) formerly Rural Health Nurse	Pay Scale 12	$18, 204 X $828 - $33,936
Pharmacist	Pay Scale 16	$24,369 X $1,056 – $44,424
Medical Officer 1	Pay Scale 21	$30, 768 X $1,320 - $55, 848
Anaesthesiologist, Cardiologist, Chest Physician, Clinical Psychologist, Epidemiologist, Forensic Doctor, General Surgeon, Gynaecologist, Health Planner, Health Economist, Neurologist, Neurosurgeon, Obstetrician, Ophthalmologist, Orthopaedic Surgeon,Pathologist, Paediatrician, and Physician Specialist	Pay Scale 23	$32,784 X $ 1,320 - $57,864

Source: GOB Circular # 6 of 2012, Estimates of Revenue & Expenditure

It is also recommended that efforts to encourage healthy lifestyle among Belizeans be redoubled. Belize's health system is predicated on a primary health care model and this posits that great emphasis be placed on the prevention of diseases. A MOH survey found that some 60% of Belizeans are either overweight or obese and this percentage can be substantially reduced via sustained advertising messages aimed at healthy living. And in this regard, the on-going efforts of many medical related NGOs such as the Belize Diabetes Association, the Belize Cancer Society and others should continue to be encouraged and supported.

Belize should adopt the 2010 Code of Practice on the International Recruitment of Health Personnel. The Code sets forth ten articles advising both source and destination countries on how to regulate the recruitment of health personnel in a way that mitigates the damage to low-income countries struggling to meet the basic health needs of their populations in a setting of serious workforce deficits. The Code recognizes "the severe shortage of health personnel... [which] constitutes a threat to the performance of health systems and undermines the ability... to achieve the Millennium Development Goals."

The Code takes into account both the right of health personnel to migrate, and there is little that Belize can do if some of its health personnel voluntarily opt to migrate elsewhere. But Belize can also make itself an attractive destination for HRH from other countries who may wish to migrate here. Belizeans do spend considerable sums accessing medical care abroad. The ease with which Belizeans could travel to both Mexico and Guatemala and the comparative cost of obtaining services in either country, results in several Belizeans visiting those countries, in addition to others, for health care reasons. A Living Standards Measurement Survey (LSMS) in 2002 found that 6.3% of Belizeans sought medical services abroad. The survey had found that the highest percentage of Belizeans who sought health care abroad were from the Corozal District (26.2%) and the Cayo District (24.6%). These districts border Mexico and Guatemala, respectively, implying that these bordering countries are the preferred foreign destination for most Belizeans who seek health care abroad.

Since the 2002 LSMS, there has been no known study to ascertain the extent of health related expenditures spent by Belizeans abroad, but there is little doubt that it is a considerable amount. That being so, and given that the country's most visited likely remain the neighbouring of Guatemala and Mexico, qualified medical practitioners from these countries could be encouraged, not necessarily to migrate to Belize, but to set up facilities here. This would represent foreign direct investment, with its multiple benefits, including employment creation and foreign exchange savings. Some foreign exchange may be saved as hard currency will no longer be required if Belizeans can access specialized medical treatment locally at affordable rates.

A final recommendation may be for the Ministry of Health to expand the cadre of Community Health Workers (CHW). These are the country's most widely dispersed health workers and have been trained as a sort of first response to health emergencies at the village level. However, unlike nurses and doctors, CHWs are unlikely to migrate given that they may not possess the professional qualifications required to practice health in developed countries. In the developed countries, which are the main destination countries for health workers from source countries such as Belize, the health workers being sought are almost exclusively certified professionals.

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APPENDIX #1

Terms of Reference

1. A compilation of the clinical science training institutions with a description of the dynamics for the training programs, titles and certificates awarded and cost of training.

    a. Quantitative data portraying the types of health profession trained in the country and the trend over time.

    b. The titles obtained nationally and internationally by the health professionals currently practicing in the country.

    c. Systems for the certification of professionals in country by different professional bodies, time frames and specific requirements by career and specialty.

