FAIMER® Short Report

Overview of For-Profit Schools in the Caribbean

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Since the mid-1950s, the United States has addressed physician workforce shortage through a reliance on a continuous influx of graduates of international medical schools (IMGs), now comprising more than 25% of the physician workforce nationally, and as high as 45% in New Jersey. These physicians have a positive impact on improving the maldistribution of physicians in this country, as IMGs are more likely to treat minority and underserved patients, and practice primary care.

The number of U.S. citizen IMGs (USIMGs) who achieved Educational Commission for Foreign Medical Graduates (ECFMG) certification has increased fivefold from 527 in 1995 (9% of ECFMG certifications) to 2,963 or 30% of certifications in 2013.5 The majority of USIMGs are enrolled in for-profit, privately owned medical schools located in the Caribbean. If IMGs continue to be part of the solution to our nation's physician shortage, it is important to have more information on their medical education programs, including the number and location of these schools, accreditation by internationally accepted regional accreditation bodies, recognition reviews by other agencies, and number of ECFMG certified graduates. This descriptive data will assist prospective students in objective evaluation of these schools, provide information to graduate residency directors, and help in evaluating the quality of the education offered at these institutions. In view of the growing number of USIMGs studying medicine in the Caribbean, this short report provides descriptive information on for-profit schools in the region.

Methods

In a previous publication,⁶ offshore medical schools (OMSs) were defined as those identified by the Caribbean Accreditation Authority for Education in Medicine and Other Health Professions (CAAM-HP) as for-profit institutions whose purpose is to train US and Canadian students who intend to return to North America to practice medicine. This current study updates this previous study⁶ by describing various characteristics of the OMSs located in the Caribbean and Belize operating at some point between 2010-2013.

All schools in this study are listed in the Foundation for Advancement of International Medical Education and Research (FAIMER) online resource of medical schools, the *International Medical Education Directory (IMED)*. *IMED* was launched in 2001 to fill the void left by the cessation of the World Health Organization (WHO) directory of the world's medical schools. *IMED* listing does not represent accreditation, nor entail independent verification that programs meet specified educational standards. Schools are listed in *IMED* when the appropriate authority in the country where the school is located (usually the Ministry of Education or Ministry of Health) confirms that the school is recognized to grant the MD degree or equivalent.

We obtained descriptive data on OMSs from the medical schools' websites (i.e., ownership, tuition) and accreditation and approvals information from the relevant organizations' websites. We obtained ECFMG data denoting the number of number of graduates who obtained ECFMG certification in 2013. This study involved no known risks to participants and ECFMG applicants acknowledge, as part of the application process, that their data can be used for research purposes.

Results

Number of OMSs

Enumerating OMSs is a challenging and potentially imprecise task due to school name changes, relocation, and the difficulty in obtaining current data from inactive websites. For example, in 2010 the Netherlands Antilles was dissolved as a legal entity which resulted in jurisdictional changes to medical schools on the islands of Bonaire, Curacao, Saba, Sint Eustatius, and Sint Maarten. Subsequently some of the schools moved to other islands in the Caribbean. It is also not uncommon for OMSs to change ownership and/or management, sometimes resulting in a name change or completely overhauled faculty and curriculum. In addition, a minimum of 10 new schools have been launched in the region since 2009. Three new schools have opened on St. Lucia and three on St. Vincent and the Grenadines. One school listed in *IMED* is thought to be inactive due to lack of any updated information on the website for the past four years, although the government of the country has not officially confirmed closure. Table 1 shows the key characteristics of the 39 Caribbean OMSs listed in *IMED* as operational (includes one possibly inactive) as of December 31, 2013. The school data includes current location, tuition (as of the fall 2013 semester), and year founded, and shows the number of graduates certified by ECFMG for the year 2013.

