Globalization of Medical Education

2012 AAMC Annual Meeting

San Francisco
November 4, 2012
Introduction: Trends in the Globalization of Medical Education and Workforce Challenges in the US

Robert K. Crone, MD, President & CEO, Strategy Implemented, Inc.

Jenny Samaan, PhD, Director Global Health Learning Opportunities, AAMC

November 4, 2012
Two Students in 2025

Where would you recommend that they apply for medical school?

• 18 year old graduate of a prestigious east coast preparatory school who completed a gap year in India

• 21 year old ivy-league university senior with a current student debt of $250,000
Global Environment in 2025

- Severe **healthcare workforce shortage** in the US
- 20 Medical schools in China and India offering **5-Year degrees with dual licensing** in their own countries and the EU, Canada, and Australasia
- 3 Global Education Medical schools (1 in Asia, 1 in the Middle East, 1 in Europe). The **cost of earning a global degree is equivalent** US
- The cost of a degree at the 20 medical schools in China and India is **one third less** than in the US.
- There is **no statistical difference between graduating student performance** from the three global schools, the 20 schools in China and India and those in the US, based on:
  - The AAMC’s GHLO program and standardized school and student assessment metrics
  - Patient outcomes recorded through student clinical portfolios
  - “Medical Yelp” and other medical education crowd sourcing site analyses
First Globals Generation

The Way We’ll Be: The Zogby Report on the Transformation of the American Dream

John Zogby, 2008

US Peace Corps Photos
Moderated by:

Lewis R. First, MD MS

University of Vermont Professor and Chair of Pediatrics; Editor-in-Chief of the American Academy of Pediatrics Journal Pediatrics; Chair, National Board of Medical Examiners
<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
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<tbody>
<tr>
<td>11:15-11:30 am</td>
<td>Trends in the Globalization of Medical Education and Workforce Challenges in the US</td>
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<tr>
<td><strong>Part 1: Implications for Medical Schools</strong></td>
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<tr>
<td>11:30-11:45 am</td>
<td>Globalization of Medical Education in the Middle East: Role of the American University of Beirut</td>
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<td>11:45-12:00 noon</td>
<td>Weill Cornell Medical College in Qatar’s Role in Globalization of Education: A Unique Model and a Vision for its Future</td>
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<tr>
<td>12:00-12:15 pm</td>
<td>Flattening the World of Medical Education: Duke-NUS Medical School’s Approach</td>
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<tr>
<td>12:15-12:20 pm</td>
<td>Submission of Questions/Break</td>
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<tr>
<td><strong>Part 2: Perspectives from Members of the US “House of Medicine”</strong></td>
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<tr>
<td>12:20-12:35 pm</td>
<td>Liaison Committee on Medical Education: Seeing Beyond the Existing Borders</td>
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<tr>
<td>12:35-12:50 pm</td>
<td>Globalization of Medical Education: ECFMG Concerns and Initiatives</td>
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<td>12:50-1:00 pm</td>
<td>Submission of Questions/Break</td>
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<tr>
<td>1:00-1:15 pm</td>
<td>Welcome and Reflections from Carol A. Aschenbrener of AAMC</td>
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<tr>
<td>1:15-1:30 pm</td>
<td>International Assessment of Medical Students: Should it Matter Anymore Where the School is Located?</td>
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<td>1:30-1:45 pm</td>
<td>Graduate Medical Education Across National Boundaries</td>
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<td>1:45-2:00 pm</td>
<td>International Board Certification: Reflections</td>
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<tr>
<td>2:00-2:30 pm</td>
<td>Session Summary: Panel Discussion with All Speakers</td>
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</tbody>
</table>
3 Ways To Submit Questions:

• By EMAIL - email questions to: aamc.globalmed@gmail.com

• By TEXT - text questions to: 857-544-9552

• By FORM - write your question in the form provided and submit your question in one of the designated “Q&A” boxes
Implications for Medical Schools – Part 1
Globalization of Medical Education in the Middle East: Role of the American University of Beirut

Kamal F. Badr, MD
Associate Dean for Medical Education
Professor of Medicine,
American University of Beirut
November 4, 2012
1. AUB and its Faculty of Medicine: History and current status.
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2. “AUBMC 2020 Vision”
1. AUB and its Faculty of Medicine: History and current status.

2. “AUBMC 2020 Vision”

3. Can we (AUB, Regional Partners, and the “US House of Medicine”) create a new paradigm for advancing health professions education in the ME?
1. AUB and its Faculty of Medicine: History and current status.
American University of Beirut (AUB): History

- In 1862, American missionaries in Lebanon and Syria, asked Dr. Daniel Bliss to found a college of higher learning that would include medical training.
- In 1863, the state of New York granted a charter under the name: Syrian Protestant College.
- The College opened with its first class of 16 students on December 3, 1866.
- In 1920, the name was changed to American University of Beirut. Mission became secular.
AUB in 2012:
Students: 7,900 (6,400 undergrads); Faculty: 870

Six Faculties:

- Agriculture and Food Sciences
- Arts and Sciences
- Engineering and Architecture
- Health Sciences
- Medicine (includes Hariri School of Nursing)
- Suliman S. Olayan School of Business

120 programs (bachelor, master, PhD)
AUB and American Accreditation

- AUB: Middle States Commission on Higher Education since 2004
- Olayan School of Business: Association to Advance Collegiate Schools of Business (AACSB) in 2009.
- Faculty of Engineering and Architecture: Accreditation Board for Engineering and Technology (ABET) in 2010.
- Hariri School of Nursing (1905): BSN and MSN accredited by the Commission on Collegiate Nursing Education (CCNE); first beyond American territories
- Faculty of Health Sciences (1954): Council on Education for Public Health (CEPH); first outside North America.
Following Harvard, AUB was the first American medical school to adopt a 4-year program of study for the MD degree.

Vast majority of faculty are trained in the USA, are American Board certified, or have had Fellowship training in the USA.

Class size: 90-95. Rank among top 10 MCAT scores of admitted students to US schools.

Graduates in USA: >3500
AUBFM and American Accreditation:

AUB is a founding member of the Association of American Medical Colleges (AAMC) in 1957. AUB remained a member until 1988.
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February 14, 2006 ACGME Board of Directors decided to “not consider the application” since “the scope of accreditation of ACGME is limited to institutions and programs physically located within the United States, its territories and possessions”.

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Nevertheless, ACGME policies are fully implemented institutionally and in most residency programs.
Faculty of Medicine Memberships in American Medical Societies

Alpha Omega Alpha (1958; first Chapter outside US)

The American College of Physicians/American Society of Internal Medicine

The Association of Program Directors in Internal Medicine

The American Medical College Application Service
AUBMC: 1970-2012

- 420 bed “state-of-the-art” MC was completed in 1970
- undergoing expansions and renovations since 2000
AUBMC and American Accreditation

- Joint Commission International (JCI) since 2008
- Commission on laboratory accreditation of the College of American Pathologists (CAP) since 2004
- The Nursing Service is Magnet designated by the American Nurses Credentialing Center (ANCC) since 2009 (one of two outside US)
1. AUB and its Faculty of Medicine: History and current status.