2. Compilation of the laws, regional agreements and other legal instrument that allow health professionals to move within Central America and/or the Caribbean regions.

3. Analysis of the degree of implementation of the laws, regional agreements and other legal instrument in Belize.

APPENDIX #2

Course Sequence for Nurses at the University of Belize

Faculty of Nursing, Allied Health & Social Work
Bachelor Degree in Nursing Program
Sequence of Courses
20__ - 20__

FIRST YEAR

Semester I

CODE	COURSE NAME	CREDITS
ENGL1014	College English I……..	3_____
CHEM1015	General Chemistry I…….	3_____
CHEM 1015L	General Chemistry I Lab…….	1_____
BIOL1015	General Biology I……..	3_____
BIOL1015L	General Biology I Lab……	1_____
MATH1014	Intermediate Algebra……	3_____
PHIL1014	Ethics……	3_____
CMPS1004	Introduction to Computer Studies……	3_____
		20

Semester II

ENGL1025	College English II…….	3_____
BIOL2015	Human Anatomy & Physiology I……..	3_____
CHEM1032	Introduction to Organic Chemistry & Biochemistry……	3_____
CHEM1032L	Introduction to Organic Chemistry & Biochemistry Lab……	1_____
PSYC1014	Introduction to Psychology……...	3_____
SOCL1014	Introduction to Sociology……	3_____
		16

SECOND YEAR

Semester I

BIOL 3402	General Microbiology……..	3_____
BIOL 3402L	General Microbiology Lab……..	1_____
BIOL2025	Human Anatomy & Physiology II……	3_____
MGMT1014	Applied Management……	3_____
HIST1014	Belizean History……	3_____
SPAN 1025	Lower Intermediate Spanish……	3_____
NURS2051	Nursing Concepts……..	3_____
NURS2051L	Nursing Concepts Lab……	1_____
		20

Semester II

CODE	COURSE NAME	CREDITS
NURS2102	Pharmacotherapeutics……..	3
RSCH2014	Research Methods……..……..	3
NUTR2055	Food, Nutrition and Health……..	3
NURS2152	Current Issues in Nursing…….	4
NURS2202	Physical Assessment…….	3
NURS2202L	Physical Assessment Lab……	1
		17

THIRD YEAR
Semester I

NURS3051	Nursing Care of Infants & Children……..	5
NURS3051L	Nursing Care of Infants & Children Lab……..	1
NURS3101	Care of Adult Population……..	5
NURS3101L	Care of Adult Population Lab……..	1
SWRK4101	Family Violence……	3
		15

Semester II

NURS3051P	Nursing Care of Infants & Children Practicum……	7
NURS3101P	Care of Adult Population Practicum…….	7
		14

FOURTH YEAR
Semester I

NURS4051	Reproductive Health Care…….	5
NURS4051L	Reproductive Health Care Lab…….	1
NURS4051P	Reproductive Health Care Practicum……	3
NURS4101	Community Health Nursing……..	6
NURS4101P	Community Health Nursing Practicum…….	3
		18

Semester II

NURS4152	Promoting Mental Wellness……..	6
NURS4152P	Promoting Mental Wellness Practicum……	3
NURS4202	Nursing Management & Leadership…….	6
NURS4202P	Nursing Management & Leadership Practicum……	3
		18

	TOTAL CREDIT HOURS……	**138**

APPENDIX #3

Application for Medical Council of Belize

Medical Council of Belize
Belize City, Belize C.A.
c/o P.O. Box 1872

REGISTRATION APPLICATION FORM
(to be completed in duplicate)

A. **Personal Data:**

Name of Applicant: _____
Address: _____ Sex: _____ Marital Status _____
Telephone No: _____
Place of Birth: _____ Date of Birth: _____/_____/_____
(Day/Month/Year)
Citizenship: _____
Language Spoken by Applicant: First: _____ Other: _____

B. **Qualification:** **Medical Degree (and transcript):**

_____
Country where degree was obtained/Date: _____
University awarding Degree/Date: _____
Additional medical qualifications with particulars as for degree: _____
_____
_____
_____

Reasons for requesting registration in Belize:

_____
_____
_____

Name and address of two references: (One must be of the last employer)

1. _____
_____
_____

2.

