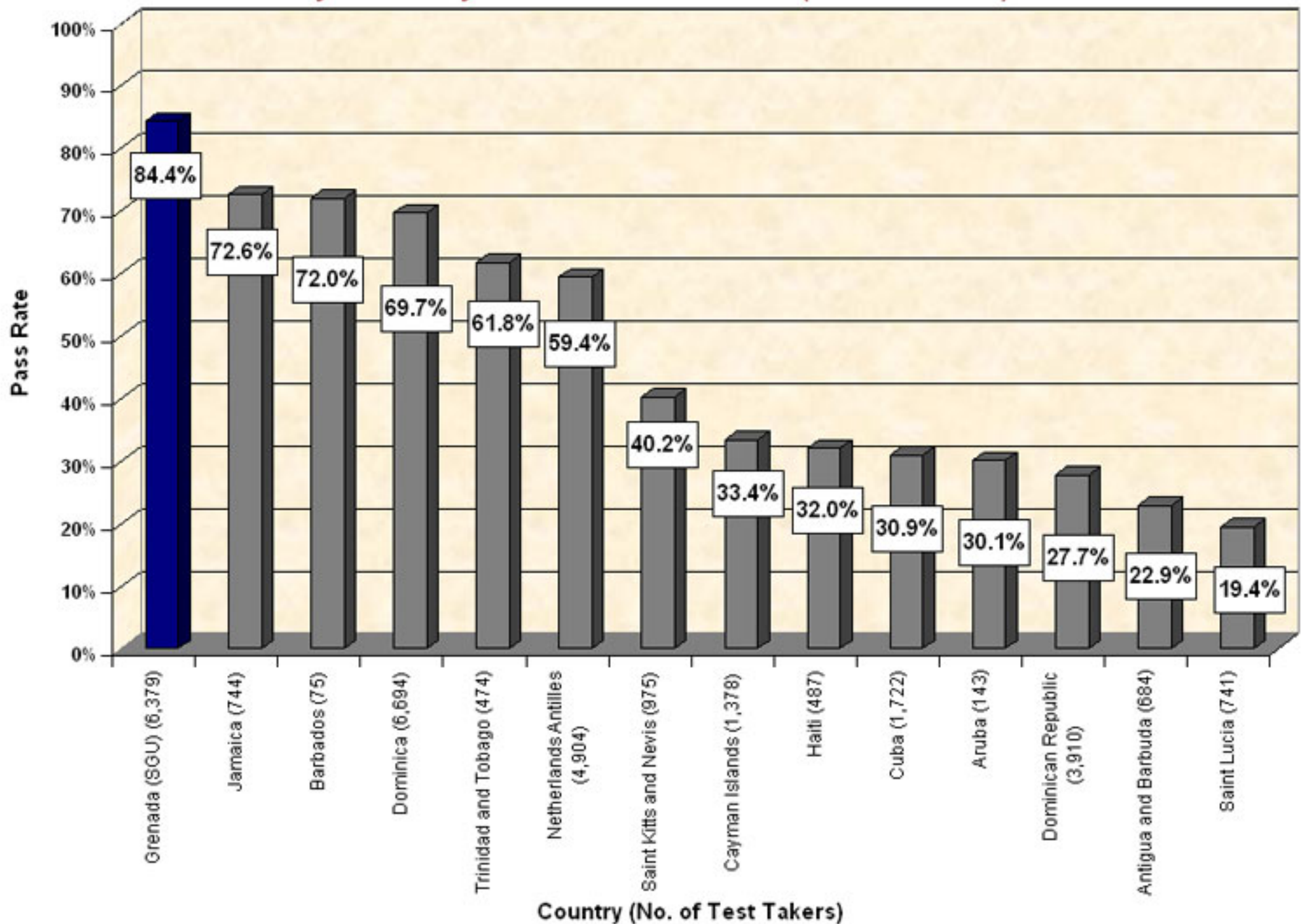