2. “AUBMC 2020 Vision”
AUBMC 2020 Vision: Since 2009

1. Major strategic commitment by AUB (~500 Million USD) for the FM and the Medical Center

2. Recruitment of new leadership with outstanding credentials and commitment to the academic mission of the FM (Dean Sayegh and team)

3. Concrete milestones achieved in the strategic pathways envisioned in the “2020 Vision”:
   1. Construction of new facilities
   2. Recruitment of 81 new faculty
   3. Resources directed to Education and Research
Conceptual Option 1/Base

Steering Committee – 4 June 2012

PH
320 beds (216/94/0/10) mech 1800

12
24 OR/Procedure VIP suites (10) 2000

11
ED beds (36) 2564 Mech

10
CSSD beds (36) 2564 Surg IP St Jude IP Pharm Mech

9
~600 parking spaces beds (36) 2564 Med IP Mech SDSU CSSD

8
beds (36) 2564 Cancer IP/BMT Supt Adm Offices Opth Clin/Proc/Off

7
ICU beds (30) 2564 OB IP NICU LDR

OG/GYN O

Offices Otlary Clin/Proc/Off

6
ICU beds (30) 2564 Pedi IP/PICU Pharm

Pedi, ENT, Orthodonti

Offices Card, Cardio-Thor, Vasc

5
mech 1500 mech 2400 CCU IP Cath Lab

Surg, IM, Densitometr

Offices Onc Exam, Chemotherapy

4
OR/Proc (8) 3180 590 OR/Proc (8) 2868 bridge Surg IP Surg ICU Surg, Kidney, etc Offices Psych/Onc, Rad Onc, Pul Off

3
Beds (36) 3180 OR/Proc (8) 2868 Med Lab Med Rec Int Med, Derm, etc Path Lab bridge CR/EMU/CME/CPDC

2
Beds (36) 3180 ICU beds (34) 2868 bridge Kitchen Dining Micro Lab RN Adm CPDC/Conf Ctr Multi Ed Serv

1
Rad Onc Imaging/public support 2365 entry-> ED 2917 Lobby/Adm Lab ? ED Mech Aud/Conf Ctr Lobby

B1
500 Treatment planning/clinic 1690 amenities Dock/CSSD/ramp 2917 tunnel Procedures Pharm Supt Radiology/Rad Onc tunnel Aud/Clin Skills/Sim

B2
tunnel parking (90 spaces) 3400 shelter/parking (60 spaces) 4460 tunnel Supt Supt Aud Parking

B3	parking (90 spaces) 3400 parking (135 spaces) 4460 Parking

B4	parking (90 spaces) 3400 parking (135 spaces) 4460 Parking

Auditorium Remains

NMC Phase 4 NMC Phase 3 MC Phase 2 MC Phase 1 ACC

Current Medical Center
Conceptual Option 1/Base

- PH
  - 320 beds (216/94/0/10)
  - Mech 1800
- 12
  - 24 OR/Procedure
  - VIP suites (10)
  - 2000
- 11
  - ED beds (36)
  - 2564
  - Mech
- 10
  - CSSD beds (36)
  - 2564
  - Surg IP
  - St Jude IP
  - Pharm Mech SDSU CSSD
- 9
  - ~600 parking spaces
  - Med IP Mech SDSU CSSD
- 8
  - 36 beds (36)
  - 2564
  - Cancer IP/BMT
  - Supt Adm Offices
  - Opth Clin/Proc/Off
- 7
  - ICU beds (30)
  - 2564
  - OB IP
  - NICU
  - LDR O
  - GYN O
  - Offices
  - Otalary Clin/Proc/Off
- 6
  - ICU beds (30)
  - 2564
  - Pedi IP/PICU
  - Pharm
  - Pedi, ENT, Orthodonti
  - Card, Cardio-Thor, Vasc
  - Offices
  - Onc Exam, Chemotherapy
- 5
  - mech 1500
  - mech 2400
  - CCU IP
  - Cath Lab
  - Surg, IM, Densitometr
  - Offices
  - Onc Exam, Chemotherapy
- 4
  - OR/Proc (8)
  - 3180
  - 590 OR/Proc (8)
  - 2868 bridge
  - Surg IP/Surg ICU Surg
  - Kidney, etc Offices
  - Psych/Onc, Rad Onc, Pul
  - Off
- 3
  - 36 beds (36)
  - 3180
  - OR/Proc (8)
  - 2868
  - Med Lab Med Rec
  - Int Med, Derm, etc Path Lab
  - bridge CR/EMU/CME/CPDC
- 2
  - Beds (36)
  - 3180
  - ICU beds (34)
  - 2868 bridge
  - Kitchen Dining
  - Micro Lab RN Adm
  - CPDC/Conf Ctr Multi Ed Serv
- 1
  - Rad Onc Imaging/public support
  - 2365 entry-> ED
  - 2917
  - Lobby/Adm Lab ?
  - ED Mech
  - Aud/Conf Ctr Lobby

New Hospital Tower

Current Medical Center

Auditorium

NMC Phase 4

NMC Phase 3

MC Phase 2

MC Phase 1

ACC

New Hospital

Current Medical Center

Tower

AUB MEDICAL CENTER - NMC and ACC Master Planning, Programming and Concept Design
New Hospital Tower

Cancer and Children’s Hospital

Current Medical Center

| PH | 320 beds (216/94/0/10) mech 1800 |
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<td>1</td>
<td>Rad Onc Imaging/public support</td>
<td>2365</td>
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#### Auditorium Remains
- NMC Phase 4
- NMC Phase 3
- MC Phase 2
- MC Phase 1
- ACC

#### New Hospital Tower
- Current Medical Center
- Cancer and Children’s Hospital
- Academic and Clinical Center

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2012 AAMC Annual Meeting
AUBMC 2020 Vision:
AUBMC Academic and Clinical Center: prototype building combining academia and clinical care
AUBMC 2020 “New” Vision in Education:

Our (resurgent) strategic vision in education is to be a regional resource serving the advancement of health professions education in the Middle East.
Education: The New Vision

Strategic Vision: to be a regional center serving the advancement of health professions education in Lebanon and the Middle East.

Initiatives in Education:

- Program for Research and Innovation in Medical Education (PRIME)
Education: The New Vision

Strategic Vision: to be a regional center serving the advancement of health professions education in Lebanon and the Middle East.

Initiatives in Education:

- Program for Research and Innovation in Medical Education (PRIME)
- Undergraduate Medical Education
Education: The New Vision

Strategic Vision: to be a regional center serving the advancement of health professions education in Lebanon and the Middle East.

Initiatives in Education:

- Program for Research and Innovation in Medical Education (PRIME)
- Undergraduate Medical Education
- Post Graduate Medical Education
Program for Research and Innovation in Medical Education (PRIME) (Ramzi Sabra –Director): A core resource Program for Medical education; six Units:

I. Curriculum Development Unit.

Teaching and Learning:

- Classroom Education - Nathalie Zgheib
- Clinical Education - Umayya Musharrafieh
- Evidence-Based Medicine - Mona Nabulsi
- Ethics and Professionalism - Thalia Arawi (through the Salim Hoss Bioethics and Professionalism Program)

Learner Assessment

- Cognitive Assessment - Fuad Ziyadeh
- Performance Assessment - Imad BouAkl

Curriculum Evaluation - Ramzi Sabra:

II. Simulation Unit - Rana Sharara

III. Information Technology Unit - Joumana Antoun:

IV. Inter-professional Education Unit - Imad BouAkl with Nuhad Doumit for HSON and Rima Afifi for FHS

V. Faculty Development and Advancement Unit - Kamal Badr

VI. Research in Education Unit - Nathalie Zgheib
AUBMC 2020 Vision:

Initiatives in Undergraduate Medical Education

To graduate physicians who will **impact and transform** society as healers, scholars, educators and advocates.

