An Update on Osteopathic Medical Education for the UNECOM Alumni CME Program

Biddeford, ME
October 7, 2016

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President and CEO
AACOM
Disclosure Statement

Stephen C. Shannon, DO, MPH, has nothing to disclose with regard to commercial relationships.
An Update on Osteopathic Medical Education

• Background
• Environment
• Trends in Osteopathic Medical Education
• Single Accreditation System - Implementation Update
• AACOM Activities/Priorities
• Discussion
An Update on Osteopathic Medical Education

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What is AACOM?

33 Colleges at 48 Locations in 31 States

Source: AACOM Reports: www.aacom.org/reports-programs-initiatives/aacom-reports
AACOM’s Mission

The American Association of Colleges of Osteopathic Medicine provides leadership for the osteopathic medical education community by promoting excellence in medical education, research and service, and by fostering innovation and quality across the continuum of osteopathic medical education to improve the health of the American public.
Overview of AACOM

• An organization of organizational members
• Governance—Board of Deans
• Organization
  • 44 full-time staff
  • Five Departments:
    • Government Relations
    • Research
    • Medical Education
    • Marketing and Communication
    • Finance and Administration
Overview of AACOM

• Although AACOM’s members are the colleges, we serve individuals:
  • Students
  • Faculty
  • Deans
  • Associate Deans/Academic Administrators
  • Clinical Learning Environment
Overview of AACOM

- Council of Student Financial Aid Advisors
- Council of Student Government Presidents
- Council of Osteopathic Medical Admissions Officers
- Council on Marketing and Communications
- Council on Development and Alumni
- Council on Research
- SOME and ECOP
- Council of Fiscal Officers
- Council of Osteopathic Librarians
- International Collaborative
AACOM Strategic Goals

- Serve as the collective voice of the U.S. colleges of osteopathic medicine and associated osteopathic medical education programs
- Promote osteopathic medical education as a preferred pathway for future physicians
- Promote excellence, innovation, and a culture of lifelong learning throughout medical education
- Demonstrate the distinctive value and approach of osteopathic medical education by providing opportunities for collaborative research and scholarship
- Operate as an efficient and fiscally responsible organization working in support of its mission and its members
Overview of AACOM

- Government Relations:
  - Capitol Hill Office—8 staff
  - Congressional Advocacy
  - COM Day on Capitol Hill
  - Federal Regulatory Agencies: WH, HRSA, VA, HHS, CMS, USDE, DEA, NIH and more
  - Advisory Committee Appointments: COGME, VA, USDE
  - ED to MED
  - Washington Insider
AACOM’s Advocacy Focuses On:

- Graduate Medical Education
  - Maintaining funding levels and enabling growth
  - Inequity of current system
  - Limitations of community-based training, e.g., Teaching Health Center Programs
- Support for Medical Education
- Student Debt
- Higher Education Reauthorization
- Support for research that would focus on OPP
What is ED to MED?

ED to MED is a national grassroots advocacy campaign that brings together students, medical educators, and other advocates dedicated to raising the profile of student issues in the halls of Congress.

Join the campaign at www.edtommed.com
Stay Engaged

Become a Washington Insider with regular updates on legislative, regulatory, and advocacy activities

Overview of AACOM

- Research:
  - OME data for COMs, AACOM and COCA
  - Reports, e.g.:
    - Applicants and Matriculants
    - Incoming Student Questionnaire
    - Graduating Student Questionnaire
    - Tuition and Fees
    - Research
    - GME placement
    - Faculty
    - Curriculum
  - Workforce projections
- [http://www.aacom.org/reports-programs-initiatives/aacom-reports](http://www.aacom.org/reports-programs-initiatives/aacom-reports)
Overview of AACOM

• Medical Education:
  • Faculty Development
    • Interprofessional Education Collaborative
    • IAMSE Webinar Series
    • Training Osteopathic Primary Care Educators (TOPCE)
  • Society of Osteopathic Medical Educators
    • National Academy of Osteopathic Medical Educators
  • ECOP
  • COSGP
  • Annual Conference
  • Joining Forces
Overview of AACOM

- Marketing, Communications and Operations:
  - Press
  - Social Media
  - AACOMAS
  - Recruitment
  - Inside OME
  - Publications
  - Infrastructure
An Update on Osteopathic Medical Education

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Forces for Change

- Aging population
- Chronic disease epidemic
- Rising expectations for evidence-based education/practice and quality
- Predictive health (targeting prevention)
- Acceleration of technological change
- Information technology
- Shifting diversity of U.S. population
Percent Growth in U.S. Elderly Population

Total Population, Population Older/Younger than 65, & Percent 65 or Older

Source: U.S. Census Bureau, Population Estimates and Projections
U.S. Population: 2050

- Hispanic: 30.3%
- Non-Hispanic White: 46.3%
- Black: 13%
- Asian: 8%
- Native Hawaiian/Pacific Islander: 1.5%
- Other: 1.1%

U.S. Census Bureau Percent of the Projected Population by Race and Hispanic Origin for the U.S.: 2008 to 2050
U.S. Population: 2060

Change in Total Population and Population Under 18 by Race and Hispanic Origin: 2014 to 2060
(In percent)

Note: Unless otherwise specified, race categories represent race alone. NHPI = Native Hawaiian and Other Pacific Islander, AIAN = American Indian and Alaska Native. Minority refers to everyone other than the non-Hispanic White alone population. Source: U.S. Census Bureau, 2014 National Projections.
In an environment....

- Changing U.S. health care system
- Growing numbers of insured
- Lack of diversity in health care professions
- Unequal distribution of health care resources
- Evidence and predictions of health workforce shortages
- Significant financial challenges
Health Care Spending as a Percentage of GDP, 1980–2013

Percent

- US (17.1%)
- FR (11.6%)
- SWE (11.5%)
- GER (11.2%)
- NETH (11.1%)
- SWIZ (11.1%)
- DEN (11.1%)
- NZ (11.0%)
- CAN (10.7%)
- JAP (10.2%)
- NOR (9.4%)
- AUS (9.4%)*
- UK (8.8%)

* 2012.