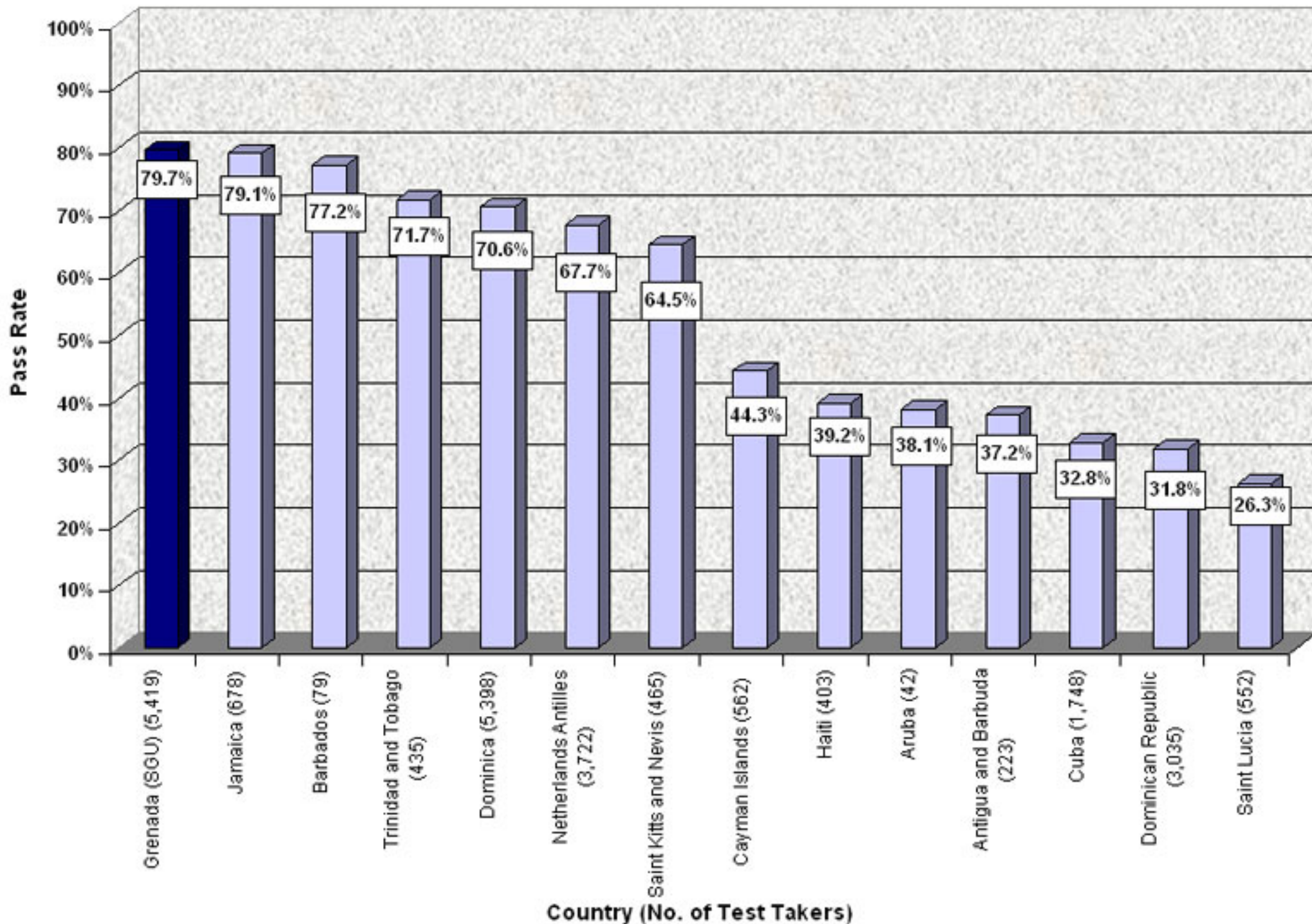


