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Q&A: Profession has chance to redefine medical education for 21st century

Posted Jan. 28, 2:20 p.m.

By Carolyn Schierhorn / Staff Editor

The Flexner Report of 1910 spurred revolutionary improvements in and the standardization of medical education in the United States. But even though biomedical knowledge has exploded and medical practice has changed dramatically during the past 100 years, undergraduate medical education still reflects the Flexner-inspired model, with two years of didactic instruction in the biological and clinical sciences followed by two years of clinical training in hospitals.

Physicians then pursue three or more years of postgraduate hospital-based specialty training, typically at institutions not affiliated with the medical school they graduated from. This lengthy, disjointed system for training doctors is ill-suited to the health care needs of the 21st century, says Marc B. Hahn, DO, who with AOA Trustee Boyd R. Buser, DO, chairs the Blue Ribbon Commission for the Advancement of Osteopathic Medical Education.

Established by the AOA and the American Association of Colleges of Osteopathic Medicine (AACOM), the 24-member Blue Ribbon Commission has developed a roadmap for overhauling osteopathic medical education that is summarized in the November 2013 issue of *Health Affairs*.

The commission proposes a new educational model, referred to as “the pathway,” which embodies five principles:

- Reinforcing the profession’s traditional focus on primary care, the pathway would prepare all students for primary care practice while integrating osteopathic philosophy and osteopathic manipulative treatment throughout the curriculum.
- The pathway’s curriculum would be competency-based and would link undergraduate and graduate medical education. Trainees would become practice-ready primary care physicians in as few as five years if they demonstrate expected competencies.
- The pathway would consist of a continuous, longitudinal educational experience. Clinical education would begin in the first year of medical school, allowing students to follow patients over time. The transition between undergraduate medical education and GME would be seamless, eliminating redundancies and inefficiencies.
- The new model would be administered by osteopathic medical schools in collaboration with OGME programs that are part of osteopathic postdoctoral training institutions (OPTIs). Clinical training would take place in community-based ambulatory settings, as well as hospitals, so that DO trainees gain experience in the wide variety of environments in which medicine is practiced.
- Trainees in the pathway would become proficient in important aspects of modern health care delivery, such as health information technology, health policy development, the patient-centered medical home model of care and quality assurance.

Implementing these principles would improve the quality and reduce the costs of medical education, according to Dr. Hahn, who has served as the dean of three osteopathic medical schools and is currently the president and CEO of the Kansas City (Mo.) University of Medicine and

Biosciences (KCUMB).

The new educational model would strengthen the profession's already recognized leadership role in primary care, he says. But while all pathway-educated DOs would be ready to enter primary care, they would have the option of pursuing additional training in non-primary care specialties.

Dr. Hahn, who is an anesthesiologist, maintains that by adopting the Blue Ribbon Commission's recommendations, the osteopathic medical profession would emerge as a leader in reinventing medical education, as well as in training top-quality, practice-ready primary care and specialist physicians.

In the following edited remarks, Dr. Hahn discusses some of the Blue Ribbon Commission's proposals.

What led to the Blue Ribbon Commission's recommendations?

It was a two-year process in which the Blue Ribbon Commission and its steering committee worked and met on a regular basis to explore what is working well in health care and medical education and what can be improved upon. The basic recommendations stem from the fact that now more than ever before, this country is looking for the type of physicians and physician leaders that the osteopathic medical profession has always delivered. The federal government is espousing a philosophy of health care that our profession has always espoused.

For most of the 100-plus years since the Flexner Report was issued, the osteopathic medical profession has been a me-too profession when it comes to medical education. Whenever allopathic medical programs adopted a model, we tended to follow.

Given current trends in health care, the osteopathic profession now has the opportunity to take a leadership role in redefining medical education for the 21st century, especially primary care medical education.

The commission's proposed pathway would allow trainees to become board-certified primary care physicians in as few as five years. How does this model differ from existing programs that shorten the medical education process, such as the three-year accelerated primary care or family medicine pathways at the Lake Erie College of Osteopathic Medicine (LECOM) in Erie, Pa.; the New York Institute of Technology College of Osteopathic Medicine (NYITCOM) in Old Westbury; and the Texas Tech University School of Medicine in Lubbock, Texas?

In many ways, LECOM and Texas Tech were trailblazers in starting the discussion of what a new model of medical education could look like. However, many of these programs are a compression of the standard model of four years of medical school into three years of medical school.

The pathway recommended by the Blue Ribbon Commission would be different in structure because it would be more competency-based and it would be a continuum from medical school to residency training. Students with the aptitude and skills would be able to move through the continuum in five years. But it could take longer for some students.

The osteopathic medical profession used to train general practitioners in five years: four years of medical school followed by a one-year rotating internship. What makes the new pathway different from that traditional model?

Some people on the commission commented that this pathway is an example of "back to the future." Is this not the same model we had before? The time frame may be the same. But the educational process in the new model would be generations different from the former four-plus-

one rotating-internship pathway to become a general practitioner.

Why is it important to link undergraduate medical education and GME in a continuous pathway? Would osteopathic medical students serve their residency at the same institutions where they served their clinical rotations?

One of the commission's key recommendations is that the curriculum be continuous between undergraduate and graduate medical education. The joining of the two creates a very valuable longitudinal educational experience, as opposed to snapshots of education.