Notes: GDP refers to gross domestic product. Dutch and Swiss data are for current spending only, and exclude spending on capital formation of health care providers.

Source: OECD Health Data 2015.
Political/Economic Environment

Cost
- $3 trillion in 2014
- 17.5% of GDP

Access
- 29 million uninsured (2016)
- 25 million uninsured (2020; projected)
- Access expanding for insured (prevention)
2014 National Health Expenditures Distribution by Type of Service

Source: Kaiser Family Foundation analysis of National Health Expenditure (NHE) data from Centers for Medicare and Medicaid Services, Office of the Actuary, National Health Statistics Group
http://kff.org/slideshow/health-spending-trends-slideshow/

Other Health Spending includes, for example, administration and net cost of private health insurance, public health activity, research, and structures and equipment, etc.
Personal Health Care Expenditures (2004-2014)

NOTE: Personal health care expenditures are outlays directly related to patient care.

SOURCE: CDC/NCHS, *Health, United States, 2015*, Figure 15 and Table 95. Data from the Centers for Medicare & Medicaid Services, National Health Expenditure Accounts (NHEA).

http://www.cdc.gov/nchs/hus/healthexpenditures.htm
Most Plausible Scenario of U.S. Physician Shortage

AAMC Releases 2016 Update to Post-Reform Physician Shortage Estimates

- Previous projections showed a baseline shortage of 39,600 doctors in 2015.
- Projected total physician shortfall by 2025 is now between 61,700 and 94,700
- Projected shortfalls in primary care physicians by 2025 are between 14,900 and 35,600
Primary Care Issues

Primary Care Crisis and OME

- More physicians may be leaving primary care than entering (2015-2025)
- Fewer DO graduates pursuing primary care
  - Traditional primary care roots of osteopathic profession
  - DO grads still 3 times more likely to choose Family Medicine than MD grads
  - Growing Student Debt (In 2015, osteopathic medical school grads reported an average of nearly $230,000 in educational debt)
- Medical Home/ACO
Primary Care Issues

Primary Care Physicians are Retiring

Adult PC Physicians Retiring Are Likely to Exceed # Entering Within Next Few Years

Note: Primary care numbers include hospitalists. Adult primary care includes family medicine and internal medicine. Includes both MDs and DOs.

Sources
AMA Physician Masterfile (December 31, 2008)
AAMC/AMA National GME Census
The Number of Licensed PAs Has Grown More than 36% Since 2009 (74,777 in 2009 to 101,977 in 2014)

Source: American Academy of Physician Assistants
Growth in NP grads and newly certified PAs since 2001 – 22,638 combined in 2014

162% NPs

63% PAs
Workforce Composition: Growth of PAs/NPs Compared to Physicians

Percentages of Types of Direct Patient Care Providers, Supply and Production

Currently Practicing
- 18% PAs/NPs
- 82% Physicians

New Providers per Year
- 37% PAs/NPs
- 63% Physicians

Source: HHS/Health Resources and Services Administration, National Center for Health Workforce Analysis
Less than half of patient care NPs are providing primary care

Exhibit 3. Specialty of Practice/Facility for Nurse Practitioners Providing Patient Care

- **Primary Care**
  - Number: 60,407
  - Percentage: 48.1%

- **Internal Medicine Subspecialties**
  - Number: 16,675
  - Percentage: 13.3%

- **Surgical Specialties**
  - Number: 11,047
  - Percentage: 8.8%

- **Pediatric Subspecialties**
  - Number: 3,880
  - Percentage: 3.1%

- **Psychiatry/Mental Health**
  - Number: 7,034
  - Percentage: 5.6%

- **Other**
  - Number: 25,079
  - Percentage: 20.0%

- **No Specialty**
  - Number: 1,586
  - Percentage: 1.3%

Source: Highlights from the 2012 National Sample Survey of Nurse Practitioners (bhpr.hrsa.gov/healthworkforce/
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Source: AACOM Reports:
www.aacom.org/reports-programs-initiatives/aacom-reports
The Growth of Osteopathic Medical Schools (1977-2016)

Total Enrollment, Number of Colleges, & Percent Female Total Enrollment

Five Year Intervals

- Number of Colleges, Branch Campuses, and Remote Teaching Sites

- Female

- Male

- Total Enrollment
Osteopathic Medical Schools

Private (27) Colleges of Osteopathic Medicine

- Alabama College of Osteopathic Medicine (ACOM), Alabama
- Arkansas College of Osteopathic Medicine (ARCOM), Arkansas
- A.T. Still University School of Osteopathic Medicine – Arizona (ATSU-SOMA), Arizona
- A.T. Still University of Health Sciences/Kirksville College of Osteopathic Medicine (ATSU-KCOM), Missouri
- Arizona College of Osteopathic Medicine of Midwestern University (AZCOM/MWU), Arizona
- Burrell College of Osteopathic Medicine (BCOM), New Mexico
- Campbell University Jerry M. Wallace School of Osteopathic Medicine (CUSOM), North Carolina
- Chicago College of Osteopathic Medicine of Midwestern University (CCOM/MWU), Illinois
- Des Moines University – College of Osteopathic Medicine (DMU-COM), Iowa
- Kansas City University of Medicine and Biosciences – College of Osteopathic Medicine
  - (KCU-COM), Missouri
  - (KCU-COM-Joplin), Missouri
Osteopathic Medical Schools

Private (27) Colleges of Osteopathic Medicine

- Lake Erie College of Osteopathic Medicine  
  - (LECOM), Pennsylvania
  - (LECOM–Bradenton), Florida
- Liberty University College of Osteopathic Medicine (LUCOM), Virginia
- Lincoln Memorial University Debusk College of Osteopathic Medicine (LMU-DCOM), Tennessee
- Marian University College of Osteopathic Medicine (MU-COM), Indiana

