Osteopathic Medical Education: Innovations in a Changing Environment

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Medical education must continually evolve to meet today's and tomorrow's health care challenges, as the only thing certain about the future of health care is uncertainty. This annual medical education theme issue of *The Journal of the American Osteopathic Association* (*JAOA*) strives to highlight the exciting new developments and innovations taking place in osteopathic undergraduate and graduate medical education (GME). It is indeed an exciting time to be an osteopathic educator. New colleges of osteopathic medicine (COMs) are sprouting in areas in need of primary care, osteopathic GME is forging new pathways and paradigms for training, and education research is blossoming. Throughout history, medical educators have viewed changes as opportunities to provide innovation and to consistently improve the quality of medical education.[1] Fortunately, the osteopathic medical profession is grounded in clear principles, which will continue to drive our expansion.

As health care professionals, we not only need to address the health care needs of the public, but we must also gain and maintain the public's trust. Phillips-Madson and Dharamsi[2] address osteopathic medicine and social accountability in this issue, focusing on physicians' responsibilities to remove barriers to providing quality and affordable health care. Reductions in public funding for medical education will continue to drive innovation—the 2017 proposed federal budget cuts of nearly $18 billion to Medicare will directly affect patient care and the financing of GME at academic health centers. Without new models of care, this reduction in funding is likely to have a negative impact on care for the most vulnerable patients, who seek treatment at these facilities.[3] In addition, by 2025, the United States is predicted to have a deficit of 46,000 to 90,000 physicians. This shortage is predicted to include 12,500 to 31,000 primary care physicians and 28,200 to 63,700 non–primary care physicians.[4] Both of these factors—reduced funding and the predicted physician shortage—challenge osteopathic physicians and medical educators to envision health disparities and access to health care differently.

As osteopathic medical educators, we also have a responsibility to help develop a physician workforce focused on improving the public's health. The growth of COMs and GME programs demonstrate the osteopathic profession's commitment. In 10 states, osteopathic residency slots have increased by 25% since the 2013-2014 academic year.[5] However, barriers to population health care are confounded by a range of personal, social, economic, and environmental factors. Osteopathic educators have always focused on this holistic concept, now referred to by some as the concept of "One Health." These factors limit a patient's ability to access health services, resulting in a profoundly negative effect on all aspects of health.[1] To improve the health of all people, there is an ongoing need to increase access to health care, including routine medical care. Data from Martinez and Biszewski[5] show osteopathic medicine's continuing focus to address these needs, with COM graduates continuing to enter primary care. In fact, 47% of residents in programs approved by the American Osteopathic Association (AOA) are in primary care.[5] Furthermore, AOA-approved residency and fellowship growth has been greatest in family medicine and internal medicine programs in the past academic year.[5]

Just as COMs are creating innovative pathways for undergraduate osteopathic medical education, GME must also evolve. Osteopathic manipulative treatment often becomes a lost art when students venture off into the clinical training environment. Integrating those key principles and techniques learned in COMs must be weaved into the fabric of clinical training and GME. Heineman and colleagues[7] propose an approach to the integration of osteopathic manipulative medicine into clinical clerkships.[7] They address the importance of continued training and mentorship in the clinical years, as well as the potential influence of osteopathic

manipulative medicine integration on student confidence, awareness, and interest in using osteopathic manipulative treatment in clinical practice.[7]

The public needs to be aware of who we as osteopathic physicians are, what we do, and how we teach. As the osteopathic medical profession grows, we must promote our brand identity. The AOA launched a national awareness campaign (DoctorsThatDO.org) in October 2015[8] that does just that and aligns perfectly with the transition of osteopathic residency training with the Accreditation Council for Graduate Medical Education (ACGME) single GME accreditation system. As the osteopathic medical profession transitions to the single GME system, we are challenged to clearly articulate what makes osteopathic medicine unique. Stillman and colleagues[9] address this topic through their exploration of allopathic medical students' perceptions of allopathic, osteopathic, and international medical school graduates' patient care, clinical knowledge, and medical school rigor. The article[9] touches on factors underlying unconscious bias that can be a source of frustration for the osteopathic medical community. However, before we can address bias, osteopathic medical educators must first identify it. Furthermore, we are tasked to define and ensure valid measures of what it means to train osteopathic physicians.

Mentorship is one of the key ingredients in developing successful osteopathic physicians and educators. Mentors and advisors are critical to supporting students' preparation for residency. Speicher and Pradhan[10] investigate the advising needs of osteopathic medical students and the relationship of those needs to student confidence and awareness of advising resources. Another key area for advising is in test preparation for licensing examinations, which serve as gatekeepers to the residency selection process. Sandella and colleagues[11] provide a detailed overview of student preparation strategies for the Comprehensive Osteopathic Medical Licensing Examination-USA Level 2-Performance Evaluation. The study[11] demonstrates that although students use multiple approaches for study, standardized patient encounters remain a constant component. Almost all students in the study engaged in multiple standardized patient encounters in years 3 and 4 of predoctoral training.[11]

Each osteopathic medical educator has his or her own perception of professionalism. How should physicians dress and behave? Competence in professionalism is a key milestone in medical school and GME. Social expectations can guide beliefs of professional culture, including assumptions of what it means to be a responsible and caring physician. Professional cultures also powerfully shape trainees' values and behaviors through both formal and informal modes of socialization and organizational influences sometimes called the "hidden curriculum."[12] Bramstedt and colleagues[13] investigate the hidden curriculum through the exploration of medical student perceptions on clinical attire.[13]

Leading in an Ever-Changing Landscape

At the end of the 19th century, in a time of substantial change in the health care landscape, Andrew Taylor Still, MD, DO, planted the seeds for change in medical education. The latest developments and innovations were published in a journal that would become the *JAOA*. More than a century later, those seeds have blossomed into the fruits of today's 30 accredited COMs at 42 locations.[14] Recognizing the need to work together again, the *JAOA* and the American Association of Colleges of Osteopathic Medicine (AACOM) developed a collaborative medical education section to deliver the best research and practices in osteopathic medical education to our readers. This theme issue is the beginning of that venture.

Osteopathic institutions continue to lead the transformation of medical education in the United States. Earlier this year, AACOM announced its

partnership with the ACGME in Pursuing Excellence in Clinical Learning Environments.[15] This 4-year initiative is designed to promote transformative improvement within the clinical learning environments of ACGME-accredited sponsoring institutions in which resident and fellow physicians pursue their formal clinical training in a specialty or subspecialty. In addition, the Interprofessional Education Collaborative recently announced the addition of 9 new members, several with osteopathic educational ties.[16] Osteopathic educators are seated at the table of innovation in medical education.

In this ever-changing landscape of medical education, several questions remain: What are the challenges our educators should address in the future? What are the best models of interprofessional education? Will osteopathic distinctiveness thrive in the ACGME accreditation system? How should medical educators study these changes? What influence will teaching the tenets of osteopathic medicine have on non–osteopathically trained graduates? As research and innovation in health care education evolve, the *JAOA*/AACOM section on medical education will be the conduit to bring this new knowledge to our readers. (doi:10.7556/jaoa.2016.038)

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