New integrated “IMPACT” Curriculum: 2013
AUBMC 2020 Vision:
Initiatives in Undergraduate Medical Education

To graduate physicians who will impact and transform society as healers, scholars, educators and advocates.

New integrated “IMPACT” Curriculum: 2013

AUB is Pilot Participant with AAMC on GHLO: April 1, 2012.

The Global Health Learning Opportunities (GHLO™) is a AAMC initiative that will utilize web-based software to streamline the application process for cross-border medical school electives.
The Global Health Learning Opportunities (GHLO™): Participating Institutions

**U.S. Medical Schools**

- Boston University School of Medicine
- Case Western Reserve University
- Tulane University
- University of California - Davis
- University of California - San Diego
- University of Illinois College of Medicine
- University of Pittsburgh School of Medicine
- University of Rochester School of Medicine & Dentistry
- University of South Carolina
- University of Texas Health Science Center

**International Medical Schools**

- American University of Beirut, Lebanon
- Erasmus MC, Netherland
- Jagiellonian University, Poland
- Johann Wolfgang Goethe University Frankfurt am Main, Germany
- Katholieke Universiteit Leuven, Belgium
- Manipal University, India
- Monash University Australia, Australia
- Monash University Malaysia, Malaysia
- St. George's University of London, UK
- Technion Israel Institute of Technology, Israel
- Universidade Cidade de Sao Paulo, Brasil
- Universidade do Minho, Portugal
- Universidad Peruana Cayetano Heredia, Peru
- University of Pavia, Italy
Total Number of Residents & Fellows over past 6 years


Residents Fellows

20/20 Vision

Initiatives in Post-graduate Medical Education
# List of 2012-2013 Programs

<table>
<thead>
<tr>
<th>Residency Programs</th>
<th>Fellowship Programs</th>
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<tbody>
<tr>
<td>1. Anesthesiology</td>
<td>1. Cardiovascular Anesthesiology</td>
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<tr>
<td>2. Dermatology</td>
<td>2. Internal Medicine- Cardiology</td>
</tr>
<tr>
<td>3. Diagnostic Radiology</td>
<td>3. Internal Medicine - Endocrinology &amp; Metabolism</td>
</tr>
<tr>
<td>4. Emergency Medicine</td>
<td>4. Internal Medicine - Gastroenterology</td>
</tr>
<tr>
<td>5. Family Medicine</td>
<td>5. Internal Medicine - Hematology-Oncology</td>
</tr>
<tr>
<td>6. Internal Medicine (Preliminary &amp; Categorical Track)</td>
<td>6. Internal Medicine - Infectious Disease</td>
</tr>
<tr>
<td>7. Obstetrics &amp; Gynecology (Preliminary &amp; Categorical</td>
<td>7. Internal Medicine - Nephrology</td>
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<tr>
<td>Track)</td>
<td>8. Internal Medicine - Pulmonary &amp; Critical Care</td>
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<tr>
<td>16. Radiation Oncology</td>
<td>17. Pediatrics - Neurology</td>
</tr>
<tr>
<td>17. General Surgery (Preliminary &amp; Residency Track)</td>
<td>18. Psychiatry - Mood Disorder</td>
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<td>18. Neurosurgery</td>
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<tr>
<td>19. Orthopedic Surgery</td>
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<tr>
<td>20. Plastic Surgery</td>
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<tr>
<td>21. Urology</td>
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2012 AAMC Annual Meeting
Strategic Objectives for Post-Graduate Medical Education: 2012-2017:

1. Curricular Reform of Residency/Fellowship Programs: transformation to competency based ACGME-compliant programs.

2. ACGME(I) Accreditation.

3. Regional initiatives
Components of the AUB 20/20 Vision which provide resources for capacity building in regional medical education.
Components of the AUB 20/20 Vision which provide resources for capacity building in regional medical education.

Establish AUBMC as a regional hub for clinical practice and research through six COEs

- Cancer
- Neuroscience Neurogenetics
- Immunology and Immuno-therapeutics
- Cardiovascular Sciences
- Stem Cell Biology and Therapeutics
- Diabetes and Metabolic Disorders
Components of the AUB 20/20 Vision which provide added resources for capacity building in regional medical education.

- AUBMC as a regional hub for clinical practice and research through six COEs
- AUBMC as a regional hub for Continuing Medical Education and Professional Development
- AUBMC as a regional hub for Clinical and Translational Research
1. AUB and its Faculty of Medicine: History and current status.

2. “AUBMC 2020 Vision”

3. Can we (AUB, Regional Partners, and the “US House of Medicine”) create a new paradigm for advancing health professions education in the ME?
Proposed Elements of a new paradigm: AAMC 2012

1. Shift the focus and scope of implementation strategies in health profession education from “global” to “regional”

   Define basis for “region”
Proposed Elements of a new paradigm: AAMC 2012

What is a “Region”? 

For educational objectives and initiatives, a region is best defined on language/culture basis: for MENA

I. Arabic-speaking countries

II. Turkey/Iran/Israel
GLOBALIZATION TO REGIONALIZATION: WHAT IS THE REGION?

ARABIC SPEAKING COUNTRIES

2012 AAMC Annual Meeting
Proposed Elements of a new paradigm: AAMC 2012

1. Shift the focus and scope of implementation strategies in health profession education from “global” to “regional”
   Define basis for “region”

2. “Transpose” the excellence of the “US House of Medicine” in medical education to “regions” that seek it.
Proposed Elements of a new paradigm: AAMC 2012

MENA Healthcare in 2015: 125 Billion Dollars
Proposed Elements of a new paradigm: AAMC 2012

1. Shift the focus and scope of implementation strategies in health profession education from “global” to “regional”
   Define basis for “region”

2. “Transpose” the excellence of the “US House of Medicine” in medical education to “regions” that seek it.

3. Leverage the repatriation of US-trained exported physicians to effect the transposition of the US House of Medicine back to their home regions.
PHYSICIAN EXPORT: REGION TO NORTH AMERICA: 15,000 MDs
PHYSICIAN EXPORT: REGION TO NORTH AMERICA: REVERSIBLE?
AUBMC 2020 Vision: Transforming Healthcare in the Middle East

Reversing the brain drain: a Lebanese model

A country's efforts to keep doctors and biomedical scientists after they qualify often fail owing to a lack of a clear strategy. Mohamed H. Sayegh and Kamal F. Badr argue they have developed a model in Lebanon, one which could be scaled up and implemented elsewhere.

Mohamed Sayegh & Kamal Badr
5 Requirements for Repatriation

1. Analyze the demographic and professional characteristics of exported medical graduates and scientists in the West (focusing initially on those in the United States).

2. Access the willingness of medical graduates and scientists to return to the region.

3. Build and expand local infrastructures for medical education, research, and clinical practice in the home country.

4. Create academic and clinical networks of collaboration with regional medical centers and healthcare facilities.

5. Forge and maintain links with North American and European medical centres and universities.
Proposed Elements of a new paradigm: AAMC 2012

1. Shift the focus and scope of implementation strategies in health profession education from “global” to “regional”
   Define basis for “region”

2. “Transpose” the excellence of the ”US House of Medicine” in medical education to “regions” that seek it.

3. Leverage the repatriation of US-trained exported physicians to effect the transposition of the US House of Medicine back to their home regions.