- New York College of Osteopathic Medicine of New York Institute of Technology  
  - (NYITCOM), New York
  - (NYITCOM A. State), Arkansas
- Nova Southeastern University – College of Osteopathic Medicine (NSU-COM), Florida
- Pacific Northwest University College of Osteopathic Medicine (PNWU-COM), Washington
- Philadelphia College of Osteopathic Medicine  
  - (PCOM), Pennsylvania
  - (GA-PCOM), Georgia
Osteopathic Medical Schools

Private (27) Colleges of Osteopathic Medicine

- Rocky Vista University College of Osteopathic Medicine
  - (RVUCOM), Colorado
  - (RVUCOM), Utah
- Touro College of Osteopathic Medicine – New York
  - (TouroCOM-NY), Harlem
  - (TouroCOM-NY), Middletown
- Touro University College of Osteopathic Medicine
  - (TUCOM-CA), California
  - (TUNCOM), Nevada
- University of the Incarnate Word School of Osteopathic Medicine (UIWSOM), Texas
- University of New England College of Osteopathic Medicine (UNE COM), Maine
- University of Pikeville-Kentucky College of Osteopathic Medicine (UP-KYCOM), Kentucky
Osteopathic Medical Schools

Private (27) Colleges of Osteopathic Medicine

- Edward Via Virginia College of Osteopathic Medicine
  - (VCOM-Auburn), Alabama
  - (VCOM-VC), Virginia
  - (VCOM-CC), South Carolina

- Western University College of Osteopathic Medicine of the Pacific
  - (Western U/COMP-Pomona), California
  - (Western U/COMP-Northwest), Oregon

- William Carey University College of Osteopathic Medicine (WCUCOM), Mississippi
Osteopathic Medical Schools

Public (6) Colleges of Osteopathic Medicine

- Michigan State University College of Osteopathic Medicine
  - (MSUCOM) East Lansing
  - (MSUCOM) Detroit
  - (MSUCOM) Clinton Township
- Ohio University Heritage College of Osteopathic Medicine
  - (OU-HCOM) Athens
  - (OU-HCOM) Cleveland
  - (OU-HCOM) Dublin
- Oklahoma State University Center for Health Sciences – College of Osteopathic Medicine (OSU-COM)
- Rowan University School of Osteopathic Medicine (RowanSOM)
- University of North Texas Health Science Center at Fort Worth/Texas College of Osteopathic Medicine at Fort Worth (UNTHSC/TCOM)
- West Virginia School of Osteopathic Medicine (WVSOM)
New COM Campuses

Opened in 2016

- New York Institute of Technology College of Osteopathic Medicine *(NYITCOM)*, Arkansas
- Burrell College of Osteopathic Medicine *(BCOM)*, New Mexico

Opening in 2017

- University of the Incarnate Word School of Osteopathic Medicine *(UIWSOM)*, Texas
- Arkansas College of Osteopathic Medicine *(ARCOM)*, Arkansas
- Rocky Vista University College of Osteopathic Medicine *(RVU-COM)*, Ivins, Utah
Osteopathic Medical Schools in the Pipeline
(COMS listed by COCA as seeking applicant status since 2013)

- Alliant International University, San Francisco, CA
- College of Osteopathic Medicine-Jefferson, Jefferson, WI
- Idaho College of Osteopathic Medicine, Meridian, ID
- Larkin College of Osteopathic Medicine, Miami, FL
- Louisiana College of Osteopathic Medicine, Central Louisiana
- Minnesota College of Osteopathic Medicine, Gaylord, MN
- College of Medicine at the University of Northwestern-St. Paul, St. Paul, MN
- Trine University, Angola, IN

Applications to Osteopathic Medical Colleges (for 2016-17 academic year)

- The number of individual applicants to osteopathic medical schools has again surpassed historical records, but the pace of applicant growth is leveling off.

- As of April 19, the closing date for the 2016 application cycle, total 2016 applicants are 21,574, an increase of 4.37% from 2015. Individual applications to colleges totaled 190,046, a 0.02% increase from 2015.
Applicants to Osteopathic Medical Colleges

* Does not include UNTHSC/TCOM
Note: The University of North Texas Health Sciences Center at Fort Worth/Texas College of Osteopathic are not included in this chart because the data are not part of the AACOMAS database; they receive applications through the Texas Medical and
Mean MCAT Scores by Section (Old MCAT)

<table>
<thead>
<tr>
<th>Section</th>
<th>2014 Applicant</th>
<th>2014 Matriculant</th>
<th>2015 Applicant</th>
<th>2015 Matriculant</th>
</tr>
</thead>
<tbody>
<tr>
<td>MCAT Verbal</td>
<td>8.63</td>
<td>8.85</td>
<td>8.59</td>
<td>8.87</td>
</tr>
<tr>
<td>MCAT Physical Science</td>
<td>8.91</td>
<td>9.16</td>
<td>8.54</td>
<td>8.87</td>
</tr>
</tbody>
</table>

Note: The decrease in mean scores may result from fewer pre-2015 MCAT scores being reported due to many applicants reporting new MCAT scores in their application.
Mean Undergraduate GPA

Mean Undergraduate GPA
2014 & 2015 Entering Class - Applicants & Matriculants

- GPA Science
- GPA Non-science
- GPA Overall

2014 Applicant: GPA Science 3.28, GPA Non-science 3.55, Overall 3.43
2014 Matriculant: GPA Science 3.39, GPA Non-science 3.60, Overall 3.51
2015 Applicant: GPA Science 3.30, GPA Non-science 3.56, Overall 3.44
2015 Matriculant: GPA Science 3.43, GPA Non-science 3.63, Overall 3.53
Applicant Survey Respondents

Mean Total MCAT Scores - Old MCAT
2015 Entering Class - Osteopathic & Allopathic

Mean Undergraduate Overall GPA
2015 Entering Class - Osteopathic & Allopathic
AACOMAS Applicants as a Percentage of AMCAS Applicants