Accreditation and recognition

In addition to recognition by the Ministry of Education or the Ministry of Health in their home country, some OMSs seek accreditation or approval by external regional agencies. CAAM-HP was established in 2003 under the aegis of the Caribbean Community (CARICOM) to ensure that the education programs of medicine and other health professions are recognized to be of international standard. Currently CAAM-HP has accredited seven OMSs in the Caribbean with a variety of terms and conditions.⁷

Four schools are accredited for up to six years by the Accreditation Commission on Colleges of Medicine (ACCM), an independent Irish organization which has been appointed by the governments of the Cayman Islands, Sint Maarten, the territory of Nevis, and the former government of the territory of Saba to accredit the medical schools

located on these islands. The ACCM is distinct from the Irish Medical Council, the accrediting agency for the medical schools of Ireland.

Ownership

The OMSs are all private, for-profit institutions. Some of the schools are owned by large corporations, such as R3 Education, Inc., a holding company that acquires and manages for-profit education institutions (The Medical University of the Americas, Saba School of Medicine and St. Matthew's University); DeVry, Inc., a publically traded for-profit education company (Ross University School of Medicine [RUSM] and American University of the Caribbean [AUC]); and Manipal Education Americas, LLC., (American University of Antigua [AUA]). Other OMSs are owned and managed by individuals or small organizations.

Enrollment

Exact enrollment numbers in OMSs are not known. Individuals' applications to ECFMG for certification can be viewed as a quasi-enumeration of the size of a school, albeit likely an underestimate. Students at OMSs who are not seeking to practice in the United States may choose not to become ECFMG certified. There was a very large variation in the number of individuals who obtained ECFMG certification in 2013 across the schools, ranging from none or a very low number for some smaller or newer schools, to almost 1,000 for older, larger schools. In addition, while some OMSs welcome student transfers and allow enrollment at any level through the fourth year of medical school, exact data on transfers are unavailable. However of the individuals who achieved ECFMG certification from OMSs in 2012, approximately 9% had attended more than one school, including U.S. schools or other international schools located outside of the Caribbean.

Tuition

Comparing tuition at OMSs with data from U.S. MD-granting schools is imprecise, as U.S. schools charge a similar tuition for each of the four years, while OMSs differentiate among the tuition of the preclinical semesters, tuition during a semester of transition used for clinical orientation and preparation for United States Medical Licensing Examination (USMLE) Step 1, and the tuition of the clinical semesters. Data from OMS websites indicate the preclinical semester tuition ranges from \$3,800 per semester at the Atlantic University School of Medicine in Saint Lucia to \$24,709 per semester at SGU, while clinical tuition ranges from \$4,500 at the University of Medicine and Health Sciences in Montserrat to almost \$25,000 at SGU per semester. Further differences in clinical tuition costs may occur within schools depending on the assigned clinical sites. The overall cost is difficult to determine as the length of study is not always published, and numerous "fees" (e.g., fees for enrollment, examinations, malpractice insurance,

graduation, usage of the library, laboratories, technology, equipment, etc.) are sometimes charged in addition to the published tuition amount.

Residency matching

The number of USIMGs applying to the National Resident Matching Program (NRMP) increased 50% to 5,095 between 2009 and 2013. 9,10 While the overall match rate for U.S. medical school graduates in 2013 was 94%, the success rate for USIMGs was 53% compared to 48% for non U.S. citizen IMGs. 11 Certain specialties less commonly selected by U.S. graduates, such as primary care fields, provide opportunities for many OMS graduates. 10 A 2013 study revealed that Caribbean graduates had the highest proportion of physicians practicing in primary care specialties as compared to all other IMGs, graduates of U.S. MD-granting schools, and U.S. DO-granting schools. 4

State regulations

Faced with requests to allow students of international schools to participate in clinical clerkships, to allow residents to train, and to grant licenses to graduates, some state medical boards have developed methods to evaluate the eligibility of schools. The New York State Department of Education evaluates schools for the purpose of placement in hospitals for long term clerkships. The state is currently in the process of reexamining its policies. The California Medical Board also has a process to evaluate OMSs that regulates student learning and graduate practice in the state. Table 2 describes the regulations used by selected states that include specific information on the relevant medical board websites regarding students' eligibility to participate in clinical clerkships and graduates' eligibility for residency and licensure.