_____
_____
_____

Specimen Signature: _____ Date: _____

List of documents to be submitted for Full Registration

1. Curriculum Vitae

2. Authenticated original degree, diploma or certificate. It must be authenticated with the seal and signature of (i) Dean of the University, (ii) Ministry of Education of the Country of study, (iii) Ministry of Foreign Affairs of Country of Study, and (iv) the Belize Ministry of Foreign Affairs, Embassy or British High Commissioner.

   (a)Applicants who are not nationals of CARICOM or Meso America (Mexico-Central America) are required to submit evidence of having passed one of the following examinations: CAMC, USMLE or PLAB.

   (b) Said applicants must supply the name(s) and address(s) of body/organization which can verify the authenticity of the documents submitted eg. Medical Council, Medical Association, University.

3. Letter of Good Standing from the Medical Council (or equivalent) of last country where working.

4. Current License to practice.

5. Notarized translation to English language if documents are in any other language.

6. Proof of Belizean Citizenship (birth certificate, passport).
7. Two notarized recent passport size photographs.
8. Police Record from place of residence.

9. Show TOEFL if 1st Language is not English or evidence of proficiency in the English language.

List of documents to be submitted for Temporary Registration

1. All of the above requirements except # 6/

2. Copy of the newspaper clippings advertising the said post must accompany the application form.

NB. An appointment to meet the Medical Council will be scheduled after application is processed and accepted.

APPENDIX #4

Application for Nursing Association of Belize

THE GENERAL NURSING COUNCIL OF BELIZE
FORM 2
THE NURSES REGISTRATION ORDINANCE, CHAPTER 253 OF THE CONSOLIDATE LAWS OF BELIZE, 2000

Full Name _____

Country of Birth: _____ Date of Birth: _____/_____/_____

Permanent Postal address: _____

Marital Status (Please tick)

☐ Single ☐ Married ☐ Divorced ☐ Other

Personal Contact Information: Phone Number: _____

Fax No. _____ E-mail address: _____

Name of University/College/School where qualification (s) were obtained

_____

Date of Graduation ___/_____/_____

Qualification Awarded (Please tick)

☐ Certificate ☐ Diploma ☐ Degree ☐Other

Name and contact information of University/College/School attended

Phone Number: _____ Fax No. _____

E-mail address: _____

I forward herewith the Application Fee of $150.00Bz and I promise in the event of my being registered and in consideration thereof to be bound by and to confirm in all respect to the Rules for the time being in force.

Signature of Applicant Signature of Witness

_____ _____

Address of Witness

Date: _____/_____/____

_____

Please note the following are to be submitted with application form:

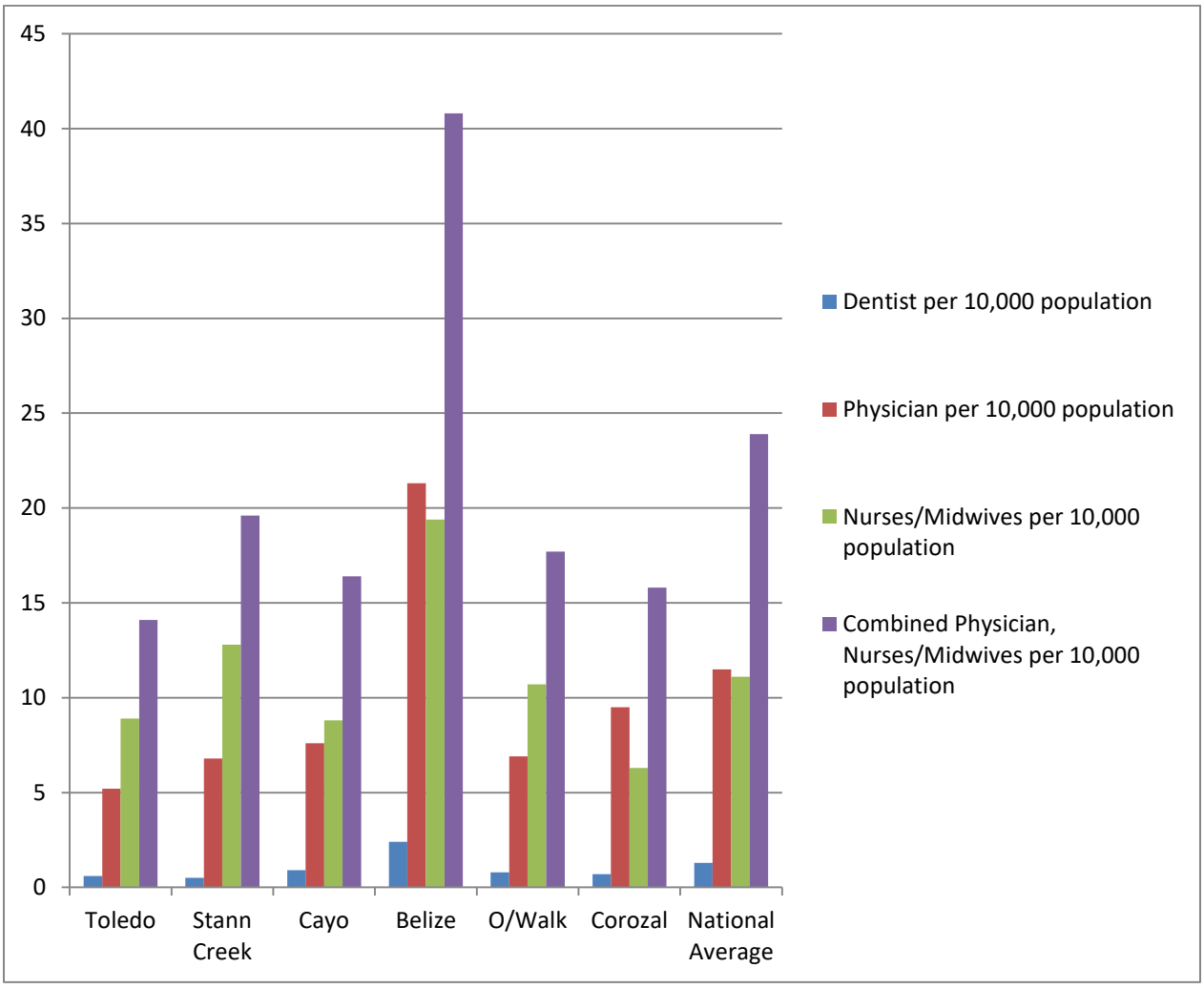
1. Proof of citizenship (birth certificate).
2. Valid identification document (Passport or Social Security Card)
3. Notarized and authenticated original degree, diploma or certificate. The final authentication must be that of the Embassy of Belize or British High Commission of that country.
4. Official ***untampered*** transcript mailed directly to the Nurses and Midwives Council at P.O. Box 933, Belize City, Belize.
5. Official translation to English if documents are in any other language.
6. Proof that applicant is able to read and write English.
7. Non-refundable Application Registration Fee of $150.00Bze made payable in cheque or cash deposit to the Nurses and Midwives Council account.
8. Be prepared to provide any other information or record as requested by the Registrar of the Nurses and Midwives Council from time to time.