AACOMAS Applicants as Percentage of AMCAS Applicants
2006-07 Through 2015-16

AACOMAS Applicants

Percentage AACOMAS to AMCAS Applicants

Number of AACOMAS Applicants

Percentage AACOMAS to AMCAS Applicants

2006-07
9,477
24.2%

2007-08
11,231
26.5%

2008-09
11,742
27.8%

2009-10
12,617
29.9%

2010-11
13,147
30.8%

2011-12
14,087
32.1%

2012-13
14,945
33.0%

2013-14
16,454
34.3%

2014-15
17,944
36.3%

2015-16
20,447
38.9%

0
2,500
5,000
7,500
10,000
12,500
15,000
17,500
20,000
22,500
25,000
0.0%
5.0%
10.0%
15.0%
20.0%
25.0%
30.0%
35.0%
40.0%
Factors Influencing Number of Applicants

Factors that may influence the decline in the rate of increase of applicants:

- **Demographics** – Decline in the rate of increase of college graduates
- **GME shortage news** – Prospective applicants, their parents, advisers may be turning away from medicine if there is no assurance of GME
- **Student debt** – Prospective applicants may be steering away from graduate and professional programs requiring increased debt
- **Economy** – Alternative career pathways opening up for college graduates as economy improves
- **Increased focus on suicide and depression among physicians** – Many may decide to seek a less stressful profession
Percent Change in Bachelors Degrees
### AACOM Growth Report (2014)

#### Table 1 - Colleges accredited as of 2014

<table>
<thead>
<tr>
<th></th>
<th>Fall 2014</th>
<th>Fall 2015</th>
<th>% change</th>
<th>Fall 2016</th>
<th>Fall 2017</th>
<th>% change</th>
<th>Fall 2018</th>
<th>% change</th>
<th>Fall 2019</th>
<th>% change</th>
</tr>
</thead>
<tbody>
<tr>
<td>students</td>
<td>6,477</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Actual new student</td>
<td>6,786</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>enrollment</td>
<td></td>
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<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Projected COCA</td>
<td>6,668</td>
<td>2.9%</td>
<td></td>
<td>6,958</td>
<td>4.3%</td>
<td></td>
<td>7,158</td>
<td>2.9%</td>
<td>7,258</td>
<td>1.4%</td>
</tr>
<tr>
<td>approved class size</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Projected actual</td>
<td>7,090</td>
<td>3.9%</td>
<td></td>
<td>7,361</td>
<td>4.4%</td>
<td></td>
<td>7,571</td>
<td>2.9%</td>
<td>7,678</td>
<td>1.4%</td>
</tr>
<tr>
<td>new student enrollment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Percentage growth</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>14.6%</td>
<td></td>
</tr>
<tr>
<td>2014-2019 (colleges</td>
<td></td>
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<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>accredited as of 2014</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>academic year</td>
<td></td>
</tr>
</tbody>
</table>

#### Table 2 - Developing colleges (applicant status)

<table>
<thead>
<tr>
<th></th>
<th>Fall 2014</th>
<th>Fall 2015</th>
<th>Fall 2016</th>
<th>Fall 2017</th>
<th>Fall 2018</th>
<th>Fall 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>students</td>
<td>480</td>
<td>640</td>
<td>790</td>
<td>950</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Developing colleges</td>
<td></td>
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<td></td>
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<td></td>
</tr>
<tr>
<td>(cumulative total)</td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>
### Table 3 – Currently accredited and developing colleges

<table>
<thead>
<tr>
<th></th>
<th>Fall 2014</th>
<th>Fall 2015</th>
<th>% change</th>
<th>Fall 2016</th>
<th>Fall 2017</th>
<th>Fall 2018</th>
<th>Fall 2019</th>
<th>% change</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total current</strong></td>
<td>6,786</td>
<td>7,050</td>
<td>3.90%</td>
<td>7,841</td>
<td>8,211</td>
<td>8,468</td>
<td>8,730</td>
<td>3.1%</td>
</tr>
<tr>
<td><strong>and developing colleges</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total percentage growth 2014 - 2019 -- current and developing colleges</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>28.6%</td>
</tr>
</tbody>
</table>
Growth in OME

Osteopathic medical college applicants, enrollment, & graduates over the last decade:

<table>
<thead>
<tr>
<th>DO College Applicants</th>
<th>First Year Enrollment (includes repeaters)</th>
<th>Total Enrollment</th>
<th>Total Graduates</th>
</tr>
</thead>
</table>

Figure 4: Applicants, First-Year Enrollment, Total Enrollment and Graduates

Growth in Last Decade
### Combined MD/DO 1st Year Enrollment Projected to Increase 49%

<table>
<thead>
<tr>
<th></th>
<th>2002</th>
<th>2019</th>
<th>Growth</th>
<th>% Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>M.D.</td>
<td>16,488</td>
<td>21,304</td>
<td>4,816</td>
<td>29%</td>
</tr>
<tr>
<td>D.O.</td>
<td>2,968</td>
<td>7,780</td>
<td>4,812</td>
<td>162%</td>
</tr>
<tr>
<td>Combined</td>
<td>19,456</td>
<td>29,084</td>
<td>9,628</td>
<td>49%</td>
</tr>
</tbody>
</table>
# 2014-2015 Graduating Senior Survey—Reported Debt

## Table 1.1: Mean Osteopathic Medical Education Debt - Graduating Seniors*

<table>
<thead>
<tr>
<th>Source of Debt</th>
<th>Debt‡</th>
<th>% in Debt</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>All Schools</td>
<td>Public</td>
</tr>
<tr>
<td>Total Osteopathic Medical Education Loans</td>
<td>2014-2015</td>
<td>$229,934</td>
</tr>
<tr>
<td></td>
<td>2013-2014</td>
<td>$220,945</td>
</tr>
<tr>
<td></td>
<td>2012-2013</td>
<td>$211,423</td>
</tr>
</tbody>
</table>