Discussion

In a step forward towards promoting international quality, ECFMG announced in 2010 that, effective 2023, only graduates of appropriately accredited medical schools would be eligible for certification.¹³ To satisfy this requirement, the physician's medical school must be accredited through a formal process that uses criteria comparable to those established by the Liaison Committee on Medical Education (LCME), or that uses other globally accepted criteria, such as those put forth by the World Federation for Medical Education (WFME). WFME is a global organization that developed a program to recognize accreditation organizations around the world.

In parallel, the U.S. Department of Education National Committee on Foreign Medical Education and Accreditation (NCFMEA) determines the comparability of LCME standards with those used by the accreditation agencies that accredit international medical schools.¹⁴ The NCFMEA comparability of an accrediting agency is one of the necessary requirements

for students at international schools to be eligible to receive Federal Family Education Loan (FFEL) funds. The NCFMEA is currently in the process of expanding its current role to include initiatives aimed at advancing a high level of medical education for all U.S. citizens at international medical schools and a wise spending of federal funds for student support.¹⁵

The ECFMG endorsement of accreditation of all medical schools and the movement by NCFMEA for improved quality of medical education are steps forward in assuring that physicians worldwide desirous of coming to the United States are graduates of medical schools meeting international standards. International medical graduates, including those from the wide variety of OMSs, bring needed diversity to the U.S. physician pool, and are more likely to practice primary care⁴ and serve in underserved areas³ as compared to their U.S. medical school graduate peers. Many factors must be considered when evaluating the role of IMGs, the foremost being the quality of the students, the educational programs, and outcomes.

 $Table 1: Characteristics \ of \ offshore \ medical \ schools \ listed \ in \ the \ International \ Medical \ Education \ Directory \ and \ operational \ between \ 2010 \ and \ 2013 \ and \ number \ ECFMG \ certified \ in \ 2013$

Country	School name and website	North American office location	Fall 2013 tuition (may not include additional fees)	Year Started	Regional accreditation status	Number ECFMG certified in 2013
Anguilla	Saint James School of Medicine, Anguilla http://anguilla.sjsm.org	Park Ridge, IL	Basic Science, per semester (BS) \$7,150 Clinical Science, per semester (CS) \$8,200	2010	CAAM-HP initial accreditation as a developing school	0
	American University of Antigua College of Medicine http://www.auamed.org	New York, NY	BS \$15,150 CS \$16,850	2004	CAAM-HP provisional accreditation	347
Antigua and Barbuda	University of Health Sciences Antigua School of Medicine http://www.uhsa.ag	San Juan, PR	BS \$7,800 Transitional Semester (TS) \$9,000 CS \$9,700	1982		9
	Aureus University School of Medicine (Formerly All Saints University) http://www.aureusuniversity.com	Fair Lawn, NJ	BS \$6,495 TS \$6,750 CS \$7,995	2004		12
Aruba	Xavier University School of Medicine http://www.xusom.com	Woodbury, NY	BS \$7,150 CS \$9,900	2004	CAAM-HP provisional accreditation	38
Barbados	American University of Barbados School of Medicine http://www.aubmed.org	Springfield, MA	BS \$6,500 TS \$7,900 CS \$7,900	2011		0
	American Global University School of Medicine http://www.agusm.org	Columbus, OH	BS \$6,195 CS \$8,295	2006		1
	Avicina Medical Academy http://www.avicina.bz	Palos Hills, IL	BS \$5,500 CS \$7,700	2012		0
	Central America Health Sciences University Belize Medical College http://www.cahsu.edu	Devens, MA	BS \$8,000 CS \$9,500	1996		2
	InterAmerican Medical University ^a http://www.interamericanmed.net	Spokane, WA	BS \$5,000 CS \$8,000	2003		0
Belize	Washington University of Health and Science http://www.wuhs.org	Washington, DC	BS \$5,900 CS \$7,600	2012		0
Bonaire (Special Municipality of the Netherlands)	Saint James School of Medicine, Bonaire ^b http://bonaire.sjsm.org	Park Ridge, IL	BS total \$28,200 CS \$8,100	2001		0
Cayman Islands	Saint Matthew's University http://www.stmatthews.edu	Orlando, FL	BS \$10,150 CS \$12,850	1997	ACCM accredited	129

