Creating Future Leaders: The Transformational Imperative for Medical Education and Global Health Care

Duke University – National University of Singapore

Darrell G. Kirch, M.D.
President and CEO, AAMC
January 30, 2012
AAMC Membership

The AAMC represents:

• All 136 U.S. and 17 Canadian M.D.-granting medical schools
• Nearly 400 major teaching hospitals and health systems
• Nearly 90 academic and scientific societies
Academia as a Major Provider of Health Care in the United States

AAMC-member teaching hospitals represent 6% of all U.S. hospitals

Their work represents:
- 40% of all Medicare inpatient days
- 22% of all Medicaid inpatient days
- 41% of all hospital charity care

They provide:
- 79% of all burn center beds
- 40% of neonatal intensive care beds
- 83% of all Level 1 regional trauma centers

Overall, AAMC-member teaching hospitals provide 20% of all hospital care
The reality of our shared historical legacy for academic medicine!
The Legacy of Abraham Flexner for Medical Education

Relevance of the Flexner Report to Contemporary Medical Education in South Asia

Zubair Amin, MD, MHPE, William P. Burdick, MD, MSEd, Avinash Supe, MS, PGDME, and Tejinder Singh, MD, MHPE

Abstract

A century after the publication of Medical Education in the United States and Canada: A Report to the Carnegie Foundation for the Advancement of Teaching (the Flexner Report), the quality of medical education in much of Asia is threatened by weak regulation, inadequate public funding, and explosive growth of medical schools. The purpose of this article is to extend the analysis of the Flexner Report, to contemporary medical education in South Asia, to analyze the consequences of growth, and to recommend pragmatic changes. Major drivers for growth are the supply–demand mismatch for medical school positions, weak governmental regulation, private sector participation, and emigration of trained health providers. Medical education reform in South Asia must adapt to these challenges and focus on quality improvement, transparency, and accountability.
NATIONAL BESTSELLER

THE CULTURE CODE

AN INGENIOUS WAY TO UNDERSTAND WHY PEOPLE AROUND THE WORLD LIVE AND BUY AS THEY DO

CLOTAIRE RAPAILLE
The Culture of the University
The Culture of Biomedical Research
The Culture of Health Care
Our Cultural Legacy

Hierarchical
Autonomous
Competitive
Individualistic
Expert-centered
Our global economic reality!
Asia stocks fall as S&P warns euro nations on debt

By PAMELA Sampson
 Associated Press
 updated 12/5/2011 10:56:34 PM ET

Bloomberg

European Stock Futures Decline on S&P Downgrades of Global Banks

By Adria Cimino - Nov 30, 2011

The Wall Street Journal

MARKETS | AUGUST 6, 2011
S&P Strips U.S. of Top Credit Rating

Unprecedented Downgrade Comes After Last-Minute Standoff; Treasury Says Decision Is ‘Flawed by a $2 Trillion Error’

By DAMIAN PALETTA and MATT PHILLIPS
Our global health care realities!
Average spending on health per capita ($US PPP)

Note: $US PPP = purchasing power parity.
## Comparing Health Costs

<table>
<thead>
<tr>
<th></th>
<th>Singapore</th>
<th>U.S.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total population</td>
<td>5,076,700</td>
<td>309,050,816</td>
</tr>
<tr>
<td>Gross national income per capita (PPP international $)</td>
<td>$55,790</td>
<td>$47,360</td>
</tr>
<tr>
<td>Total expenditure on health per capita (2009)</td>
<td>$1,501</td>
<td>$7,410</td>
</tr>
<tr>
<td>Total expenditure on health as % GDP (2009)</td>
<td>3.91%</td>
<td>16.2%</td>
</tr>
</tbody>
</table>