AACOM 2014-15 Graduating Senior Survey—Debt and Scholarship

Chart 1: Percentage of Students with Reported Debt and Scholarships*

*Bubble sizes are proportional to the percentage/number of students with debt/scholarships and may appear inconsistent due to rounding.
Recruiting and Maintaining U.S. Clinical Training Sites: Joint Report of the 2013 Multi-Discipline Clerkship/Clinical Training Site Survey

A joint report from the American Association of Colleges of Nursing (AACN), the American Association of Colleges of Osteopathic Medicine (AACOM), the Association of American Medical Colleges (AAMC), and the Physician Assistant Education Association (PAEA), summarizes the results of a March 2013 survey sent to the dean or director of every eligible school or program in the four disciplines.
Survey response rate

• Overall response rate to survey – 85%
• By discipline
  • DO – 91%
  • MD – 83%
  • NP – 85%
  • PA – 84%
## Concern about adequacy of clinical training sites

<table>
<thead>
<tr>
<th>“Moderately” or “Very Concerned”</th>
<th>DO</th>
<th>MD</th>
<th>NP</th>
<th>PA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of clinical sites</td>
<td>81%</td>
<td>80%</td>
<td>96%</td>
<td>95%</td>
</tr>
<tr>
<td>Supply of qualified primary care preceptors</td>
<td>65%</td>
<td>84%</td>
<td>94%</td>
<td>91%</td>
</tr>
<tr>
<td>Supply of qualified specialty preceptors</td>
<td>70%</td>
<td>62%</td>
<td>84%</td>
<td>73%</td>
</tr>
<tr>
<td>Demographic diversity of patients</td>
<td>32%</td>
<td>23%</td>
<td>48%</td>
<td>40%</td>
</tr>
<tr>
<td>Diversity of medical conditions</td>
<td>29%</td>
<td>21%</td>
<td>38%</td>
<td>36%</td>
</tr>
</tbody>
</table>
### Respondents reporting increased difficulty finding sites, by specialty

<table>
<thead>
<tr>
<th>Specialty</th>
<th>% reporting more difficulty</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pediatrics</td>
<td>77%</td>
</tr>
<tr>
<td>Obstetrics/Gynecology</td>
<td>74%</td>
</tr>
<tr>
<td>Psychiatry</td>
<td>42%</td>
</tr>
<tr>
<td>OMM</td>
<td>35%</td>
</tr>
<tr>
<td>Emergency medicine</td>
<td>19%</td>
</tr>
<tr>
<td>Internal medicine</td>
<td>16%</td>
</tr>
<tr>
<td>Radiology</td>
<td>10%</td>
</tr>
</tbody>
</table>
Increased difficulty developing new and preserving existing core sites

<table>
<thead>
<tr>
<th>“Somewhat” and “Much more difficult”</th>
<th>DO</th>
<th>MD</th>
<th>NP</th>
<th>PA</th>
</tr>
</thead>
<tbody>
<tr>
<td>New sites</td>
<td>81%</td>
<td>71%</td>
<td>86%</td>
<td>76%</td>
</tr>
<tr>
<td>Existing sites</td>
<td>68%</td>
<td>69%</td>
<td>78%</td>
<td>78%</td>
</tr>
</tbody>
</table>
Clerkships reported in community based settings, by discipline

<table>
<thead>
<tr>
<th>Discipline</th>
<th>Average Reported Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>M.D. (n=92)</td>
<td>26%</td>
</tr>
<tr>
<td>D.O. (n=23)</td>
<td>66%</td>
</tr>
<tr>
<td>N.P. (n=275)</td>
<td>74%</td>
</tr>
<tr>
<td>P.A. (n=123)</td>
<td>65%</td>
</tr>
</tbody>
</table>
Incentives reported by DO and MD programs

Figure 6. Percent of Respondents Who Rated the Use of Incentives for Community-Based Sites, by Discipline

<table>
<thead>
<tr>
<th>Incentive</th>
<th>M.D. (n=110)</th>
<th>D.O. (n=31)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Offer faculty positions</td>
<td>86%</td>
<td>97%</td>
</tr>
<tr>
<td>Offer library access</td>
<td>85%</td>
<td>87%</td>
</tr>
<tr>
<td>Offer faculty development opportunities</td>
<td>79%</td>
<td>94%</td>
</tr>
<tr>
<td>Public recognition</td>
<td>62%</td>
<td>74%</td>
</tr>
<tr>
<td>Offer other educational opportunities for preceptors</td>
<td>58%</td>
<td>77%</td>
</tr>
<tr>
<td>Offer CME/CNE credits or opportunities</td>
<td>47%</td>
<td>97%</td>
</tr>
<tr>
<td>Retreats or dinners</td>
<td>34%</td>
<td>35%</td>
</tr>
<tr>
<td>Pay money for personnel time</td>
<td>22%</td>
<td>23%</td>
</tr>
<tr>
<td>Pay money per student</td>
<td>15%</td>
<td>71%</td>
</tr>
<tr>
<td>Offer computers or other resources</td>
<td>9%</td>
<td>26%</td>
</tr>
<tr>
<td>Other</td>
<td>4%</td>
<td>6%</td>
</tr>
</tbody>
</table>
Payment reported by DO and MD programs

<table>
<thead>
<tr>
<th>Region</th>
<th>DO</th>
<th>MD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>15%</td>
<td>71%</td>
</tr>
<tr>
<td>Midwest</td>
<td>11%</td>
<td>71%</td>
</tr>
<tr>
<td>Northeast</td>
<td>19%</td>
<td>40%</td>
</tr>
<tr>
<td>South</td>
<td>20%</td>
<td>64%</td>
</tr>
<tr>
<td>West</td>
<td>0%</td>
<td>100%</td>
</tr>
</tbody>
</table>

