Reevaluating Osteopathic Medical Education for the 21st Century and Beyond

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uch is changing in the world of osteopathic medical education. New colleges of osteopathic medicine (COMs), curricular changes, reevaluation of physician competencies for 21st century practice, new accreditation standards for medical schools and graduate medical education (GME), calls for reform-all of these factors impact the osteopathic medical education continuum. Although there are a number of reasons that these changes are upon us, there are 2 overriding drivers of these changes: (1) the response to the challenges being faced by the osteopathic medical education system in the current environment for health care delivery and education, and (2) the innovative impulse (given new knowledge and technologies) that lead many of our educators to propose and implement new solutions to the education of osteopathic physicians.

The environment in which our education system functions has elicited certain recent actions. For example, because of physician workforce shortage projections and the shifting demographics and burden of chronic disease in the United States,¹⁻³ a number of new medical schools (both osteopathic and allopathic) have opened since 2000, and existing schools have expanded their class sizes and added additional campus locations. These increases have occurred in both osteopathic and allopathic medical schools, but the system for GME—which is reliant on federal funding—has not expanded in a similar fashion.

Although there has been significant progress in expanding osteopathic GME,⁴ and osteopathic medical school graduates have been successful in GME placement in recent years (according to unpublished data from the American Association of Colleges of Osteopathic Medicine, 98.5% of 2013 graduates placed in either osteopathic or allopathic programs), there is growing concern about what will happen if federal funding does not expand to meet the need for physicians or, even worse, if federal funds are reduced. As a result, the American Osteopathic Association Commission on Osteopathic College Accreditation, which is the sole body responsible for accrediting COMs, has created and implemented a new standard (Standard 8) that requires COMs to address GME issues when seeking substantive changes.⁵

The transforming health care system is changing the environment for physician practice, resulting in more self-employed physicians (over 50% of US physicians and increasing)⁶ and a greater focus on patient safety and team-based care. To better prepare new physicians for this practice environment, interest in systems-based practice and interprofessional health professions education is expanding. These factors have led schools to increase their focus on interprofessional education. In addition, it led the American Association of Colleges of Osteopathic Medicine to join in partnership with 5 peer organizations-the American Dental Education Association, the Association of American Medical Colleges, the American Association of Colleges of Nursing, the Association of Schools and Programs of Public Health, and the American Association of Colleges of Pharmacy-to form the Interprofessional Education Collaborative, which is working "to advance substantive interprofessional learning experiences to help prepare future clinicians for team-based care of patients."7

At the same time, innovations are being proposed and implemented by osteopathic medical educators seeking to take advantage of new knowledge, technologies, and learning methods to address the changing environment and to offer new ideas on how to address these challenges. For example, Raymond et al⁸ describe the implementation and outcomes of an innovative model at the Lake Erie College of Osteopathic Medicine designed to increase the number of graduates pursuing osteopathic family medicine residencies by decreasing the time frame from medical school entry to completion by 1 year, thus saving graduates a year of tuition payment. In addition, in November 2013 the Blue Ribbon Commission for the Advancement of Osteopathic Medical Education released its report, *Building the Future: Educating the 21st Century Physician.*^{9,10} The report called for a new model for osteopathic medical education based on the following 5 key principles:

- 1. Focus on community needs served by primary care physicians. We must prepare physicians for primary care practice by focusing training on team-based and patientcentered care. Prevention and population health need to be incorporated to improve quality and efficiency of care.
- Advancement based on knowledge, not years of study. We must build "competency-based curricula centered on biomedical, behavioral, and clinical science foundations."¹⁰ Measurable outcomes specific to medical education are needed to assess graduates' readiness for professional practice.
- 3. Boost clinical experience. The curriculum should become a continuous, longitudinal educational experience, providing clinical experience from a student's first year "with increasing levels of responsibility throughout the duration of their training."¹⁰ A seamless transition between undergraduate and graduate medical education should be established, eliminating redundancies and inefficiencies.
- 4. Require a range of experience. The programs should be "administered by medical schools in collaboration with GME providers."¹⁰ Clinical experiences should "occur in a wide variety of environments, including both hospital and ambulatory care settings. Community-based sites, such as integrated health systems, community health centers, and large practice groups, would

provide optimal environments"¹⁰ for learning experiences in primary care.