4. Begin building ”regional houses of medicine” modeled after the American system, but also interacting symbiotically with it, and create the mechanisms for such interactions (Portals, AAMC, AMEE, MEMA etc)
PHYSICIAN EXPORT: REGION TO NORTH AMERICA: AUB and the Arab Gulf: a new paradigm for partnership

EXPORTED REGIONAL PHYSICIANS (15,000)
PHYSICIAN EXPORT: REGION TO NORTH AMERICA: AUB and the Arab Gulf: a new paradigm for partnership

- AUB
- GCC
- Qatar
- Abu Dhabi
- Oman

EXPORTED REGIONAL PHYSICIANS (15,000)
PHYSICIAN EXPORT: REGION TO NORTH AMERICA: AUB and the Arab Gulf: a new paradigm for partnership

EXPORTED REGIONAL PHYSICIANS (15,000)

AUB

GCC
Qatar
Abu Dhabi
Oman

Iraq/Syria
Final thoughts

• The paradigm proposed relates to one sole objective: transposition and incorporation of quality.

• It has no implications or relevance to issues of manpower needs or licensure, which remain country-specific.

• The edifice of American medical education must be delivered as a continuum from undergraduate (College) to medical school (LCME) to PGME (ACGME) to Board Certification (ABMS), in order to yield the desired quality outcome.
Final thoughts

• The present times offer a unique opportunity for American medical education to take a leadership role in shaping the future of health in a region undergoing transformative historical changes.... and for bringing the peoples of that region closer together.. Let us not waste it.

• AUB is, as ever, ready to serve at the forefront of this new opportunity to fulfill the mission for which it was founded:
THAT THEY MAY HAVE LIFE AND HAVE IT MORE ABUNDANTLY
Weill Cornell Medical College in Qatar’s Role in Globalization of Education:

A Unique Model and a Vision for its Future

Javaid I. Sheikh, MD, MBA
Dean, Weill Cornell Medical College in Qatar
November 4, 2012
Overview

• Introduction and program overview
• Faculty and student body
• Admission, curricula, student performance
• Clinical affiliates
• Research Centers of Excellence
• Residency and research training
• Vision for the future
Weill Cornell Medical College in Qatar

- Founded in 2001 as a branch campus of WCMC in New York
- A historic partnership between Qatar Foundation (QF) for higher education and Cornell University (CU)
- Teaching by CU faculty
- Unique Pre-Medical and Medical programs (2 + 4 years)
- First American University to offer the same M.D. degree abroad as for its students at the home campus
- Tripartite mission: Excellence in Education, Research and Clinical Care
Program principles

Per the signed agreement between CU and QF, the WCMC-Q branch campus shall be identical to WCMC in New York in the following key aspects:

• Curriculum
  ▪ Qatar-based faculty follow NYC education plan
  ▪ 40+ visiting NYC faculty/year to Qatar to teach courses. Videos/live streaming of NYC lectures

• Quality of the students
  ▪ Same admissions process

• Quality of the faculty
  ▪ Same appointment and promotion process

• Degree granted (CU degree)
Program structure

Pre-med Program in Qatar specifically designed to maintain same four-year Medical Program as in New York

90-98% entrants into Medical Program come from Pre-med Program

Foundation Program (1 year) available to students from Qatar
# WCMC-Q academic staff

<table>
<thead>
<tr>
<th>Category</th>
<th>Count</th>
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<tbody>
<tr>
<td><strong>WCMC-Q RESIDENT FACULTY</strong></td>
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<tr>
<td><strong>VISITING FACULTY (WCMC &amp; CU)</strong></td>
<td>43</td>
</tr>
<tr>
<td><strong>AFFILIATED INSTITUTIONS</strong></td>
<td>249</td>
</tr>
<tr>
<td><strong>NON-FACULTY ACADEMIC STAFF</strong></td>
<td>35</td>
</tr>
</tbody>
</table>

- Faculty appointed through Weill Cornell Medical College (NYC) or Cornell University (Ithaca, NY)
  - Same appointment & promotion process as US colleagues
## Students

<table>
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<tr>
<th>Class</th>
<th>Total</th>
<th>Gender</th>
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<tr>
<td>Foundation (Class 2019)</td>
<td>19</td>
<td>11F, 8M</td>
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<tr>
<td>Pre-medical 1, 2 (Class 2017, 18)</td>
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<td>48F, 40M</td>
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<td>Medical 1, 2 (Class 2015, 16)</td>
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<td>39F, 43M</td>
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<td>Medical 3, 4 (Class 2013, 14)</td>
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<td>42F, 42M</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>273</strong></td>
<td><strong>140F, 133M</strong></td>
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</table>

Representing 29 different countries
### Curriculum: pre-med program

#### TWO YEAR PRE-MEDICAL CURRICULUM

<table>
<thead>
<tr>
<th>Year</th>
<th>Aug</th>
<th>Sep</th>
<th>Oct</th>
<th>Nov</th>
<th>Dec</th>
<th>Jan</th>
<th>Feb</th>
<th>Mar</th>
<th>Apr</th>
<th>May</th>
<th>Jun</th>
<th>Jul</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-medical 1</td>
<td></td>
<td>Introductory Biology I</td>
<td>General Chemistry I</td>
<td>Calculus I</td>
<td>Biology Seminar</td>
<td>Writing Seminar</td>
<td>Introductory Biology II</td>
<td>General Chemistry II</td>
<td>Calculus II</td>
<td>Biology Seminar</td>
<td>Writing Seminar</td>
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</tr>
<tr>
<td>FALL – Total credit hours = 15</td>
<td>SPRING – Total credit hours = 16</td>
<td></td>
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</tbody>
</table>

| Pre-medical 2 | Physics | Organic Chemistry I | Psychology | Medical Ethics | Neuroscience | | Biochemistry | Organic Chemistry II | Human Genetics | Immunology | Writing Seminar | | | | | | | Medical Program Application Process |
| FALL – Total credit hours = 14 | SPRING – Total credit hours = 15 |
Admissions to medical program

Admissions process replicates that in New York:

- GPA
- MCAT
- Interview
- Letters of Reference
- Volunteer activities
- Extracurricular activities
- Other attributes
- Final decision by combined NY & Qatar admissions committee
## Curriculum: medical program

### FOUR YEAR MEDICAL CURRICULUM

<table>
<thead>
<tr>
<th>Year</th>
<th>Jul</th>
<th>Aug</th>
<th>Sep</th>
<th>Oct</th>
<th>Nov</th>
<th>Dec</th>
<th>Jan</th>
<th>Feb</th>
<th>Mar</th>
<th>Apr</th>
<th>May</th>
<th>Jun</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medical 1</td>
<td></td>
<td></td>
<td></td>
<td>Molecules Genes &amp; Cells</td>
<td>Human Structure &amp; Function</td>
<td>Host defenses</td>
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<tr>
<td></td>
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<td></td>
<td>Medicine, Patients &amp; Society I</td>
<td></td>
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<tr>
<td>Medical 2</td>
<td></td>
<td></td>
<td></td>
<td>Brain &amp; Mind</td>
<td>Basis of Disease</td>
<td>USMLE Step I Study</td>
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<td>Medicine, Patients &amp; Society II</td>
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</tr>
<tr>
<td>Medical 3</td>
<td></td>
<td></td>
<td></td>
<td>Clinical Clerkships &amp; Electives</td>
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<td>Anesthesia</td>
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<td>Neurology</td>
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<td>Pediatrics</td>
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<td>Public Health</td>
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<td>Medical 4</td>
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<td>Clinical Clerkships &amp; Electives</td>
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<td></td>
<td>Advanced Biomedical Science</td>
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<td>Clinical Clerkships &amp; Electives</td>
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2012 AAMC Annual Meeting
USMLE Step 1 passing % of WCMC-Q and USA/Canada students (first attempt)