Figure 7. Percent of Respondents Who Reported Paying Money per Student to One or More Community-Based Sites, by Discipline and Region
Figure 7. Percent of Respondents Who Reported Paying Money per Student to One or More Community-Based Sites, by Discipline and Region

<table>
<thead>
<tr>
<th>Discipline</th>
<th>Total (n=112)</th>
<th>Midwest (n=27)</th>
<th>Northeast (n=27)</th>
<th>South (n=44)</th>
<th>West (n=12)</th>
</tr>
</thead>
<tbody>
<tr>
<td>M.D.</td>
<td>15%</td>
<td>11%</td>
<td>19%</td>
<td>20%</td>
<td>0%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Discipline</th>
<th>Total (n=31)</th>
<th>Midwest (n=7)</th>
<th>Northeast (n=5)</th>
<th>South (n=11)</th>
<th>West (n=8)</th>
</tr>
</thead>
<tbody>
<tr>
<td>D.O.</td>
<td>71%</td>
<td>71%</td>
<td>40%</td>
<td>64%</td>
<td>100%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Discipline</th>
<th>Total (n=300)</th>
<th>Midwest (n=85)</th>
<th>Northeast (n=73)</th>
<th>South (n=105)</th>
<th>West (n=37)</th>
</tr>
</thead>
<tbody>
<tr>
<td>N.P.</td>
<td>4%</td>
<td>1%</td>
<td>10%</td>
<td>2%</td>
<td>8%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Discipline</th>
<th>Total (n=137)</th>
<th>Midwest (n=30)</th>
<th>Northeast (n=45)</th>
<th>South (n=43)</th>
<th>West (n=19)</th>
</tr>
</thead>
<tbody>
<tr>
<td>P.A.</td>
<td>20%</td>
<td>13%</td>
<td>24%</td>
<td>21%</td>
<td>21%</td>
</tr>
</tbody>
</table>

Midwest: IA, IL, IN, KS, MI, MN, MO, NE, ND, OH, SD, WI.
Northeast: CT, DE, ME, MA, NH, NJ, NY, PA, RI, VT.
South: AL, AR, DC, FL, GA, KY, LA, MD, MS, NC, OK, PR, SC, TN, TX, VA, WV.
West: AK, AZ, CA, CO, HI, ID, MT, NM, NV, OR, UT, WA, WY.
Paying for clerkship slots

% of schools reporting pressure from existing clinical training sites regarding payment(s) for student rotations

2015 Preliminary Results of New Payment Questions

- 24% pay for students to rotate at academic sites.
- 26% pay for students to rotate at community-based sites.

Source: AAMC Survey of Medical School Enrollment Plans
99.4% of 2015 DO Graduates Placed in GME

DO Graduate Match Outcomes 2015
as of May 1, 2015

- Expected: 5309
- Not seeking: 49
- Seeking GME: 5260
- Matched/Placed: [VALUE] (48%)
- Military match: [VALUE] (5%)
- Other matched: [VALUE] (.5%)
- Matched NRMP: [VALUE] (46%)
- Total matched: [VALUE] (99.4%)
- Not matched: [VALUE] (.6%)
2016 GME Placement Report

NMS (AOA), NRMP & SOAP (ACGME), and Military Match
(Data as of May 1, 2016 - Final Data in Fall 2016)

• 99.61% of DO graduates seeking GME successfully placed into GME (5,356 new physicians)
• 2,633 (48.97%) placed into AOA accredited GME positions
• 2,465 (45.84%) placed into ACGME accredited GME positions
• 233 (4.33%) placed into military match
• 25 (0.47%) placed into other GME positions (San Francisco match, etc.)
• 0.39% did not match or place into GME
DO Grads in Primary Care GME -- historical

Primary care includes Family Practice and OMM and Family Practice and NMM (AOA), Family Medicine (ACGME), and Internal Medicine, Pediatrics (AOA and ACGME).
DO Grads in Primary Care GME -- historical

Number DO Graduates Placing in Primary Care GME 2009-2013

Primary care includes Family Practice and OMM and Family Practice and NMM (AOA), Family Medicine (ACGME), and Internal Medicine, Pediatrics (AOA and...
An Update on Osteopathic Medical Education

• Background
• Environment
• Trends in Osteopathic Medical Education
• Single Accreditation System - Implementation Update
• AACOM Activities/Priorities
• Discussion
Typical Physician Training Timeline

The Osteopathic Physician (DO) Timeline

Osteopathic Medical Education

- 4 years: Undergraduate study (Bachelors degree)
- 4 years: Osteopathic Medical Degree
- 3–7 years: Internship/Residency
- 1–3 years: Specialty Fellowship

Board Certification/Licensure

11 to 18 years
AACOM continues to work collaboratively with the ACGME and the AOA in the transition to the single GME accreditation system, which officially launched July 2015

AACOM participates in various committees as the three organizations work through operational and educational efforts related to the transition

SAS streamlines the residency program application process and broadens access to residency and fellowship programs

DO students can train in ACGME programs and still continue osteopathic training through ACGME programs with osteopathic recognition
Key Benefits of the new system

- Ensures that the evaluation and accountability for the competency of residents is consistent across all GME programs, helping to ensure quality and efficiency.
- Ensures that all physicians have access to the primary and sub-specialty training they need to serve patients.
- Allows the osteopathic and allopathic communities to speak with a unified voice for GME to better serve the public.
- Recognizes the unique principles and practices of DOs as integral to the U.S. health care system.
- Continues to include osteopathic-focused training programs; AOA trained and certified physicians can serve as GME faculty.
Transition Timeline

- February 2014, MOU signed by ACGME, AOA, AACOM to create a single accreditation system for graduate medical education (GME)
- April 1, 2015 institutions begin to apply
- July 1, 2015 programs begin to apply
- Only programs w/n institutions with ACGME accreditation or those who achieve pre-accreditation can apply
- Transition period: July 1, 2015-June 30, 2020
  - AOA stops accrediting programs June 30, 2020
AOA/AACOM Integration into Governance and Operations of new ACGME