5. Require modern health system literacy. Programs should focus on health care delivery science, including "the principles of the high-quality, high-value, outcomes-based health care environments."¹⁰

Given these initiatives, it is more important than ever to focus on evidence, evaluation, and data. We need to know where we are, where we are going, and how we will best evaluate the results of the modifications under way. This medical education theme issue of The Journal of the American Osteopathic Association is filled with examples of scholarship designed to study and assess change.11-15 It also is a key source of the data^{4,5,16-19} about osteopathic medical education necessary to identify and understand trends that are already under way. It is evident from these articles, and the countless work of others engaged in this field, that osteopathic medical education can provide leadership and innovation for a health care system that is engaged in transformation aimed at better health, better care, and lower costs. (doi:10.7556/jaoa.2014.046)

References

- Physician shortages to worsen without increases in residency training. Association of American Medical Colleges website. https://www.aamc.org/download /150584/data/physician_shortages_factsheet.pdf. Accessed March 9, 2014.
- Sargen M, Hooker RS, Cooper RA. Gaps in the supply of physicians, advance practice nurses, and physician assistants. J Am Coll Surg. 2011;212(6):991-999. doi:10.1016/j.jamcollsurg.2011.03.005.
- Ensuring an Effective Physician Workforce for America: Recommendations for an Accountable Graduate Medical Education System. New York, NY: Josiah Macy Jr Foundation; 2010.
- DeRosier A, Lischka TA, Martinez B. Appendix 1: osteopathic graduate medical education 2013. J Am Osteopath Assoc. 2014;114(4):299-303. doi:10.7556/jaoa.2014.057.
- Williams A, Miskowicz-Retz KC. Colleges of osteopathic medicine: substantive changes—an update. J Am Osteopath Assoc. 2014;114(4):283-289. doi:10.7556/jaoa.2014.054.

(continued)

- Kane CK, Emmons DW. Policy research perspectives: new data on physician practice arrangements: private practice remains strong despite shifts toward hospital employment. American Medical Association website. http://www .ama-assn.org/resources/doc/health-policy/prp-physician -practice-arrangements.pdf. Accessed March 11, 2014.
- About IPEC. Interprofessional Education Collaborative website. https://ipecollaborative.org/About_IPEC.html. Accessed March 6, 2014.
- Raymond RM, Madden MM, Ferretti SM, Ferretti JM, Ortoski RA. Preliminary outcomes of the Lake Erie College of Osteopathic Medicine's 3-year Primary Care Scholar Pathway in osteopathic medical education. J Am Osteopath Assoc. 2014;114(4):238-241. doi:10.7556/jaoa.2014.048.
- Buser BR, Hahn MB; Blue Ribbon Commission for the Advancement of Osteopathic Medical Education. Building the Future: Educating the 21st Century Physician. American Osteopathic Association, American Association of Colleges of Osteopathic Medicine; 2013. http://blueribboncommission .org/building-the-future-full-report/. Accessed March 6, 2014.
- Shannon SC, Buser BR, Hahn MB, Crosby JB, Cymet T, Mintz JS. A new pathway for medical education. *Health Aff* (*Milwood*). 2013;32(11):1899-1905.
- Binstock J, Junsanto-Bahri T. Student and faculty-reported importance of science prerequisites for osteopathic medical school: a survey-based study. J Am Osteopath Assoc. 2014;114(4):242-251. doi:10.7556/jaoa.2014.049.
- Sandella JM, Smith LA, Dowling DJ. Consistency of interrater scoring of student performances of osteopathic manipulative treatment on COMLEX-USA Level 2-PE. J Am Osteopath Assoc. 2014;114(4):253-258. doi:10.7556/jaoa.2014.050.

- Li F, Gimpel JR, Arenson E, Song H, Bates BP, Ludwin F. Relationship between COMLEX-USA scores and performance on the American Osteopathic Board of Emergency Medicine Part 1 certifying examination. *J Am Osteopath Assoc.* 2014;114(4):260-266. doi:10.7556 /jaoa.2014.051.
- Falcone JL, Rosen ME. Concurrent validity of the Osteopathic General Surgery In-Service Examination. *J Am Osteopath Assoc.* 2014;114(4):267-272. doi:10.7556 /jaoa.2014.052.
- Helstrom JM, Langenau EE, Sandella JM, Mote BL. Keyboard data entry: use among osteopathic medical students and residents. J Am Osteopath Assoc. 2014;114(4):274-282. doi:10.7556/jaoa.2014.053.
- Pierson A. Citation and correction of deficiencies in osteopathic graduate medical education programs: opportunities for improvement. J Am Osteopath Assoc. 2014;114(4):290-294. doi:10.7556/jaoa.2014.055.
- Rodgers DJ. AOA continuing medical education. J Am Osteopath Assoc. 2014;114(4):295-298. doi:10.7556 /jaoa.2014.056.
- Gross C, Lischka TA, Martinez B. Appendix 2: dual and parallel postdoctoral training programs. J Am Osteopath Assoc. 2014;114(4):305-312. doi:10.7556/jaoa.2014.058.
- Gross C, Bell EC. Appendix 3: AOA specialty board certification. J Am Osteopath Assoc. 2014;114(4):313-316. doi:10.7556/jaoa.2014.059.

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