No significant difference between the two populations

Number

<table>
<thead>
<tr>
<th>Year exam taken</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
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<td>2009</td>
<td>2010</td>
<td>2011</td>
<td>2012</td>
<td>2013</td>
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</table>
USMLE Step 1 means for WCMC-Q and USA/Canada students (first attempt)

No significant difference between the two populations

<table>
<thead>
<tr>
<th>Year exam taken</th>
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<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
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<tbody>
<tr>
<td>Class of</td>
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<td>2009</td>
<td>2010</td>
<td>2011</td>
<td>2012</td>
<td>2013</td>
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<td>Number</td>
<td>16</td>
<td>16</td>
<td>22</td>
<td>28</td>
<td>30</td>
<td>34</td>
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</table>
### WCMC-Q clinical partners

<table>
<thead>
<tr>
<th>Hamad Medical Corporation:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Largest healthcare provider in Qatar</td>
</tr>
<tr>
<td>• WCMC-Q’s primary clinical partner</td>
</tr>
<tr>
<td>• WCMC-Q and HMC are working together on transforming into an Academic Health Science Center</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sidra Medical &amp; Research Center:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• US-style, fully digital Academic Medical Center</td>
</tr>
<tr>
<td>• Primarily focusing on care of women and children</td>
</tr>
<tr>
<td>• World-class clinical and translational research</td>
</tr>
</tbody>
</table>
Research strategy and deliverables

Multipronged Approach

- Research Administration: Compliance, Procurement, Grants, etc.
- Advanced Research Infrastructure: Core Labs
- Recruit & Retain World-Class Faculty & Scientists
- Training Programs to strengthen Human Capital
- A Collaborative Model: National & International

Multiple Deliverables

- Contribute knowledge through publications & IP
- Address pressing health needs in Qatar & the region
- Build biomedical research infrastructure & capacity in Qatar
- Sustainable human capacity through training programs & recruitment
- Contribute toward building knowledge based society

Bench (basic & translational research)

Bedside (clinical research & clinical trials)

Community (public health policies & strategies)
Research department structure

Faculty Laboratories
- Cancer Genomics
- Psychiatry
- Stem Cell Biology
- Patient-Physician Relationship
- Women's Health
- Infectious Disease Epidemiology
- miRNA
- Signal Transduction
- Cardiovascular
- Metabolomics
- Neurobiology
- Diabetes
- Date Palm Genomics
- Calcium Signaling
- DNA Repair
- Neurogenetics
- Proteomics

Core Facilities
- Proteomics
- Bioinformatics
- Basic
- Genomics
- Stem Cells
- Imaging
- Biostatistics
- Vivarium

Research Administration
- Business & Grants
- Compliance
- Lab Management
- Clinical Support

26 Active Research Labs
Residency and Research Training

Allocation Graduating Class

Year

2008 2009 2010 2011 2012

0% 25% 50% 75% 100%

- Research
- Hamad Med. Corp.
- US Match
Qatar National Vision

Human Development
Developing physician leaders, scientists, innovators, and a broad-based skilled healthcare workforce to address pressing healthcare needs of society

Social Development
Through education and community involvement, contribute to Qatar’s National Vision of social Development including a just and moral society

Economic Development
Training a skilled workforce who will contribute to a knowledge based economy, as will the commercialization of discoveries and patents

Environmental Development
Initiating and collaborating in relevant applied research to keep a clean and safe environment and educating people about minimizing pollution

WCMC-Q Vision
Specific Objectives for the next decade-I

• Along with its primary clinical affiliates HMC and Sidra, become a regional leader in MENA for ACGME-I accredited GME

• Under the auspices of ABMS and in partnership with AUB and others in the region, play a leading role in establishing a regional board certification

• In collaboration with Sidra and Qatar Biomedical Research Institute, become the regional Center of Excellence for obesity & diabetes research
Specific Objectives for the next decade-II

• Implement a plan for a comprehensive career pathway for returning alumni from the US in academia, public, and private sectors

• Play a pivotal role in healthcare policy development and implementing public health initiatives of major importance (e.g., obesity, diabetes, MVAs)

• Become widely recognized as one of the premier medical schools in all of Asia
Flattening the World of Medical Education: Duke--NUS Medical School’s Approach

Robert K. Kamei, MD, Vice Dean, Medical Education, Duke-National University of Singapore Graduate Medical School

November 4, 2014
Year 2000: Singapore’s initiative to be biomedical hub

Year 2005: Agreement signed

Year 2007: Pioneer class starts school

Year 2011: Graduation of the Pioneer Class
Duke/Duke-NUS MD vs. Conventional MD

Duke & Duke-NUS

1st year

2nd year

3rd year

4th year

Basic Science

Research

Clinical

Typical US MD Program

1st year

2nd year

3rd year

4th year

Basic Science

Clinical
PLANNING THE CURRICULUM
15,000-17,000 medical journals!!!
New Instructional Strategy:

TeamLEAD
(Learn, Engage, Apply, Develop)
TRADITIONAL

Wishful Thinking:

Before | During | After
--- | --- | ---
Pre-work | Active Learning | Homework

Exam

REALITY:

Before | During | After
--- | --- | ---
Pre-work | Passive Lecture | Study

Exam
TeamLead: Reality:

Before | During | After

Pre-work | Lecture | Study | Exam
TeamLEAD:

Before | During | After
--- | --- | ---
Pre-work | Lecture | Study
Exam

Video-taped Lecture
TeamLEAD:

Before
Video-taped Lecture

During
Team Problem Solving

After
Study

Exam
TeamLEAD:

Before
Video-taped Lecture

During
Team Problem Solving

After
Review

Exam
Instructional Strategy

Team LEAD (Learn, Engage, Apply, Develop)

- Goals and Objectives
- Learning Materials
- Independent /Team learning
# Sample Timetable

<table>
<thead>
<tr>
<th></th>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
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<tbody>
<tr>
<td>7</td>
<td>10:00 AM - 12:00 PM RA # 7</td>
<td>8:30 AM - 11:00 AM <strong>Histology Lab # 4:</strong></td>
<td>8:00 AM - 12:00 PM <strong>Practice Course</strong></td>
<td>10:00 AM - 12:00 PM RA # 8</td>
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<tr>
<td></td>
<td>LEAD Room - Level 2 - Duke-NUS new campus</td>
<td><strong>Cartilage and Bone</strong></td>
<td>LEAD Room - Level 2 - Duke-NUS new campus</td>
<td>LEAD Room - Level 2 - Duke-NUS new campus</td>
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<tr>
<td></td>
<td>2:00 PM - 4:30 PM <strong>TeamLEAD # 7:</strong></td>
<td><strong>LEAD Room - Level 2 - Duke-NUS new campus</strong></td>
<td>12:30 PM - 1:30 PM <strong>College Meetings</strong></td>
<td>2:00 PM - 4:30 PM <strong>TeamLEAD # 8:</strong></td>
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<td>**Diabetes Mellitus and intermediary</td>
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<td>(Venue: #03-15, #03-17, #03-18, #03-19)</td>
<td><strong>Lipid and lipoprotein metabolism</strong></td>
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<td></td>
<td>metabolism**</td>
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<td>LEAD Room - Level 2 - Duke-NUS new campus</td>
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<td>LEAD Room - Level 2 - Duke-NUS new campus</td>
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</tbody>
</table>
Instructional Strategy

Team LEAD (Learn, Engage, Apply, Develop)