- ACGME Board of Directors
- SVP, Osteopathic Accreditation
- Joint Operations Committee
- RC for ONMM
- Recognition Committee for OM Designation
- Adding DOs to RCs
- RC Monitoring Committee
- Single Accreditation System
Highlights

- All DOs and MDs will be eligible for training positions and fellowships

- MDs must demonstrate readiness to enter osteopathic training

- Program size will not prevent AOA programs from achieving ACGME accreditation

- Through the transition, GME accreditation will change, but other elements of the osteopathic medical education continuum will be preserved, COMLEX, predoctoral education, CME, AOA Board Certification
KEY DEVELOPMENTS

• All relevant ACGME Review Committee (24 RCs) will accept AOA board certified program directors, as long as they meet all other requirements for program directors for the review committee
  • Neurological surgery decided in 2016 to accept AOA board certification for program directors
  • Several ACGME Review Committees are working to integrate AOA board certification language within ACGME program requirements, at least 15 have already submitted language for ACGME board approval, all are expected to do so shortly
KEY DEVELOPMENTS

- COMLEX-USA announcement by ACGME to its program directors: acceptance for graduates from pre-accredited programs, seeking fellowships as exceptionally qualified candidates

- Acceptance of AOA internship year for specialties that require a preliminary year
Newly Approved AOA Standards

• New standards help ensure residents will complete their training in an accredited training.

• These standards set deadlines for programs to either apply for ACGME accreditation, or stop accepting trainees if the trainees cannot complete the program by June 30, 2020. If a program does not apply to the ACGME by the deadline, it will not be able to accept trainees the following February.
Newly Approved AOA Standards

• Charts in Section X. of the Basic Documents delineate a date by which programs in a specific specialty must stop accepting trainees if no ACGME application is submitted

• For example: family medicine programs must submit an application for ACGME accreditation by January 1, 2018. If a program has not submitted an application by this time, their program must stop accepting trainees.
# AOA Training Programs as of July 1, 2015

<table>
<thead>
<tr>
<th>Program Type</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total AOA Programs</td>
<td>1,244*</td>
</tr>
<tr>
<td>Internship</td>
<td>121</td>
</tr>
<tr>
<td>Fellowship</td>
<td>261</td>
</tr>
<tr>
<td>Residency</td>
<td>862</td>
</tr>
</tbody>
</table>

*173 AOA programs are dually-accredited programs

Source: AOA presentation at AOA Annual Business Meeting 2016
# Number of DO Residents in AOA Programs

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Number of DO Residents in AOA Programs</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012-13</td>
<td>6,883</td>
</tr>
<tr>
<td>2013-14</td>
<td>7,582</td>
</tr>
<tr>
<td>2014-15</td>
<td>8,058</td>
</tr>
</tbody>
</table>

Source: Appendix 1: Osteopathic Graduate Medical Education, 2016
Authors Bulmaro Martinez and Maura Biszewski
From JAOA, April 2016, vol 116, no 4
Status of Applications: Institutions

- As of 9/14/2016

Status of institutional applications

- Pre-accreditation: 11
- Continued pre-accreditation: 17
- Initial accreditation: 56
- Total applied: 84

Source: ACGME Accreditation Data System Public Site
Status of Applications: Programs

- As of 9/14/2016

Status of program applications

Source: ACGME Accreditation Data System Public Site
AOA Call Campaign: Plans for ACGME Accreditation

N=1,244

- Applied or Will Apply, 1029, 83%
- Closed, 71, 6%
- Does Not Plan to Apply, 75, 6%
- Undecided, 22, 2%
- No Contact, 39, 3%
- No Pathway, 8, 0%

Source: AOA presentation to BOT at OMED 2016
AOACall Campaign: Program Closures since 7/1/15, N=71

- Program has not Contracted trainees for 3+ Years, 43, 61%
- New program does not want to pay AOA fees, 8, 11%
- Closure planned prior to SAS, 6, 9%
- Internship not needed for SAS, 5, 7%
- Funding issues, 3, 4%
- Does not wish to apply for ACGME, 3, 4%
- Closed by PTRC, 2, 3%
- Hospital closed, 1, 1%

Source: AOA presentation to BOT at OMED 2016
Osteopathic Recognition
In 2014, AACOM established an Ad Hoc Committee on GME Transition to provide recommendations to the OPC.

The Committee developed a paper on what an osteopathically-focused program should include and what pre-requisites would be necessary for an MD to succeed in an osteopathically-focused program.

Access report online: http://www.aacom.org/news-and-events/single-gme/next-steps-for-GME
Osteopathic Recognition

- Key method to codify osteopathic principles and practices within ACGME program requirements
- “Osteopathic Recognition (OR) is conferred upon any ACGME-accredited graduate medical education program providing requisite training in the Osteopathic Principles and Practice (OPP).”
- Overseen by the ACGME Osteopathic Principles Committee (OPC)

OR Program Requirements available on ACGME website: https://www.acgme.org/Portals/0/PFAssets/ProgramRequirements/Osteopathic_Recognition_Requirements.pdf
Why Pursue Osteopathic Recognition?

- Provides an organized approach to perpetuate osteopathic medicine’s contributions to patient care.
- Creates opportunity for all physicians to learn Osteopathic Principles and Practices
- Creates program distinctiveness.
- Programs with Osteopathic Recognition are acknowledged on the ACGME website.
- Osteopathic medical students would rather train in a program with Osteopathic Recognition

“Patient care delivered within the context of Osteopathic Principles and Practices is aligned to patient-centered, high-value care and the needs of our nation’s healthcare system.”