Country	School name and website	North American office location	Fall 2013 tuition (may not include additional fees)	Year Started	Regional accreditation status	Number ECFMG certified in 2013
	Avalon University School of Medicine (formerly Xavier					
	University located on Bonaire) http://www.avalonu.org	Youngstown, OH	BS \$6,500 CS \$7,700	2003	Not CAAM-HP accredited	24
	Caribbean Medical	OH		2003	accredited	24
	University School of Medicine http://cmumed.org	Rosemont, IL	BS \$4,900 CS \$6,900	2007		2
	St. Martinus University Faculty of Medicine		BS \$7,200			
Curacao	http://www.martinus.edu	Austin, TX	CS \$12,500	2003		1
Dominica	All Saints University School of Medicine, Dominica		BS \$4,995			
	http://www.allsaintsuniversity.org	Chicago, IL	CS \$6,995	2006		4
	Ross University School of Medicine		BS \$11,500		CAAM-HP accredited with	
	http://www.rossu.edu	Edison, NJ	CS \$12,625	1978	conditions	815
			BS \$24,709 (2 semesters)			
			BS \$33,800 (1 semester)			
	St George's University School of		TS \$27,290		СААМ-НР	
Grenada	Medicine http://sgu.edu	Bayshore, NY	CS \$24,942 (5 semesters)	1977	accredited with conditions	891
	All American Institute of Medical		Ρα Φζ 000		CAAM-HP initial	
Jamaica	Sciences http://www.aaims.edu.jm	N/A	BS \$6,000 CS \$7,200	2010	provisional accreditation	0
	University of Science, Arts and Technology	Saint	BS \$4,100		Not CAAM-HP	
Montserrat	http://www.usat-montserrat.org	Petersburg, FL	CS \$4,500	2003	accredited	6
Saba (Special Municipality of	Saba University School of Medicine		BS \$12,000		ACCM and	
the Netherlands)	http://www.saba.edu	Gardner, MA	CS \$13,150	1993	NVAO accredited	156
	International University of Health Sciences	Winnipeg, MB,	BS total \$30,800			
	http://www.iuhs.edu	Canada	CS total \$15,000	1998		6
	Medical University of the Americas		BS \$11,000		ACCM	
	http://www.mua.edu	Gardner, MA	CS \$12,575	1998	accredited	135
	University of Medicine and Health Sciences		BS \$9,600			
	http://www.umhs-sk.org	New York, NY	CS \$12,000	2008		56
Saint Kitts and	Windsor University School of Medicine		BS \$4,990		Not CAAM-HP	
Nevis	http://www.windsor.edu	Monee, IL	CS \$4,990	2000	accredited	139
	American International Medical		BS (year 1) \$10,000 BS (year 2) \$12,000			
	University http://aimu.us	Silver Springs, MD	CS \$21,000 (year 3 and 4)	2007		3
	Atlantic University School of		,	2007		
Saint Lucia	Medicine http://www.ausom.org	Island Park, NY	BS \$3,800 CS \$7,900	2010		2

