



Medical School Expansion in the 21st Century

Colleges of
Osteopathic Medicine

Michael E. Whitcomb, M.D. and Douglas L. Wood, D.O., Ph.D.

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Cover: University of New England campus

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FOREWORD

The Macy Foundation has recently documented the motivating factors, major challenges, and planning strategies for the fifteen new allopathic medical schools (leading to the M.D. degree) that enrolled their charter classes between 2009 and 2014.^{1,2} A parallel trend in the opening of new osteopathic medical schools (leading to the D.O. degree) began in 2003. This expansion will result in a greater proportional increase in the D.O. workforce than will occur in the M.D. workforce as a result of the allopathic expansion. With eleven new osteopathic schools and nine new sites or branches for existing osteopathic schools, there will be more than a doubling of the D.O. graduates in the U.S. by the end of this decade.

Douglas Wood, D.O., Ph.D., and Michael Whitcomb, M.D., bring their broad experiences in D.O. and M.D. education to this report of the osteopathic school expansion. They identify ways in which the new schools are similar to and different from the existing osteopathic schools, and they identify differences in the rationale and characteristics of the new osteopathic schools, compared with those of the new allopathic schools that Dr. Whitcomb has previously chronicled.

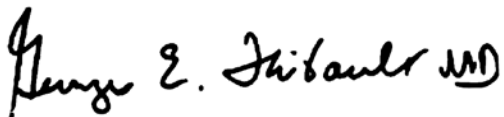
1 Whitcomb ME. New and developing medical schools: Motivating factors, major challenges, planning strategies. New York (NY): Josiah Macy Jr. Foundation; 2009.

2 Whitcomb ME. New and developing medical schools: Motivating factors, major challenges, planning strategies part 2. New York (NY): Josiah Macy Jr. Foundation; 2013.

The osteopathic and the allopathic school expansions are occurring at a time of dramatic change in the U.S. healthcare system. It is a time when we need to support and encourage innovation in physician (and other health professional) education to better prepare a workforce that is aligned with these changes. We must take advantage of these “natural experiments” of expansion to identify innovations that might improve the process of preparing all doctors, while paying close attention to our responsibility to assure that all schools (new and old) are meeting their social responsibility to the communities they serve.

This report is one important contribution to an ongoing discussion about the need for better alignment of health professions education with societal needs. Determining the appropriate size, composition, and preparation of our physician workforce at a time of demographic and delivery-system change is an essential part of this discussion. We will need more time and follow-up study to determine how this expansion has contributed to that alignment.

I want to thank Drs. Whitcomb and Wood for undertaking this project and for producing such a well-done and scholarly report.

A handwritten signature in black ink that reads "George E. Thibault MD". The signature is written in a cursive, flowing style.

George E. Thibault, M.D.

President, Josiah Macy Jr. Foundation

INTRODUCTION

In 2001, a new osteopathic medical school was founded in Blacksburg, Virginia. Since then, ten more new osteopathic medical schools have been established across the country. During the same period, a number of osteopathic medical schools, including several of the new schools, established major satellite campuses, designated either as a Branch Campus or an Additional Location, where first-year students are enrolled and may complete all four years of the school's educational program. As a result of the opening of the new schools and the establishment of the new satellite campuses, the number of students enrolled in osteopathic medical schools has more than doubled since the turn of the century. There were 10,817 students enrolled in osteopathic medical schools in the 2000–2001 academic year. In the 2014–2015 academic year, the number of students enrolled had increased to 24,615. The number of first-year students enrolled in 2000–2001 was 2,927. In the 2014–2015 academic year, the number of first-year students enrolled had increased to 7,019. Due to the increase that has occurred in the number of students enrolled in osteopathic medical schools, osteopathic medical students now account for more than 20% of all students enrolled in U.S. medical schools.

This report provides information about the extraordinary expansion that has occurred in osteopathic medical school enrollment during the

past fifteen years. The report provides specific information about the eleven new osteopathic medical schools that have been established in the country since the turn of the century. Information about the major satellite campuses that were established during that period is also included, since the campuses have contributed in major ways to the increase that has occurred in osteopathic medical school enrollment. In order to place the development of the new schools and major satellite campuses in perspective, the report also provides some information about the osteopathic medical schools that existed when the new schools began to be developed in 2001.

As noted above, the increase that has occurred in the number of students attending osteopathic medical schools during the past fifteen years is quite remarkable. In fact, the increase in enrollment is almost as great as the increase in enrollment that occurred during the same period of time in the number of students attending allopathic medical schools, even though the number of allopathic medical schools is almost five times greater than the number of osteopathic medical schools (141 vs. 30). The increase in osteopathic medical school enrollment reflects to a great extent the major changes that occurred throughout the 20th century in the way that osteopathic medicine has been viewed in this country. Unfortunately, very little has been written about the nature of the changes that have occurred over the years, and the reasons why they occurred. Indeed, to understand why there has been such a large increase in recent years in the number of osteopathic medical schools, it is important to be aware of the history of the evolution of osteopathic medicine in this country. Thus, the report begins by providing a historical overview of the evolution of osteopathic medicine during the 20th century.