Source: Presentation by Robert Cain, DO, Chair, OPC at OMEL Conference 2016
OPC Key Developmental Activities

- OPC Working Group Formed in Oct 2014
- OPC Committee Formed, January 2015
- OPC Program Requirements Approved by ACGME Board, February 2015
- Proposed Requirements Posted November 2014
- Application for Osteopathic Recognition Posted April 2015
- FAQs for OPC Program Requirements Posted, April 2015
- Milestones Development finalized December 2015
Osteopathic Recognition

- Programs started to apply for Osteopathic Recognition (OR) July 1, 2015
- Must be ACGME-accredited to receive OR but can apply if in pre-accreditation status
- As of 9/14/2016:
  - 66 programs have applied so far
  - 48 programs reviewed received Initial Recognition (IR)
  - 11 of the programs are allopathic programs without linkages to AOA-accredited programs have already received initial recognition
    - These programs have great interest in recruiting osteopathic medical students

Source: ACGME Accreditation Data System Public Site
KEY RESOURCES

• ACGME Osteopathic Recognition Home Page: http://www.acgme.org/What-We-Do/Recognition/Osteopathic-Recognition

• ACGME Application Instructions for Osteopathic Recognition: https://www.acgme.org/Portals/0/PFAssets/ProgramResources/OR_Application_Instructions.pdf

• ACGME Frequently Asked Questions on Osteopathic Recognition: https://www.acgme.org/Portals/0/PDFs/FAQ/Osteopathic%20Recognition%20FAQs.pdf
An Update on Osteopathic Medical Education

• Background
• Environment
• Trends in Osteopathic Medical Education
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• Discussion
Challenges and Opportunities

• OME as model for producing the physicians needed for a transformed health care system

• Advocacy for all aspects of recognition and support for OME system

• Champion:
  • Patient-centered, hands-on care
  • Community-based training
  • Innovation

• Maintain and improve the quality of our applicants and support our COMs, their faculty, and the clinical training programs (UME and GME) amidst growth and external forces
Challenges and Opportunities

• Successfully implement Single Accreditation System

• Take advantage of opportunities to grow OME via osteopathic recognition of OGME and ACGME programs, and demonstrate value

• Reinvent the Osteopathic Postgraduate Training Institutions—our OME consortium—to meet the needs of continuity of OME and health care transformation issues such as IPE, innovation and related research, faculty development

• Fully seed OPP throughout the ACGME system—which will be the nation’s GME training system

• Exert leadership in health care system in line with our profession’s values
Some Key AACOM Initiatives

- National Academy of Medicine (formerly IOM)
- Interprofessional Education
- UME-GME Task Force
- Closer Alignment with AODME—Annual Conference
- Entrustable Professional Activities (EPA) Project
- Senior Leadership Development/Health Policy Fellowship Program
- Faculty Development:
  - IAMSE
  - TOPCE
Empathy is predominantly a **cognitive** attribute which involves an **understanding** of experiences, concerns, and perspective of the patient, combined with a capacity to **communicate** this understanding, and an intention to help.

“It is good to be able to *put yourself into someone else’s shoes*, but you have to remember that you *don’t wear them.*”

(Szalia, 1976, Psychiatry, 39, 142-152)
Figure 1.1: Empathy and Sympathy as Related to Cognition and Emotion
The empathy timeline

Timeline for empathy in training and career

Hojatt et al. The Devil is in the Third Yr. Acad Med in press
Measurement of physician empathy

The Jefferson Scale of Physician Empathy

(JSPE) (S-Version & HP-Version)

Contains 20 Likert-type items (7-point scale).
Data support its validity (construct, criterion-related, convergent, and discriminant), and reliability (coefficient alpha and test-retest).

Measures 3 factors:

1. Perspective taking.
2. Compassionate care.
3. Standing in patient’s shoes.

(Hojat, et al., 2001, Educ & Psych Measurement, 61, 349-365,
Selected Highlights of Research Findings

Empathy and Academic Performance

- Empathy scores are significantly correlated with global ratings of clinical competence in medical school.

- Empathy scores are not correlated with performance on objective examination of knowledge in both basic and clinical sciences.

Physician Empathy and Patient Outcomes

Two key studies in the U.S. and Italy


Correlates and Changes in Empathy and Attitudes Toward Interprofessional Collaboration in Osteopathic Medical Students

Leonard H. Calabrese, DO; Joseph A. Blanco, PhD; Douglas Mann, PhD; David Massello, BA; and Mohammadreza Hojat, PhD

From the Department of Rheumatic and Immunological Diseases at Case Western Reserve University in Cleveland, Ohio, and the Lerner Research Institute at the Cleveland Clinic in Ohio (Dr Calabrese), the Department of Social Medicine at the Ohio University Heritage College of Osteopathic Medicine in Athens (Drs Blanco and Mann); the Foundation for Osteopathic Research and Continuous Education in Highland Park, Illinois (Mr Massello); and the Center for Research in Medical Education and Health Care and

Context: Many studies have reported a decline in empathy as allopathic medical students progress through medical school. Data are needed to compare the pattern of changes in empathy in osteopathic and allopathic medical students. Also, it is important to investigate the associations between measures of empathy and attitudes toward interprofessional collaboration, which are among major elements of professionalism in medicine.

Objectives: (1) To investigate correlations between empathy and interprofessional collaboration in osteopathic medical students; (2) to examine differences in empathy and interprofessional collaboration scores by sex, class year, and specialty interest; and (3) to compare empathy scores by class year between osteopathic and allopathic medical students.

Design: Correlational and comparative study.

Conclusion: The decline in empathy that is often reported among allopathic medical students was not observed. The present study can serve as a step toward further longitudinal research on the development of empathy and attitudes toward teamwork among osteopathic medical students.

J Am Osteopath Assoc. 2013;113(12):898-907
doi:10.7556/jaoa.2013.068
Mean Scores of the Jefferson Scale of Empathy in Allopathic and Osteopathic Medical Schools (Cross-Sectional Studies)
Questions/Discussion

The American Association of Colleges of Osteopathic Medicine provides leadership for the osteopathic medical education community by promoting excellence in medical education, research, and service, and by fostering innovation and quality across the continuum of osteopathic medical education to improve the health of the American public.

www.aacom.org