## USMLE STEP 1 PASS RATE FIRST TIME TEST TAKERS By Country of Medical School (1993 - 2007)



**USMLE STEP 2 PASS RATE FIRST TIME TEST TAKERS\***  
**By Country of Medical School (1993 - 2007)**



\* Clinical Knowledge

Source: Academic Medicine, Vol.83, No. 10/October 2008

Appendix 1

First-Attempt Pass Rates on the United States Medical Licensing Examinations, by Year and Country of Medical School, 2000–2009										
Country; no. schools	Exam name; first-attempt pass rate (no. exam takers)									
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
<b>Antigua and Barbuda; 2</b>	<i>Step 1 Basic Science</i>									
	36.8 (19)	13.3 (15)	22.2 (18)	12.0 (25)	14.6 (48)	17.4 (86)	22.2 (176)	36.4 (231)	44.9 (305)	54.4 (441)
	<i>Step 2 Clinical Knowledge</i>									
	54.5 (11)	56.3 (16)	40.0 (15)	20.0 (15)	*	37.5 (24)	40.0 (25)	49.0 (49)	58.2 (100)	64.8 (128)
	<i>Step 2 Clinical Skills/Clinical Skills Assessment</i>									
	*	*	*	*	*	75.9 (29)	78.8 (33)	68.9 (45)	74.0 (123)	75.6 (156)
<b>Aruba; 3</b>	<i>Step 1 Basic Science</i>									
	*	*	*	8.3 (12)	11.8 (17)	17.9 (39)	18.4 (49)	34.3 (67)	25.4 (63)	29.8 (57)
	<i>Step 2 Clinical Knowledge</i>									
	*	*	*	*	*	*	43.8 (16)	42.1 (19)	21.9 (32)	59.6 (47)
	<i>Step 2 Clinical Skills/Clinical Skills Assessment</i>									
	*	*	*	*	*	*	52.4 (21)	73.3 (30)	71.4 (56)	68.9 (61)
<b>Barbados; 1</b>	<i>Step 1 Basic Science</i>									
	*	*	*	*	*	76.9 (13)	63.6 (11)	*	69.2 (13)	*
	<i>Step 2 Clinical Knowledge</i>									
	*	*	*	90.0 (10)	*	70.0 (10)	81.3 (16)	*	*	100 (12)
	<i>Step 2 Clinical Skills/Clinical Skills Assessment</i>									
	*	*	*	*	90.0 (10)	*	100 (19)	*	90.0 (10)	*
<b>Cayman Islands; 1</b>	<i>Step 1 Basic Science</i>									
	26.9 (26)	14.8 (88)	20.6 (97)	20.6 (155)	29.9 (137)	29.5 (193)	38.9 (298)	54.7 (298)	59.6 (270)	51.6 (349)
	<i>Step 2 Clinical Knowledge</i>									
	*	*	64.0 (25)	39.3 (61)	36.1 (97)	40.5 (121)	49.2 (120)	47.2 (144)	65.9 (232)	65.3 (242)
	<i>Step 2 Clinical Skills/Clinical Skills Assessment</i>									