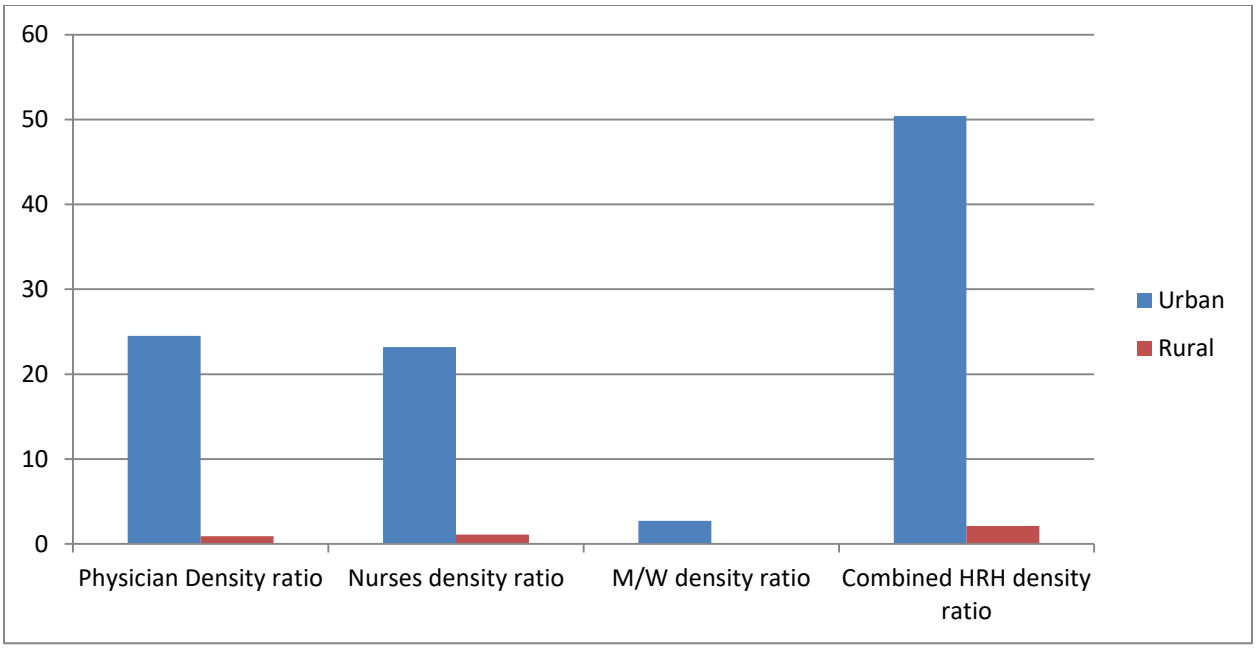
Nurses and Midwives Council of Belize
Revised July 27, 2007

APPENDIX #5

Summary of Data on Nurses, Midwives, Physicians (Public & Private), 2012

CAYO	STANN CREEK	TOLEDO	BELIZE	ORANGE WALK	COROZAL	TOTAL
PHYSICIANS						
61	25	17	218	33	41	395
DENTIST						
8	2	2	25	4	3	44
NURSE/MIDWIVES						
71	47	29	198	51	27	423
TOTAL						**862**




60
50
40
30
20
10
0
Physician Density ratio
Nurses density ratio
M/W density ratio
Combined HRH density ratio
Urban
Rural

APPENDIX #6

Work Permits Approved between June 2010 to December 2013

S/No	Year	Occupation	Nationality
1	2010	Medical Lab Technician	Nigerian
2	2010	Nursing Attendant	Nigerian
3	2010	SN	Nicaraguan
4	2010	Nursing	Nicaraguan
5	2011	Physician	USA
6	2011	Nursing	USA
7	2011	Nurse practitioner	USA
8	2011	Nurse practitioner	USA
9	2011	Volunteer	USA
10	2011	Health Worker Trainer	USA
11	2011	Volunteer Pharmacist	USA
12	2011	General Surgeon	Nicaraguan
13	2011	General Surgeon	Nicaraguan
14	2011	Registered Nurse	Nicaraguan
15	2011	Dental Hygienist	Canada
16	2012	Nursing	Nigerian
17	2012	Anaesthesiologist	Nicaraguan
18	2012	Nursing	Nigerian
19	2012	Radiologist	Salvadorian
20	2012	Radiologist	Nicaraguan
21	2012	Staff Nurse	Indian
22	2012	Staff Nurse	Indian
23	2012	Nurse	Philipino
24	2012	Staff Nurse	Nicaraguan
25	2012	Registered Nurse	Philipino
26	2012	Registered Nurse	Philipino
27	2012	Registered Nurse	Philipino
28	2012	Nurse	Philipino
29	2012	Nurse	Philipino
30	2012	Nurse	Nigerian
31	2012	Chiropractor	USA
32	2012	Staff Nurse	Nicaraguan
33	2012	Staff Nurse	Nicaraguan
34	2012	Urologist	Nicaraguan