For example, often students on rotation will see patients who've been newly diagnosed with cancer. Or they'll see patients who are dying of cancer. But students aren't able to follow a cancer patient longitudinally to see the progression of the disease and whether the patient survives. Under the proposed model, students would be able to have that experience.

To create the five-year longitudinal pathway, an osteopathic medical school would partner with its affiliated clinical training sites. Ideally, postgraduate training would take place in the same sites.

The commission proposes that students begin clinical training in the first year of medical school. Would the basic sciences play a different role in the revamped curriculum?

Yes. Even today, with the model that we have, we are rethinking what goes into the education of a doctor and what the building blocks for that foundation should be. It is certainly important to have a conceptual understanding of the biomedical sciences to support the clinical decisions that physicians make.

But since the Flexner Report was published, the fund of both bioscience and medical knowledge has grown exponentially. You can't push all of that knowledge into the same period of time that you could 100 years ago. So we have to reconsider what is important for medical students to learn.

What is important for a student's conceptual understanding of how to treat a patient? And probably more important, how do we develop a medical student into a lifelong learner?

As medical educators, we are looking at how physicians obtain and use information today. Physicians need to know certain things by heart. But often they just need to know where to look for information: What sources are trusted, reliable and up-to-date?

So rather than expecting students to memorize more and more information, we need to focus on helping them develop the skills to become lifelong learners, given all the tools at their fingertips today. We need to teach them how to get the information necessary to make an appropriate diagnosis and know the latest treatment for a condition.

There is no way that the average doctor can remember the amount of content that is out there today. But if physicians have the skills to seek that information from their smartphone, their tablet, their laptop or any other means of getting on the Internet, they will have access to a wealth of information that previous generations of physicians had no access to.

That's why at KCUMB, we've begun a transition from textbooks and paper-and-pencil examinations to a tablet-based curriculum. We have given each student the most up-to-date iPad to use in downloading course syllabi, handouts and textbooks and in accessing the Internet. So students now carry their library with them. This will prepare them for using electronic devices and online medical resources effectively in medical practice.

Osteopathic medical schools have a better track record than allopathic medical schools when it comes to producing graduates who will enter primary care. But AACOM's recent annual

surveys of fourth-year osteopathic medical students show that a majority plan to enter non-primary-care specialties. Is the commission hoping to reverse this trend?

In terms of proportion of graduates, osteopathic medical schools are much better at producing primary care physicians than allopathic medical schools are. Here in Kansas City, for example, 65-70% of our graduates are in primary care—that's a rate many times higher than that of our allopathic colleagues in this city.

Certainly, student debt and the challenges of an evolving health care system all shape the decisions of 21st century students. If we can do anything to make it easier for students to make career decisions based on their true interests rather than economic concerns, we will be better off as a profession and our patients will benefit. Our country will be better off as well if a larger proportion of the best and brightest choose careers in primary care.

Under the commission's proposed model, would osteopathic medical students have to decide early—even before starting med school—whether to go into primary care?

The commission discussed this at length. Many members felt it would be better to have a model in which osteopathic physicians become primary care physicians first and then move on to specialty training if that is their preference. The thinking was that broad-based primary care training prepares physicians to become better anesthesiologists, radiologists, neurosurgeons and so forth.

It was decided that the five-year pathway would lead to becoming a board-certified primary care physician. But that physician could then choose to train in a specialty or subspecialty. The physician would not be locked into a primary care career but would be a stronger specialist because of the foundation in primary care.

Given that the pathway would be competency-based, will the Blue Ribbon Commission work closely with the National Board of Osteopathic Medical Examiners (NBOME) to develop new assessments?

Yes. To move forward with our proposal, we need to partner not just with the NBOME, but also with state medical licensing boards, the AOA Commission on Osteopathic College Accreditation and residency accrediting bodies. We need to have all of these regulatory and accrediting entities understand philosophically what we are trying to accomplish and agree to any changes in the medical education model. This will not happen overnight.

Do you expect that outside funding will be available to implement the new model?

The answer is maybe. The commission has talked about whether private foundations or federal entities would help sponsor an initiative such as this. The Josiah Macy Jr. Foundation, for one, has been a key supporter and financial backer of the Blue Ribbon Commission. In fact, George E. Thibault, MD, the foundation's president, attended many of the in-person meetings and conference calls. Other organizations are also interested in revamping medical education and primary care training.

For the pathway to have an impact, would allopathic medical schools have to buy into it?

Not necessarily. But there also have been calls on the allopathic side to restructure medical education. The American Medical Association has made $10 million in grant funding available to allopathic medical schools to develop new models. Ten schools have been selected to receive those grants and come up with proposals.

So we're essentially in a race to revolutionize medical education. Most medical educators today,

allopathic and osteopathic, understand the importance of changing our educational model to fit the needs of the 21st century.

What's the next step for the osteopathic medical profession?

The next step is for one or a number of osteopathic medical schools to pilot the new pathway. Several of our colleges of osteopathic medicine are considering what the model would look like if we were to operationalize it. We're considering whether the model would apply to an entire class or a subset of a class.

The question is whether we as a profession will be bold enough to take a leadership role in redefining medical education. Or will we wait until our allopathic colleagues come out with their own blue ribbon report?

We have the opportunity to take the lead rather than being a me-too profession. Will any of our schools be bold enough to take that first step?

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