	*	*	*	77.2 (57)	89.9 (89)	83.0 (135)	75.3 (162)	76.5 (162)	78.8 (269)	81.5 (248)
<b>Cuba; 14</b>	<i>Step 1 Basic Science</i>									
	24.3 (70)	40.7 (91)	27.6 (123)	37.9 (132)	35.6 (149)	42.6 (141)	34.0 (144)	38.3 (133)	40.5 (158)	43.9 (114)
	<i>Step 2 Clinical Knowledge</i>									
	41.1 (56)	52.1 (72)	53.9 (89)	52.3 (88)	57.3 (89)	73.1 (78)	69.4 (98)	74.4 (78)	75.0 (96)	81.3 (75)
	<i>Step 2 Clinical Skills/Clinical Skills Assessment</i>									
	54.2 (48)	50.0 (38)	61.0 (59)	69.7 (76)	72.2 (115)	66.7 (111)	69.2 (107)	42.1 (95)	52.1 (94)	62.9 (89)
<b>Dominica; 2</b>	<i>Step 1 Basic Science</i>									
	83.0 (399)	81.2 (356)	68.9 (486)	60.7 (549)	57.6 (585)	65.9 (696)	84.1 (580)	86.6 (724)	91.1 (802)	88.2 (901)
	<i>Step 2 Clinical Knowledge</i>									
	77.6 (411)	79.6 (422)	80.9 (346)	72.9 (391)	71.2 (451)	64.6 (457)	68.5 (584)	73.4 (722)	77.9 (651)	81.1 (758)
	<i>Step 2 Clinical Skills/Clinical Skills Assessment</i>									
	90.6 (381)	90.5 (417)	86.7 (399)	89.4 (424)	91.4 (441)	95.5 (467)	89.6 (598)	86.7 (706)	89.9 (694)	90.0 (733)
<b>Dominican Republic; 10</b>	<i>Step 1 Basic Science</i>									
	33.9 (180)	34.0 (194)	38.1 (215)	41.9 (222)	40.9 (252)	44.1 (229)	36.2 (229)	39.6 (283)	37.5 (224)	44.1 (256)
	<i>Step 2 Clinical Knowledge</i>									
	53.1 (98)	61.4 (127)	55.8 (154)	49.6 (139)	58.4 (154)	60.0 (170)	59.1 (149)	56.2 (127)	65.5 (165)	69.5 (164)
	<i>Step 2 Clinical Skills/Clinical Skills Assessment</i>									
	77.0 (122)	73.9 (92)	70.3 (128)	71.3 (129)	80.3 (173)	78.1 (219)	64.3 (196)	65.2 (187)	59.3 (248)	55.1 (147)
<b>Grenada; 1</b>	<i>Step 1 Basic Science</i>									
	92.4 (406)	83.8 (421)	84.4 (418)	89.2 (443)	86.0 (444)	89.0 (564)	83.0 (601)	82.7 (669)	89.1 (624)	90.6 (816)
	<i>Step 2 Clinical Knowledge</i>									
	87.0 (369)	90.2 (388)	88.3 (368)	81.0 (399)	82.9 (438)	84.3 (414)	83.4 (523)	82.7 (556)	84.8 (623)	87.0 (631)
	<i>Step 2 Clinical Skills/Clinical Skills Assessment</i>									
	95.3 (338)	95.2 (378)	94.1 (404)	94.2 (414)	92.7 (441)	93.6 (441)	91.8 (512)	88.4 (577)	91.0 (645)	90.0 (612)
<b>Haiti; 3</b>	<i>Step 1 Basic Science</i>									
	36.4 (11)	12.5 (16)	33.3 (15)	43.8 (16)	51.6 (31)	61.5 (26)	42.6 (54)	47.4 (38)	49.1 (53)	23.8 (52)

	<i>Step 2 Clinical Knowledge</i>									
	*	*	63.6 (11)	84.6 (13)	52.4 (21)	47.6 (21)	72.4 (29)	64.3 (28)	80.6 (36)	74.1 (27)
	<i>Step 2 Clinical Skills/Clinical Skills Assessment</i>									
	71.4 (14)	*	*	62.5 (16)	38.5 (13)	64.0 (25)	66.7 (42)	44.1 (34)	27.5 (40)	40.6 (32)
<b>Jamaica; 1</b>	<i>Step 1 Basic Science</i>									
	72.7 (33)	79.5 (39)	70.0 (40)	76.7 (30)	83.9 (31)	70.8 (48)	67.3 (55)	81.4 (43)	66.7 (36)	54.2 (24)
	<i>Step 2 Clinical Knowledge</i>									
	84.2 (38)	92.5 (40)	73.1 (26)	85.7 (35)	80.8 (26)	90.0 (30)	79.5 (44)	88.9 (36)	78.1 (32)	88.0 (25)
	<i>Step 2 Clinical Skills/Clinical Skills Assessment</i>									
	95.8 (24)	97.0 (33)	100 (26)	100 (33)	96.3 (27)	97.6 (42)	93.3 (45)	97.1 (35)	93.9 (33)	89.3 (28)
<b>Netherlands Antilles; 6<sup>†</sup></b>	<i>Step 1 Basic Science</i>									
	58.2 (268)	49.0 (312)	46.1 (369)	49.5 (390)	62.3 (453)	64.4 (505)	67.8 (534)	64.1 (622)	69.0 (600)	68.4 (667)
	<i>Step 2 Clinical Knowledge</i>									
	72.8 (287)	77.3 (255)	70.4 (270)	71.4 (283)	64.2 (321)	72.4 (402)	72.8 (415)	72.9 (413)	77.8 (496)	73.9 (501)
	<i>Step 2 Clinical Skills/Clinical Skills Assessment</i>									
	88.7 (283)	87.6 (250)	87.5 (271)	87.7 (308)	91.0 (332)	91.1 (425)	89.7 (398)	85.9 (441)	85.5 (552)	87.3 (463)
<b>Saint Kitts and Nevis; 7 (two schools closed in 2009)</b>	<i>Step 1 Basic Science</i>									
	40.9 (22)	37.5 (32)	26.2 (84)	41.7 (84)	41.3 (143)	43.1 (174)	45.2 (168)	40.6 (224)	44.2 (258)	49.7 (326)
	<i>Step 2 Clinical Knowledge</i>									
	*	*	60.7 (28)	60.5 (48)	51.0 (51)	67.1 (79)	67.0 (103)	65.8 (120)	69.6 (115)	69.1 (149)
	<i>Step 2 Clinical Skills/Clinical Skills Assessment</i>									
	*	*	83.3 (18)	90.3 (31)	86.8 (53)	92.5 (80)	89.5 (114)	81.9 (138)	77.2 (149)	78.2 (142)
<b>Saint Lucia; 5 (one school closed in 2008)</b>	<i>Step 1 Basic Science</i>									
	17.0 (47)	17.1 (76)	15.4 (39)	19.0 (42)	31.1 (45)	20.8 (53)	20.9 (43)	20.0 (50)	29.3 (58)	37.5 (56)
	<i>Step 2 Clinical Knowledge</i>									
	42.1 (38)	41.7 (24)	38.9 (36)	20.8 (48)	28.9 (38)	31.7 (41)	34.3 (35)	33.3 (33)	43.3 (30)	54.3 (35)