- Goals and Objectives
- Learning Materials
- Independent / Team learning
- In-class student teams
  - Readiness phase
  - Application phase
Individual Readiness Assessment
Group Readiness Assessment
IF/AT forms
Instructional Strategy

Team LEAD (Learn, Engage, Apply, Develop)

- Goals and Objectives
- Learning Materials
- Independent /Team learning
- In-class student teams
  - Readiness phase
  - Application phase
Application Phase
Application Phase
Duke/Duke-NUS MD vs. Conventional MD

Duke & Duke-NUS

1\textsuperscript{st} year
2\textsuperscript{nd} year
3\textsuperscript{rd} year
4\textsuperscript{th} year

Basic Science
Research
Clinical

Typical US MD Program

1\textsuperscript{st} year
2\textsuperscript{nd} year
3\textsuperscript{rd} year
4\textsuperscript{th} year

Basic Science
Clinical
CBSE

Comprehensive Basic Science Exam US Mean and Standard Deviation Compared to Duke-NUS at the end of Year 1 and Year 2

**significant difference at p<.01**
USMLE Step 1 (Mean, Standard Deviation) first time score US 2011 compared to Duke-NUS (2010 to Sep 2012)

US; (2011, n=20,457)  
DNUS; (2010-12, n=115)

no significant difference; p = 0.0518
21st Century Learning in Medicine: Traditional Teaching versus Team-based Learning

Robert K. Kamei¹, Sandy Cook², Janil Puthucheary² & C. Frank Starmer¹
¹Duke–National University of Singapore Graduate Medical School, Singapore and Duke University School of Medicine, Durham, NC, USA
²Duke-National University of Singapore Graduate Medical School, Singapore

More Information:

Watch our Videos
www.youtube.com/insidedukenus

TeamLEAD Video
www.youtube.com/insidedukenus
Our Students’ Profile
24 Countries: Duke-NUS students
KEY UNIVERSITIES ATTENDED

USA
Amherst
Columbia
Cornell
Dartmouth College
Duke University
Emory
Harvard
Johns Hopkins
Northwestern University
Rice University
Stanford University
Tufts University
UC Berkeley
UC Irvine
UC San Diego
Univ. of Michigan
Univ. of Pennsylvania
Univ. of Washington, Seattle
Yale

Singapore
NUS
NUS-MIT
NTU

Australia
Monash
Univ. of Melbourne
Univ. of Sydney

Canada
Simon Fraser University
Univ. of Toronto

India
Univ. of Mumbai

Philippines
Univ. of Philippines

China
Fudan University
Huazhong Agricultural University
Peking University
Shanghai Jiao Tong University

Europe
University of Birmingham
University of Cambridge
University of London
University of Oxford
University of York
Imperial College

Russia
Lomonosov Moscow State University

Hong Kong
Chinese University of Hong Kong
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<tr>
<td>Engineering</td>
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<tr>
<td>Pharmacy/Pharmacology</td>
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<td>2</td>
<td>1</td>
<td>4</td>
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<td>Chemistry/ Biochemistry</td>
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<td>4</td>
<td>1</td>
<td>2</td>
<td>6</td>
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<td>Dentistry</td>
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<tr>
<td>Nursing/Nutrition</td>
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<tr>
<td>Social Sciences/Humanities</td>
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<td>(Anthropology, History, Statistics, Epidemiology, Neuroscience, Arts)</td>
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<tr>
<td>Traditional Chinese Medicine (TCM)</td>
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<tr>
<td>Business/Economics</td>
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<td>2</td>
<td>6</td>
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Student Profile
America’s Medical School in Asia
Academic Medicine in Singapore
ACGME-International Residency Programs

For more information on the AM•EI, visit 
http://www.duke-nus.edu.sg/academic-medicine
Perspectives from Members of the US “House of Medicine” – Part 2
3 Ways To Submit Questions:

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Liaison Committee on Medical Education: Seeing Beyond the Existing Borders

Dan Hunt, MD MBA, LCME Co-Secretary; Senior Director, Accreditation Services, Association of American Medical Colleges

November 4, 2014
Liaison Committee on Medical Education
Seeing Beyond the Borders

Dan Hunt, MD, MBA
LCME Co-Secretary
Senior Directory for Accreditation Services
Association of American Medical Colleges

November 4, 2012
A Case for Accreditation
County number 2
International Activities for the LCME

- Provide assistance to regions or countries in setting up their own accreditation systems
- Provide quality improvement support for individual schools using World Federation of Medical Education standards
- Undergo review by the WFME for recognition
Globalization of Medical Education: ECFMG Concerns and Initiatives

Emmanuel G. Cassimatis, MD
President and CEO, ECFMG
Chair, Board of Directors, FAIMER

San Francisco, November 4, 2012
Mission of the Educational Commission for Foreign Medical Graduates (ECFMG)

"The ECFMG promotes quality health care for the public by certifying international medical graduates for entry into U.S. graduate medical education, and by participating in the evaluation and certification of other physicians and health care professionals nationally and internationally. In conjunction with its Foundation for Advancement of Medical Education (FAIMER) and other partners, it actively seeks opportunities to promote medical education through programmatic and research activities."
Global Migration of Physicians

- The number of physicians coming to the USA from certain countries, mainly India, has decreased somewhat in recent years, but that decrease has been partially compensated by increased numbers of US IMGs, Canadian IMGs and others, coming mostly from the Caribbean.

- The number of IMGs emigrating to countries other than the USA appears to be increasing somewhat (based on ECFMG data from EICS and other sources).

- ECFMG is accordingly faced with two IMG populations, one coming to the USA and another going to Australia, Canada, South Africa, UK and other countries.
Questions Posed by Conference Organizers

As medical education and training globalizes, what should medical educators consider?

A. Can we create multinational medical schools and residency training programs?

B. Will licensing bodies recognize multinational training and certification?

C. Will we need multinational assessment tools?

D. All of the above?
Can we create Multinational Medical Schools and Residency Training Programs?

If by “multinational” we mean schools and programs that recruit students from—and then send them on to—many countries, the answer to question A is “Yes,” as many such schools already exist.

The concerns that then have to be raised are:

- Which are the multinational and other international schools and where are they? Are they all legitimate?
- Are these schools accredited and, if yes, by whom, and on the basis of what standards?
- As students seek training opportunities around the world, how can they become familiar with what is available internationally?
Which are the multinational and other international schools and where are they? Are they all legitimate? FAIMER’s International Medical Education Directory (IMED)

IMED Lists over 2,200 medical schools worldwide
The AVICENNA Directories

The Avicenna Directories
Global directories of education institutions for health professions

A partnership of the World Health Organization and the University of Copenhagen

Copenhagen 2008
Which are the multinational and other international schools and where are they?

The World Directory of Medical Schools (WDMS)

- A partnership of FAIMER and the World Federation for Medical Education (WFME), in collaboration with WHO and the University of Copenhagen.
- Major Sponsors include the Australian Medical Council, the General Medical Council (UK) and the ECFMG. MCC is considering becoming a major sponsor. Korean Institute of Medical Education and Evaluation also a sponsor.
- Will incorporate Avicenna and IMED databases which are presently being merged.
- To be launched in late summer/fall of 2013.
- Avicenna and IMED will remain available for at least a year beyond the launch of WDMS.
Are multinational schools accredited and, if yes, by whom, and on the basis of what standards?