35	2012	Registered Nurse	Nicaraguan
36	2012	Registered Nurse	Nicaraguan
37	2012	Practical Nurse	Nigerian
38	2012	Volunteer Clinic Manager	USA
39	2012	Volunteer Physician	USA
40	2012	Volunteer Pharmacist	USA
41	2012	Medical Officer	Nicaraguan
42	2012	Registered Nurse	Philipino
43	2012	General Surgeon	Nicaraguan
44	2012	General Practitioner	Nicaraguan
45	2012	Staff Nurse	Philipino
46	2012	Staff Nurse	Philipino
47	2012	Staff Nurse	Philipino
48	2012	Nurse	Philipino
49	2012	Volunteer Physician	USA
50	2012	Volunteer Nurse	USA
51	2012	Physical Therapist	USA
52	2012	Volunteer Pharmacist	USA
53	2012	Volunteer Physician	USA
54	2013	Staff Nurse	Philipino
55	2013	Staff Nurse	Philipino
56	2013	Nurse	Philipino
57	2013	Registered Nurse	Philipino
58	2013	Staff Nurse	Philipino
59	2013	Registered Nurse	Philipino
60	2013	Registered Nurse	Philipino
61	2013	Registered Nurse/ MW	Kenya
62	2013	volunteer nurse	USA
63	2013	Staff Nurse	Philipino
64	2013	Staff Nurse	Philipino
65	2013	Staff Nurse	Philipino
66	2013	Staff Nurse	Nicaraguan
67	2013	Registered Nurse	Philipino
68	2013	Staff Nurse	Philipino
69	2013	Registered Nurse	Philipino
70	2013	Staff Nurse	Philipino
71	2013	Staff Nurse 111	Philipino
72	2013	Staff Nurse 111	Philipino
73	2013	Staff Nurse 111	Philipino
74	2013	Operating room nurse specialist 11	Philipino

75	2013	Staff Nurse 111	Philipino
76	2013	Nurse	Philipino
77	2013	Nurse	Philipino
78	2013	Nurse	Philipino
79	2013	Nurse	Philipino
80	2013	Radioogist/ Sonographist	Cuban
81	2013	Nutritionist	Mexican
82	2013	Registered nurse	Philipino
83	2013	Registered nurse	Philipino
84	2013	Registered Nurse	Philipino
85	2013	Registered Nurse	Philipino
86	2013	Staff Nurse	Nicaraguan
87	2013	volunteer nurse Director	USA
88	2013	Nurse	Nicaraguan
89	2013	General Surgeon	Nicaraguan
90	2013	Registered Nurse	Philipino
91	2013	Registered Nurse	Philipino
92	2013	Registered Nurse	Philipino
93	2013	Registered Nurse	Philipino
94	2013	Angiologist and Vascular Surgeon	Cuban
95	2013	Psychiatrist	Philipino
96	2013	Staff Nurse	Nicaraguan
97	2013	Registered Nurse	Philipino
98	2013	Volunteer	USA
99	2013	Radiologist	Salvadorian
100	2013	Gyneacologist	Nicaraguan
101	2013	Biomeidcal Engineer	Cuban
102	2013	Gyneacologist	Nicaraguan
103	2013	Haemodialysis Nurse	Cameroon
104	2013	Physician Specialist	Cuban
105	2013	Registered Nurse	Cuban
106	2013	Registered Nurse	Nicaraguan
107	2013	Urologist	Nicaraguan
108	2013	Staff Nurse 111	Philipino
109	2013	Staff Nurse 111	Philipino
110	2013	Staff Nurse 111	Philipino
111	2013	Staff Nurse 111	Philipino
112	2013	Urologist	USA
113	2013	Medical Officer	Bolivia

Source: Labour Department, Belmopan