	<i>Step 2 Clinical Skills/Clinical Skills Assessment</i>									
	69.7 (33)	72.4 (29)	66.7 (21)	73.2 (41)	71.7 (46)	85.1 (47)	64.4 (59)	56.9 (51)	48.8 (41)	61.5 (39)
<b>Trinidad and Tobago; 1</b>	<i>Step 1 Basic Science</i>									
	76.5 (17)	57.7 (26)	58.6 (29)	63.8 (47)	58.3 (36)	47.8 (46)	67.5 (40)	65.9 (44)	61.2 (49)	82.0 (61)
	<i>Step 2 Clinical Knowledge</i>									
	66.7 (33)	67.5 (40)	76.3 (35)	80.6 (31)	65.1 (43)	64.3 (42)	71.4 (35)	72.7 (44)	83.3 (36)	91.1 (56)
	<i>Step 2 Clinical Skills/Clinical Skills Assessment</i>									
	94.7 (19)	95.7 (23)	93.5 (31)	100 (35)	92.0 (25)	96.2 (52)	83.8 (37)	90.9 (44)	81.0 (42)	89.6 (48)
* <10 test takers. Note: Montserrat (two schools, one closed in 2008) and Saint Vincent and the Grenadines (two schools, one closed in 2007) each had fewer than ten exam takers per year per exam.										
† On October 10, 2010, as this report was being edited, the Netherlands Antilles dissolved politically. Two of the five islands became independent countries, and the remaining three islands joined the Netherlands.										