# Comparing Health Status

<table>
<thead>
<tr>
<th></th>
<th>Singapore</th>
<th>U.S.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Life expectancy (2011)</td>
<td>82 years</td>
<td>78 years</td>
</tr>
<tr>
<td>Infant mortality rate (2011 per 1,000 live births)</td>
<td>2.32</td>
<td>6.06</td>
</tr>
<tr>
<td>Heart disease (2004 age standardized death rates)</td>
<td>89.7</td>
<td>97.6</td>
</tr>
<tr>
<td>Diabetes (2004 age standardized death rates)</td>
<td>10.3</td>
<td>16.8</td>
</tr>
<tr>
<td>Obese adults (2008 body mass index ≥ 30)</td>
<td>6.4%</td>
<td>31.8%</td>
</tr>
</tbody>
</table>

**Sources:**
Heart disease, diabetes, obesity: WHO, 2011
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Total Expenditure on Health - 2005

Source: OECD Health Data 2010 - Version: June 2010

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“To Fix Health, Help the Poor”

“IT’S common knowledge that the United States spends more than any other country on health care but still ranks in the bottom half of industrialized countries in outcomes like life expectancy and infant mortality. Why are these other countries beating us if we spend so much more? The truth is that we may not be spending more — it all depends on what you count.”

Government Social Spending - 2005

doi: 10.1787/20743904-2009-table1
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In the face of these realities, how will medical education need to change?
What the Public is Telling Us

Eight of 10 voters think medical schools do an “excellent” or “good” job educating new doctors on “medical knowledge”

Performance of Medical Schools on Educating and Training New Doctors – Medical Knowledge

<table>
<thead>
<tr>
<th>Quality</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Excellent</td>
<td>20%</td>
</tr>
<tr>
<td>Good</td>
<td>65%</td>
</tr>
<tr>
<td>Only Fair</td>
<td>14%</td>
</tr>
<tr>
<td>Poor</td>
<td>1%</td>
</tr>
</tbody>
</table>

2010 AAMC Public Opinion Research

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What the Public is Telling Us

But, one third of voters say that medical schools do a “fair” or “poor” job educating new doctors on “good bedside manner.”

Performance of Medical Schools on Educating and Training Doctors – Good “Bedside Manner”

<table>
<thead>
<tr>
<th>Category</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Excellent</td>
<td>12%</td>
</tr>
<tr>
<td>Good</td>
<td>56%</td>
</tr>
<tr>
<td>Only Fair</td>
<td>29%</td>
</tr>
<tr>
<td>Poor</td>
<td>3%</td>
</tr>
</tbody>
</table>
The Path of Medical Education is Currently Compartmentalized

- Premedical
- Medical School
- Residency and Fellowships
- Practice
Creating a True Continuum of Medical Education

A continuum guided by core competencies!
Individualizing the Continuum

“Traditional” Student
- Premedical
- Medical School
- Residency and Fellowships
- Practice
- Life-Long Learning

“Non-Traditional”
- Non-Premed Degree
- Premedical
- Medical School
- Residency and Fellowships
- Practice
- Life-Long Learning

“Aspiring” Student
- Two-Year College
- Premedical
- Medical School
- Residency and Fellowships
- Practice
- Life-Long Learning

“Returning” Student
- Premedical
- Medical School
- Residency and Fellowships
- Practice
- Re-training
- Life-Long Learning
If parallel transformation in education and health care is required, where should medical education focus?
Creating a True Continuum of Medical Education

A continuum guided by core competencies!
Core Competencies for Every Physician

• Patient care that is compassionate, appropriate, and effective
• Medical knowledge
• Practice-based learning and improvement
• Interpersonal and communication skills
• Professionalism
• Systems-based practice
What will be the critical success factors for medical education in creating transformational change?
#1 Working from clearly articulated core values, explicitly focus on creating the desired culture!
An Emerging Culture for Academic Medicine

Hierarchical → Collaborative
Autonomous → Team-based
Competitive → Service-based
Individualistic → Mutually accountable
Expert-centered → Patient-centered
#2 Ensure that the continuum of medical education supports professionalism!
How do we select future physicians with the greatest “professional” potential?