Country	School name and website	North American office location	Fall 2013 tuition (may not include additional fees)	Year Started	Regional accreditation status	Number ECFMG certified in 2013
Saint Lucia (continued)	College of Medicine and Health Sciences (Known as Destiny University School of Medicine and Health Sciences from 2008-2013) http://www.comhssl.net	Butte, MT	BS \$7,000 CS \$8,000	2001		1
	International American University http://www.iau.edu.lc/	Dallas, TX	BS \$6,000 CS \$9,500	2004		1
	Spartan Health Sciences University http://www.spartanmed.org	Santa Teresa, NM Brooklyn, NY	BS \$6,250 CS \$10,000	1980	CAAM-HP provisional accreditation	23
	St. Helen University School of Medicine and Health Sciences http://shu.com.lc	N/A	BS \$4,900 CS \$8,000	2012		0
	Washington Medical Sciences Institute http://wmsi-edu.us	Takoma Park, MD	BS \$8,000 TS \$12,000 CS \$12,000	2011		0
Saint Vincent and the Grenadines	All Saints University College of Medicine, Saint Vincent and the Grenadines http://www.allsaintsu.org	Chicago, IL	BS \$4,500 CS \$8,500	2011		0
	American University of Saint Vincent School of Medicine http://www.ausmed.us	Dallas, TX	BS \$4,500 CS \$8,500	2012		0
	Saint James School of Medicine, Saint Vincent and the Grenadines ^b http://www.sjsm.org/st-vincent- campus/	Park Ridge, IL	Not available	2013		49
	Trinity School of Medicine http://www.trinityschoolofmedi- cine.org	Alpharetta, GA	BS \$11,500 CS \$12,500	2008		16
Sint Maarten	American University of the Caribbean http://aucmed.edu	Coral Gables, FL	BS \$18,975 CS \$21,250	1978	ACCM accredited	281
	American University of Integrative Sciences, formerly University of Sint Eustatius School of Medicine http://www.eustatiusmed.edu	Tucker, GA formerly Syosset, NY	BS \$9,100 CS \$9,300	1999		86

^a presumed inactive

Abbreviations:

Educational Commission for Foreign Medical Graduates (ECFMG)

Caribbean Accreditation Authority for Medicine and Other Health Professions (CAAM-HP)

Accreditation Commission on Colleges of Medicine (ACCM)

The Accreditation Organization of the Netherlands and Flanders (NVAO)

^b as of November 2013, Saint James School of Medicine Bonaire is recognized as a sub-campus of Saint James School of Medicine St. Vincent and the Grenadines by the government of St. Vincent and the Grenadines

Table 2:Regulations related to evaluating international medical schools and physician eligibility for clinical clerkships, residency, and licensure for select states

Selected state, agency, and relevant website	Purpose of regulation	Process	Results
California Medical Board of California http://www.mbc.ca.gov/ap- plicant/schools_unapproved. html	Eligibility for physician residency and licensure	Approved School List Disapproved School List Most schools have not applied for approval by the state of California Individuals are eligible for licensure in California if a graduate of an approved school, or (as of 01/01/13) a graduate of an unapproved school and practicing for 10 years; or a graduate from a disapproved school and practicing for 20 years	Approved List includes American University of Antigua, American University of the Caribbean, Ross University School of Medicine, Saba University School of Medicine, and St. George's University Disapproved list includes Spartan Health Sciences University, St. Matthews University, and University of Health Sciences Antigua
Florida Florida Department of Education	Eligibility of school to	Core or elective clerkships in Florida hospitals and clinics are only permitted	Licensed schools include American University of the Caribbean, Ross University School of Medicine, Saba University School of Medicine, St. George's University, and St. Matthews University Occasional elective clerkships are offered to unlicensed schools but are restricted to 3 students per year from
http://www.fldoe.org/cie/ clerkships.asp	offer core clerkships in Florida hospitals	if the medical school is licensed by the Commission for Independent Education	the same school Approved schools include schools
Kansas Kansas Board of Healing Arts http://www.ksbha.org/de- partments/licensing/medi- calschools.shtml	Eligibility for physician licensure	Medical school must be approved by the board and be in existence for at least 15 years	that have not been disapproved and have been in existence for at least 15 years Disapproved list includes Spartan Health Sciences University, St. Matthews University, and University of Health Sciences Antigua
New York New York State Office of the Professions http://www.op.nysed.gov/ prof/med/part60.htm#60.10	Determination of approval of students to participate in long term (greater than 12 weeks) clerkships in New York hospitals	Medical school must be approved by the Board of Regents	Approved schools include American University of Antigua, American University of the Caribbean, Medical University of the Americas, Ross University School of Medicine, Saba University School of Medicine, St. George's University, and St. Matthew's University
Texas Texas Medical Board http://www.tmb.state.tx.us/ professionals/physicians/ap- plicants/education.php	Eligibility for physician licensure	Listing of schools whose graduates have demonstrated substantial equivalence of their education	Approved schools include American University of the Caribbean, Ross University School of Medicine, and St George's University

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