**References**

1. Lakhan SE, Laird C. Addressing the primary care physician shortage in an evolving medical workforce. *Int Arch Med.* 2009;2:14.
2. Brotherton SE, Etzel SI. Graduate medical education, 2008–2009. *JAMA.* 2009;302:1357–1372.
3. Hing E, Lin S. Role of International Medical Graduates Providing Office-Based Medical Care: United States, 2005–2006. National Center for Health Statistics Data Brief 13. Hyattsville, Md: National Center for Health Statistics; 2009.
4. Eckhert NL. Private schools of the Caribbean: Outsourcing medical education. *Acad Med.* 2010;85:622–630. [http://journals.lww.com/academicmedicine/Abstract/2010/04000/Perspective\\_\\_Private\\_Schools\\_of\\_the\\_Caribbean\\_.21.aspx](http://journals.lww.com/academicmedicine/Abstract/2010/04000/Perspective__Private_Schools_of_the_Caribbean_.21.aspx). Accessed October 13, 2010.
5. Johnson DA. Prospects for a national clearinghouse on international medical schools. *J Med Licensure Discipline.* 2008;94:7–11.
6. Relman AS. Americans studying medicine abroad: The distressing facts. *N Engl J Med.* 1978;299:887–889.
7. Weinberg E, Bell AI. Performance of United States citizens with foreign medical education on standardized medical examinations. *N Engl J Med.* 1978;299:858–862.
8. Norcini JJ, McKinley DW, Boulet JR, Anderson MB. Educational Commission for Foreign Medical Graduates certification and specialty board certification among graduates of the Caribbean medical schools. *Acad Med.* 2006;81(10 suppl):S112–S115. [http://journals.lww.com/academicmedicine/Fulltext/2006/10001/Educational\\_Commission\\_for\\_Foreign\\_Medical\\_28.aspx](http://journals.lww.com/academicmedicine/Fulltext/2006/10001/Educational_Commission_for_Foreign_Medical_28.aspx). Accessed October 13, 2010.
9. Norcini J, Anderson MB, McKinley DW. The medical education of United States citizens who train abroad. *Surgery.* 2006;140:338–346.
10. van Zanten M, Boulet JR. Medical education in the Caribbean: Variability in medical school programs and performance of students. *Acad Med.* 2008;83:S33–S36. [http://journals.lww.com/academicmedicine/Fulltext/2008/10001/Medical\\_Education\\_in\\_the\\_Caribbean\\_\\_Variability\\_in.9.aspx](http://journals.lww.com/academicmedicine/Fulltext/2008/10001/Medical_Education_in_the_Caribbean__Variability_in.9.aspx). Accessed October 13, 2010.
11. van Zanten M, Boulet JR. Medical education in the Caribbean: Variability in Educational Commission for Foreign Medical Graduate certification rates and United States Medical Licensing Examination attempts. *Acad Med.* 2009;84(10 suppl):S13–S16. [http://journals.lww.com/academicmedicine/Fulltext/2009/10001/Medical\\_Education\\_in\\_the\\_Caribbean\\_\\_Variability\\_in.5.aspx](http://journals.lww.com/academicmedicine/Fulltext/2009/10001/Medical_Education_in_the_Caribbean__Variability_in.5.aspx). Accessed October 13, 2010.

12. Jolly P, Garrison G, Boulet JR, Levitan T, Cooper RA. Three pathways to a physician career: Applicants to U.S. MD and DO schools and U.S. citizen applicants to international medical schools. *Acad Med.* 2008;83:1125–1131. [http://journals.lww.com/academicmedicine/Fulltext/2008/12000/Three\\_Pathways\\_to\\_a\\_Physician\\_Career\\_\\_Applicants.14.aspx](http://journals.lww.com/academicmedicine/Fulltext/2008/12000/Three_Pathways_to_a_Physician_Career__Applicants.14.aspx). Accessed October 13, 2010.
13. U.S. Department of Education: National Committee on Foreign Medical Education and Accreditation (NCFMEA). Report to the U.S. Congress by the National Committee on Foreign Medical Education and Accreditation Recommending Institutional Eligibility Criteria for Participation by Certain Foreign Medical Schools in the Federal Family Education Loan Program. <http://www2.ed.gov/about/bdscomm/list/ncfmea-dir/reporttocongress2009.pdf>. Accessed September 20, 2010.
14. U.S. Government Accountability Office. Foreign Medical Schools: Education Should Improve Monitoring of Schools That Participate in the Federal Student Loan Program. <http://www.gao.gov/new.items/d10412.pdf>. Accessed September 20, 2010.
15. Opalek A, Boulet JR, Dauphinee DW. Canadian citizen graduates of international medical schools: specialty choice and rate of GME entry. Paper presented at: AAMC Physician Workforce Research Conference; April 30, 2009; Washington, DC.
16. Boulet JR, Cooper RA, Seeling SS, Norcini JJ, McKinley DW. U.S. citizens who obtain their medical degrees abroad: An overview, 1992–2006. *Health Aff (Millwood)* . 2009;28:226–233.

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