We need to transform medical school admissions!
What Our Members Are Telling Us

These characteristics are rated as critical to student success:

- Integrity
- Dependability
- Service orientation
- Teamwork skills
- Respect
- Compassion
- Resilience
- Cultural competence
- Desire to learn
- Communication skills
## Transforming Admissions

<table>
<thead>
<tr>
<th>From</th>
<th>To</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prerequisite courses</td>
<td>Prerequisite competencies</td>
</tr>
<tr>
<td>Memorization of information</td>
<td>Demonstration of competencies</td>
</tr>
<tr>
<td>Post-screening review of personal competencies</td>
<td>Pre-screening review of personal competencies</td>
</tr>
<tr>
<td>“Good MCAT® scores mean good doctors”</td>
<td>“Factual knowledge is only part of what makes a skilled physician”</td>
</tr>
<tr>
<td>Academic-only signals to potential applicants</td>
<td>Broad signals that reflect medical school and AAMC values</td>
</tr>
<tr>
<td>“Which applicants will get the best USMLE scores?”</td>
<td>“Which applicants are the best fit for the health care system of the future?”</td>
</tr>
<tr>
<td>Applicant nonacademic information that requires a “deep dive” review, and varies by applicant</td>
<td>Consumable nonacademic information that is comparable across applicants</td>
</tr>
</tbody>
</table>
Updating the Medical College Admission Test

MR5:
5th Comprehensive Review of the Medical College Admission Test
Humanizing the MCAT
Revised test to focus on more than science acumen

By Andis Robeznieks
Posted: November 21, 2011 - 12:01 am ET
Tags: Darrell Kirch, Education, Missouri, Nebraska, Physicians, Regular Feature

For July 2020, some envision a new type of doctor entering the workforce: One who may not write very well but has extensive biochemistry knowledge, has a solid grasp of behavioral and social sciences, and has critical analysis and reasoning powers never seen before in the halls of medicine.

A 21-person Association of American Medical Colleges committee began the preliminary work on creating this vision three years ago, and the panel's recommendations for revising the Medical College Admission Test will be put to a

An advisory panel recommended that the AAMC find ways to measure med-school applicants' service orientation and teamwork skills. Here, members of the American Medical Association's Medical Student Section take part in a service event Nov. 11 during the AMA's House of Delegates interim meeting in New Orleans.

Photo credit: Ted Grudzinsky/AMA

Source: www.modernhealthcare.com/article/20111121/MAGAZINE/311219939
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After admitting the “brightest and the best,” how do we build upon their “pre-professional” attributes in medical school and beyond?
Research Report

Unprofessional Behavior in Medical School Is Associated with Subsequent Disciplinary Action by a State Medical Board

Maxine A. Papadakis, MD, Carol S. Hodgson, PhD, Arianne Teherani, PhD, and Neal D. Kohatsu, MD, MPH

Abstract

Purpose. To determine if medical students who demonstrate unprofessional behavior in medical school are more likely to have subsequent state board disciplinary action.

Method. A case–control study was conducted of all University of California, San Francisco, School of Medicine graduates disciplined by the Medical Board of California from 1990–2000 (68). Control graduates (196) were matched by medical school graduation year and specialty choice. Predictor variables were male gender, undergraduate grade point average, Medical College Admission Test scores, medical school grades, National Board of Medical Examiner Part 1 scores, and negative excerpts describing unprofessional behavior from course evaluation forms, dean’s letter of recommendation for residencies, and administrative correspondence. Negative excerpts were scored for severity (Good/Trace versus Concern/Problem/Extreme). The outcome variable was state board disciplinary action.

Results. The alumni graduated between 1943 and 1989. Ninety-five percent of the disciplinary actions were for deficiencies in professionalism. The prevalence of Concern/Problem/Extreme excerpts in the cases was 38% and 19% in controls. Logistic regression analysis showed that disciplined physicians were more likely to have Concern/Problem/Extreme excerpts in their medical school file (odds ratio, 2.15; 95% confidence interval, 1.15–4.02; p = .02). The remaining variables were not associated with disciplinary action.

Conclusion. Problematic behavior in medical school is associated with subsequent disciplinary action by a state medical board. Professionalism is an essential competency that must be demonstrated for a student to graduate from medical school.

Welcome & instructions

Welcome to the website for Good Medical Practice – USA, Ms. Smith.