ECFMG and International Accreditation of Medical Schools

- The ECFMG Board announced in September of 2010 an addition (effective in 2023) to the list of requirements for certifying an International Medical Graduate (IMG) for entry into US GME: Graduation from an **accredited** international medical school

- The new ECFMG requirement stipulates that the standards utilized in the accreditation of international medical schools by accrediting agencies be comparable to US (LCME) standards and/or established global standards, such as those put forth by WFME
WFME Global Standards

- Trilogy of standards for UME/GME/CME
- Basic level for accreditation and quality development
- Modified for different countries
Proposed Global Accreditation Mechanism

- WFME reviews and “recognizes” Regional or National Accrediting Agencies for compliance with its standards
  - First pilot: Caribbean Accreditation Authority for Medicine (CAAM), completed in May 2012; CAAM is now officially recognized by WFME
  - Next to be reviewed: LCME and CCMS

- Regional or National Agencies accredit individual schools

- Accreditation of an international medical school by an agency recognized by WFME, will meet the new ECFMG requirement for certification
As students seek training opportunities around the world, how can they become familiar with what is available to them? ECFMG’s Global Education in Medicine Exchange (GEMx)

- ECFMG will utilize its extensive relationships with medical schools, physicians, regulatory agencies, health care organizations, and other entities to understand challenges, innovate solutions, and ensure that GEMx meets the real-world needs of the medical schools and students engaging in global exchanges.

- GEMx will facilitate and promote international exchanges in medical education, providing medical schools and students with access to the two most essential components of effective exchange programs: information and community.
Will Licensing Bodies Recognize Multinational Training and Certification?

Licensing is presently at best national (in the US, no national license exists), and there are massive obstacles to its becoming international. However, in evaluating individuals for licensure, regulatory bodies may accept legitimate international credentials, issued on the basis of legitimate international standards.

**Gold standard for credentials:** Primary source verification

**Concern:**

How are credentials of international students seeking GME and or licensure in any country validated? Are the students’ credentials primary source verified?
How are credentials of international students seeking GME and/or licensure in any country validated? Are the students’ credentials primary source verified?

- **ECFMG’s International Credentials Services (EICS)**
  - Established in 2000 to assist international medical regulatory authorities in evaluating credentials of applicants’ education within their jurisdiction.

- **Electronic Portfolio of International Credentials (EPIC)**
  - Due to launch in early 2013
  - Provides individual IMGs physicians with a secure repository of primary-source verified medical credentials
  - Online service with 24/7 access
ECFMG International Credentials Services (EICS)

Credentials Primary-Source Verified by EICS in 2011, by Document Type

- Medical School Diploma: 9084 (43%)
- Certificate of Postgraduate Medical Training: 5747 (27%)
- Medical School Transcript: 3904 (19%)
- Certificate of Licensure: 2188 (10%)

Current Clients include:

- **Australia** - Australian Medical Council
- **Canada** - Medical Council of Canada and Physicians Credentials Registry of Canada
- **Namibia** - Medical and Dental Board of Namibia
- **Norway** - Norwegian Registration Authority for Health Personnel
- **South Africa** - Health Professions Council of South Africa
- **United States** - Federation of State Medical Boards of the United States
And what about IMGs still coming to the USA?

Be connected. Be heard. Be informed.
ECHO: ECFMG Certificate Holders’ Office

- Provides information and services to ECFMG-certified physicians and those nearing certification as they plan their careers.
- Helps ECFMG-certified physicians stay connected with ECFMG and access its resources.
- Provides ongoing communication with ECFMG through survey and feedback pages.
As medical education and training globalizes, what should medical educators consider?

Summary of Identified Concerns:

- Which are the medical schools operating around the world and where are they? Are they legitimate?
- Are medical schools around the globe accredited and, if yes, by whom, and on the basis of what standards?
- As students seek training opportunities around the world, how can they become familiar with what is available internationally?
- How are credentials of international students seeking GME and or licensure in any country validated? Are they primary source verified?
- What guidance/support is available for students/physicians seeking training and professional opportunities internationally or in the USA?
Summary of ECFMG Initiatives in Response to Identified Globalization Concerns

- The new World Directory of Medical Schools (WDMS) incorporating Avicenna and IMED
- ECFMG’s Accreditation Requirement and WFME’s Recognition of Accreditors Initiative
- ECFMG’s Global Education in Medicine Exchange GEMx Program
- ECFMG’s Primary Source Credentials Verification Programs:
  - ECFMG International Credentials Service (EICS)
  - Electronic Portfolio of International Credentials (EPIC)
- ECFMG’s Certificate Holders’ Office (ECHO)
Thank you!
3 Ways To Submit Questions:

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• By TEXT - text questions to: 857-544-9552

• By FORM - write your question in the form provided and submit your question in one of the designated “Q&A” boxes
Welcome and Reflections

Carol A. Aschenbrener, MD, Chief Medical Education Officer, Association of American Medical Colleges

November 4, 2014
International Assessment of Medical Students: Should it matter anymore where the school is located?

Donald E. Melnick, MD
President, NBME
November 4, 2012
Premise

With adequate, robust, comprehensive assessment systems that are responsive to local/regional needs, the geographic location (or credentials) of the educational institution should be irrelevant in decisions to license or employ health professionals.
Premise

With **adequate, robust, comprehensive** assessment systems that are responsive to local/regional needs, the geographic location of the educational institution should be irrelevant in decisions to license or employ health professionals.
Adequate

• How well does an assessment provide evidence about competence for locally defined needs?

• Do the standards of the assessment match local workforce and care-access parameters?

• Are local cultural and linguistic characteristics respected?

• Are practice variations accounted for?
Robust

- Is the assessment a stable predictor of future behavior?
  - Stability = reliability
  - Predictor = validity
Comprehensive

- Relevant competencies
  - Knowledge
  - Skills
  - Attitudes
- Locally sensitive
  - Non-compensatory standards
Adequate – Current state

• How well does an assessment provide evidence about competence for locally defined needs? **Possible**

• Do the standards of the assessment match local workforce and care-access parameters? **They can**

• Are local cultural and linguistic characteristics respected? **It’s possible**

• Are practice variations accounted for? **Straight forward process**
Robust – Current state

- Is the assessment a stable predictor of future behavior?
  - Stability = reliability – with some components of assessment, but not all
  - Predictor = validity – limited but tantalizing evidence
Scores predict future performance

Mammography Screening Rates

- Q-total (P<.001)
- Q-OSCE (P=.001)
- MCC-total (P<.001)
- MCC-prevention (P=.08)

Tamblyn, et al. JAMA, December 2002
Robust – Current state

- Is the assessment a stable predictor of future behavior?
  - Stability = reliability – with some components of assessment, but not all
  - Predictor = validity – limited but tantalizing evidence
Comprehensive – Current state

- Relevant competencies
  - Knowledge – Yes
  - Skills – Many
  - Attitudes – Few
- Locally sensitive
- Non-compensatory standards – Yes, but challenges test time and cost to achieve reliability
## Competency Definitions

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<thead>
<tr>
<th>ACGME/ABMS</th>
<th>AAMC MSOP</th>
<th>CanMeds 2000</th>
<th>GMC</th>
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<td>Patient care</td>
<td>Clinician</td>
<td>Clinical decision maker</td>
<td>Good clinical care</td>
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<td>Medical knowledge</td>
<td>Researcher educator</td>
<td>Medical expert</td>
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<tr>
<td>Practice-based learning</td>
<td>Lifelong learner</td>
<td>Scholar</td>
<td>Keeping up to date</td>
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## Competency Definitions