THE EVOLUTION OF OSTEOPATHIC MEDICINE

Andrew Taylor Still (A.T. Still) began his career in medicine in the mid-1850s working with his father, an itinerant minister who also provided medical care to sick individuals he encountered during his travels. Because effective treatments for most clinical conditions were quite limited at that time, doctors used a variety of different approaches to treat patients. Given that, A.T. Still became interested in trying to discover an effective form of treatment for the patients he encountered. Over time he became convinced that misalignment of parts of the body's musculoskeletal system was responsible for many of the clinical conditions that prompted patients to seek medical care. As a result, he began to focus his attention on the possibility that realigning parts of the body's musculoskeletal system through manual manipulation could provide an effective form of treatment for various clinical conditions. In the mid-1870s, he discontinued using the usual approaches for treating patients that existed at that time, and limited his practice to employing techniques for manipulating the body, an approach he referred to as osteopathy.

Still ultimately moved to Kirksville, Missouri, and established his practice there. Based on the number of patients that travelled to Kirksville seeking his care, he became convinced that he had

discovered an effective approach for treating medical conditions. Accordingly, he decided that he should share his experience with others, so in 1892 he established the American School of Osteopathy in Kirksville. When the school first opened, students who completed the course of studies were granted a certificate indicating that they were diplomats in osteopathy even though the state charter that allowed the school to be established permitted the school to grant the graduates a degree as a medical doctor (M.D.). The school was successful in attracting a number of students, and within a few years the school's graduates were granted a degree that identified them as a doctor of osteopathy (D.O.).

Beginning in the mid-1890s, graduates from the Kirksville school began to establish other schools of osteopathy across the country. In 1898, the Associated Colleges of Osteopathy was established to provide an opportunity for the new schools to share information about their educational programs. In the early years of the 20th century, many of the newly established schools closed as the American Association for the Advancement of Osteopathy, which had been established in 1897, began to develop standards for the educational programs that the schools were providing their students. In 1901, the association was renamed the American Osteopathic Association (AOA), and in 1903, it began to conduct on-site inspections of existing schools.

When A.T. Still established osteopathic medicine, or osteopathy, as a distinct discipline in the 1890s, it was based almost entirely on the manipulative techniques he advocated for the treatment of a wide range of clinical conditions. As the medical profession began to discover and employ an increasing array of effective therapeutic and surgical techniques in caring for patients, practitioners of osteopathy began to recognize that manipulative therapy was not the only approach, or at times even an appropriate approach, for treating a

number of clinical conditions. As a result, the osteopathic medicine community acknowledged that while manual manipulation could be used to treat certain conditions, graduates of schools of osteopathy should also incorporate the approaches to patient care being developed by allopathic medicine into their practices. Osteopathic manipulation could perhaps complement some of those treatment regimens. Thus, schools of osteopathy began to incorporate these novel approaches into their educational programs. Indeed, Still agreed that students should be educated to provide these new kinds of care. Accordingly, his American School of Osteopathy added obstetrics and certain surgical techniques to its curriculum in 1897.

In order to place the early development of the schools of osteopathy in perspective, it is important to recognize that during the period when they were being developed, major changes were occurring in the nature of the traditional medical schools that existed in the country. During the decades following the end of the Civil War, scientific developments were beginning to have a real impact on the practice of clinical medicine. As a result, individuals holding leadership positions in medicine began to recognize that the nature of medical schools and the course of studies they offered needed to change. The American Medical Association (AMA), which had been founded in 1847, began to advocate for changes in medical education to ensure that graduates were being prepared adequately for future practice. The AMA Council on Medical Education (CME), which had become the lead organization in promoting medical education reform, was joined in the effort by the newly formed Association of American Medical Colleges (AAMC) in 1890. Throughout that period, a number of new medical schools were established by colleges and universities that had begun to introduce more scientific course work into their curricula, based to some degree on the university model in existence in Germany and other European countries. And in 1892, the very year that A.T. Still established the American School

of Osteopathy in Kirksville, Johns Hopkins University, which had recently been established in Baltimore, Maryland, founded the Johns Hopkins School of Medicine, which became a model for the future development of medical schools in the United States.

In the years that followed, the AMA CME and the AAMC began to increase their efforts to reform the educational programs conducted by medical schools by visiting some of the schools to promote curriculum change. The AMA CME initiative actually led the newly established Carnegie Foundation for the Advancement of Teaching to embark on an effort to reform medical education. There were 155 medical schools in existence at that time in the United States and Canada, including eight schools of osteopathy, and almost half of the schools were proprietary schools. When Abraham Flexner embarked on his study of medical schools for the foundation, he and the foundation's president agreed that he should visit all of the schools, including the eight schools of osteopathy. In his 1910 report, Flexner indicated that the schools of osteopathy did not provide an appropriate course of studies for their students, a view that he also expressed about a number of the traditional medical schools in existence at that time, primarily the proprietary schools. In that regard, it is noteworthy that following the release of his report, the number of allopathic medical schools decreased from 147 in 1910 to 83 in 1921, and 76 in 1929. At that time, almost all of the schools were based in universities.