Please review the Good Medical Practice (GMP) – USA ("GMP-USA") document and provide your comments about overall content or specific text.

Comments can be entered in two ways:

1. Use the navigation menu at the left to click on the chapter you want to review. In each section of the chapter, click Show/Hide Comment to open the comment field that appears below each section. Enter your comments about the section that appears above the comment box and click on the button Save/Update Comments to save your comments.

2. Use the navigation menu at the left to Download GMP as PDF and to Comment on PDF version or enter general comment. Enter your general comments about GMP-USA or enter specific comments about numbered lines of text in the PDF version. Click on the Submit button to save your comments.

See also:

- What is Good Medical Practice – USA?
- What is the National Alliance for Physician Competence?
- About GMP-USA
Professional Behavior Assessment Methods at U.S. Medical Schools

- **Observation by faculty in clerkships**: 131 (100%)
- **Observation during small group session (preclin.)**: 128 (98%)
- **Observation by residents**: 123 (94%)
- **Observation during laboratory sessions**: 113 (86%)
- **OSCE with one or more professionalism station(s)**: 100 (76%)
- **Comments from other health professionals**: 79 (60%)
- **Comments from administrative staff**: 65 (50%)
- **Comments from patients**: 59 (45%)

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N = 131 U.S. Medical Schools
Source: www.aamc.org/curriculumreports
#3 Foster collaboration and accountability, accepting nothing short of high-performance teams!
Collaborating with Other Health Professions

Core Competencies for Interprofessional Collaborative Practice

Sponsored by the Interprofessional Education Collaborative*

Report of an Expert Panel

*IEPEC sponsors:
- American Association of Colleges of Nursing
- American Association of Colleges of Osteopathic Medicine
- American Association of Colleges of Pharmacy
- American Dental Education Association
- Association of American Medical Colleges
- Association of Schools of Public Health
#4 Leverage technology to enhance learning and the assessment of competence!
Connected 24/7
The “Virtual Patient” as Teacher
Duke-NUS Clinical Performance Center
#5 Rethink the use of performance measures!
The Impact of our Traditional Academic Rewards System

Folly is rewarding “A” – while hoping for “B”

- In research
- In teaching
- In clinical care
#6 Align governance, leadership, and management across organizational and “corporate” divisions to support all missions!
#7 Shift the focus from a traditional view of leadership toward developing future-oriented leaders!
Different Organizational and Leadership Competencies

“Shepherding organizations through this change will require new thinking. First and foremost, it will require leadership, not just management…

Change leadership is the cultural part, and culture is the biggest issue.”
## Focusing on the Development of Future-Oriented Leaders

<table>
<thead>
<tr>
<th></th>
<th>Traditional</th>
<th>Future-Oriented</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Values</strong></td>
<td>Self oriented</td>
<td>Aligned with organization</td>
</tr>
<tr>
<td><strong>Demographics</strong></td>
<td>Not diverse</td>
<td>Diverse</td>
</tr>
<tr>
<td><strong>Work orientation</strong></td>
<td>Individualistic</td>
<td>Teamwork/collaboration</td>
</tr>
<tr>
<td><strong>Career model</strong></td>
<td>Basic or clinical science</td>
<td>Translational</td>
</tr>
<tr>
<td><strong>Mode of action</strong></td>
<td>Tactical</td>
<td>Strategic</td>
</tr>
<tr>
<td><strong>Learning</strong></td>
<td>Knowledge centered</td>
<td>Competence centered</td>
</tr>
<tr>
<td><strong>Career path</strong></td>
<td>Tenure track</td>
<td>Non-tenure track</td>
</tr>
<tr>
<td><strong>Performance</strong></td>
<td>Incremental</td>
<td>Breakthrough</td>
</tr>
<tr>
<td><strong>Rewards</strong></td>
<td>Status/titles/income</td>
<td>Ethical fulfillment/work-life balance</td>
</tr>
</tbody>
</table>
#7 Resist the belief that creating better health care systems and improving global health is all a matter of “politics!”
Core Ethical Principles

Beneficence

Non-maleficence

Autonomy

Social Justice