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<td>Interpersonal, communication skills</td>
<td>Communicator</td>
<td>Communicator</td>
<td>Good communication</td>
</tr>
<tr>
<td>Professionalism</td>
<td>Professionalism</td>
<td>Professional</td>
<td>Professional relationships with patients</td>
</tr>
<tr>
<td>System-based practice</td>
<td>Manager</td>
<td>Manager, collaborator</td>
<td>Working in teams</td>
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With adequate, robust, comprehensive assessment systems that are responsive to local/regional needs, the geographic location of the educational institution should be irrelevant in decisions to license or employ health professionals.
IMG versus USMG patient mortality

Adjusted odds ratio

Norcini, et al. Health Affairs, August 2010
Premise
With adequate, robust, comprehensive assessment systems that are responsive to local/regional needs, the geographic location or (or credentials) of the educational institution should be irrelevant in decisions to license or employ health professionals.
“International Graduate Medical Education Accreditation in 2025”

Thomas J. Nasca MD MACP
Chief Executive Officer
Accreditation Council for Graduate Medical Education
Accreditation Council for Graduate Medical Education, International Professor of Medicine (vol.)
Jefferson Medical College
Disclosure

- Professor of Medicine, Jefferson Medical College (vol.)
- No conflicts of interest to report
  - The ACGME receives no funds from any corporate entity other than accreditation fees related to ACGME accreditation services
  - The Journal of Graduate Medical Education permits no commercial advertising
  - The ACGME Annual Educational Conference is entirely self sufficient, without advertising or corporate sponsorship
  - ACGME International is a Not-for-Profit, self sufficient, entity
Rhetorical Question

Do you believe that the ACGME should be involved in International Program Accreditation?

If so, Why?
Nasca, T.J., Miller, R.S., Holt, K.D.

Figure 1. Actual and Projected Numbers of Medical School Graduates Entering Graduate Medical Education (GME) Training Positions, as Compared with Three Scenarios of Available Positions (2001–2020).

Health Policy Report. The Uncertain Future of Medicare and Graduate Medical Education.
Why I Believe ACGME Should be Involved in International GME Program Accreditation

• Opportunities for US funded training by non-US Citizen International Medical Graduates

• US Governmental, NGO, and University led initiatives to improve medical schools will exacerbate brain drain

• ACGME is seen by many as the “Gold Standard”
  • professional responsibility to share our expertise

• American Residents should have the opportunity to have international experiences in quality educational settings.

• With or without increased physician migration, International Standardization of Specialty Competencies will be demanded.
  • Requires common expectations of the GME Environment/Program
  • Need to be meeting others’ needs in order to “have a seat at the table”
Certification of Individuals along the Continuum of Medical Education

US Domestic Environment 2012-2018

Accreditation of the Continuum of Medical Education

Derived from D. Kirch MD, with permission
The GME World in 2025

- Three major international accreditation/certification systems in the world
  - British Royal College System
  - Canadian Royal College System
  - American “Alphabet Soup ‘System’ ”
    - Assumes a US-international individual recognition
    - (“Local” Single Country models will persist)
- Many currently “underdeveloped” countries will leapfrog over local oversight to international systems
- WHO/UN will drive common core standards through professional accrediting bodies
  - Need to “earn” a seat at the table
How Has the ACGME Prepared for 2025

- Created ACGME-International, LLC (2009)
- International Accreditation Framework that:
  - Education for Program Directors, Faculty, and Administration, Mock site visits
  - Adjusts to local (country) standards
  - Is compatible with Royal College individual recognition requirements as well as ABMS International efforts
  - Can provide “US educational frameworks” without “US Extreme Sub-specialization”
  - Plans engagement in developing countries
- Adding physicians from other countries (with ACGME-I experience) to the Review Committee
Three Thoughts...
“Faced with the choice between changing one's mind and proving that there is no need to do so, almost everybody gets busy on the proof.”

John Kenneth Galbraith
American Economist
“The Future ain’t what it used to be!”

Yogi Berra
New York Yankees Catcher, Philosopher
You Must Be the Change You Wish to See in the World.

Mohandas K. Gandhi
(1869-1948)
Thank You
International Board Certification

Reflections

Lois Margaret Nora, MD, JD, MBA
President and Chief Executive Officer
American Board of Medical Specialties

November 4, 2012
ABMS International (ABMS-I)

» Dr. Richard Hawkins, Ms. Krista Allbee, Ms. Johanna Tighe, Ms. Caitlin Proctor

» Engagement with Singapore
  • First ABMS-I board examination, April 2013
  • On-going development of next group of examinations

» Upcoming decision about expansion of international activities

» Should we expand activities or not?
Reason One

Mission Consistency
...to maintain and improve the quality of medical care by assisting the Member Boards in their efforts to develop and utilize professional and educational standards for the certification of physician specialists

...to provide information to the public, the governments of the United States and other countries, the profession and its Members concerning issues involving certification of physicians
Overarching Goal of ABMS-I

To position the ABMS Board Enterprise as a global entity that can provide support and add value to selected organizations around the world wishing to set high standards for assessing and certifying medical specialists

“Higher standards for physicians means better care for patients”
Reason Two

Our Medical Profession’s Covenant with Society
Characteristics of a Traditional Profession

» Special knowledge and skills unavailable to people outside of the profession

» Investment in the profession by society and a grant by society to self-regulate

» The commitment that the profession and its members will serve the interests of patients and the public, and behavior that is consistent with that commitment
Serving Our Patients and the Public

» High quality, safe health care is a global imperative
  • Ensuring the quality and safety of health care systems
  • Ensuring a competent workforce of sufficient size to meet increasing health care needs

» Physicians (and other health care professionals) should be trained to provide quality care in diverse environments

» Beginnings of an infrastructure to meet global health care needs
Reason Three

Our Colleagues Have Invited Us To Become Involved.
ABMS Certification Model

» Initial Certification
  • Requires completion of high quality (ACGME-accredited) post-graduate educational program and passing a rigorous examination
  • Assessment of competence and performance
  • Evidence supports the model

» Maintenance of Certification
Reason Four

We Have Much To Learn From Our Colleagues and This Work.
Reason Five

Together,
We Can Change The World.
Panel Discussion

Kamal F. Badr, MD, Associate Dean for Medical Education, Professor of Medicine, American University of Beirut

Emmanuel G. Cassimatis, MD, President and CEO, Education Commission for Foreign Medical Graduates

Robert K. Crone, MD, President & CEO, Strategy Implemented, Inc.

Lewis R. First, MD MS, University of Vermont Professor and Chair of Pediatrics; Editor-in-Chief of the American Academy of Pediatrics Journal Pediatrics; Chair, National Board of Medical Examiners

Dan Hunt, MD MBA, LCME Co-Secretary; Senior Director, Accreditation Services, AAMC

Robert K. Kamei, MD, Vice Dean, Medical Education, Duke-National University of Singapore Graduate Medical School

Donald E. Melnick, MD, President, National Board of Medical Examiners

Thomas J. Nasca, MD MACP, CEO, Accreditation Council for Graduate Medical Education

Lois Margaret Nora, MD J D MBA, President and CEO, American Board of Medical Specialties

Janette Samaan, PhD, Director, Global Health Learning Opportunities, Association of American Medical Colleges

Javaid Sheikh, MD MBA, Dean, Professor of Psychiatry, Weill Cornell Medical College in Qatar
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Janette Samaan, PhD, Director, Global Health Learning Opportunities, Association of American Medical Colleges

Javaid Sheikh, MD MBA, Dean, Professor of Psychiatry, Weill Cornell Medical College in Qatar
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