Beginning in the 1920s and continuing throughout the 1930s, the AOA advanced the position that graduates of osteopathic medical schools should be recognized as osteopathic physicians, not simply as osteopaths. Indeed, various preventive and therapeutic approaches for treating patients were incorporated into the curricula of osteopathic medical schools throughout the initial decades of the 20th century. Based on the changes that had occurred in the ways osteopathic medical students were being educated, the AOA asserted

in a 1929 policy statement that graduates of schools of osteopathy were qualified to engage in a complete and unlimited scope of medical practice.

Nonetheless, the AMA, which had become heavily engaged in establishing allopathic medicine as the only form of medicine to be practiced by a physician, continued to view osteopaths as members of a cult because of their continued practice of manual manipulation to treat certain clinical conditions. Accordingly, they tried to bar doctors of osteopathy from being viewed as legitimate practitioners of medicine. Throughout the first half of the 20th century, the AMA engaged in ongoing efforts to undermine osteopathic medicine's reputation and standing within society, and to bar osteopathic physicians from the practice of medicine. The impact that those efforts had on the public's perception of osteopathic medicine is perhaps best reflected by the fact that the Department of Defense would not allow osteopathic physicians to serve in the medical corps of any of the branches of service during World War II.

However, in the years following the end of the war, the perception of osteopathic medicine began to change. Some states changed their licensure laws in ways that allowed osteopathic physicians to be recognized as practitioners who could engage in the full scope of medical practice. At the same time, community hospitals began to grant medical staff privileges to osteopathic physicians, thereby allowing them to care for their patients needing hospitalization alongside allopathic physicians. As a result, osteopathic physicians did not have to limit the care of their patients needing hospitalization to osteopathic hospitals. And ultimately, graduates of osteopathic medical schools began to be accepted into graduate medical education programs conducted within allopathic hospitals.

Nonetheless, throughout the 1950s there continued to be ongoing conflict within the medical profession, as well as within some state

governments, as to whether graduates of osteopathic medical schools should be recognized as being full-fledged members of the medical profession. In the 1950s the AMA conducted a review of osteopathic medical schools for the purpose of determining whether the association should discontinue categorizing osteopathic physicians as members of a cult. Even though the AMA designated teams that visited the schools determined that students were being adequately educated for the full scope practice of medicine, the AMA House of Delegates rejected the findings and voted that osteopathic medicine should continue to be designated as a cult because it continued to advocate for the use of manipulative therapy in treating certain conditions.

As a result, discussions continued throughout the country about whether there should be separate licensure laws for M.D.s and D.O.s, and even whether medical schools offering separate D.O. degrees should exist. Many members of the medical profession believed that osteopathic medicine should in essence merge with allopathic medicine so that there would only be a single profession of medicine. The controversy surrounding those issues became highly charged in the early 1960s when the state medical association in California, as well as the state government, agreed over the objections of the AMA to allow D.O.s in California to convert their title designation from D.O. to M.D. simply by exchanging their licenses. As a part of the agreement, the private osteopathic medical school located in Los Angeles closed, and the school was eventually converted to a publically supported allopathic medical school within the University of California System.

Further evidence that D.O.s were being viewed more favorably became apparent in the 1960s by the way that both state and federal governments responded to concerns about an impending shortage of physicians. By 1960, policymakers had become convinced that the country was on the verge of experiencing a major shortage of

physicians. The federal government agreed that in order to increase physician supply, there needed to be a substantial increase in the number of students attending medical school. Accordingly, the U.S. Congress established programs that provided federal funds to existing schools that were willing to increase class size, and to universities and other institutions that were willing to establish new medical schools. By providing the opportunity to obtain federal support, the programs encouraged state governments that were concerned about the adequacy of physician supply in their communities to increase enrollments in existing state institutions or to establish new schools within the state. As a result of the government programs, forty new allopathic medical schools were established between 1960 and 1980.

It is particularly important to note that ten new osteopathic medical schools were also established during the same period. And it is highly significant that six of the new schools ultimately became publicly funded institutions, even though several of them were originally established as private institutions by the osteopathic medicine community. Over time, five of the six publicly funded schools became established within major state universities (Michigan State University, Ohio University, Rowan University, the University of North Texas, and Oklahoma State University), and one became an independent school (West Virginia College of Osteopathic Medicine). Three of the ten schools founded during the period ultimately became incorporated into private universities (University of New England, New York Institute of Technology, and Nova Southeastern University). The remaining school ultimately became part of a private health sciences university (Western University of Health Sciences). Thus, as a result of the development of the ten new schools during that period of time, fifteen osteopathic medical schools existed in the country in 1980, three times the number that existed in 1960.

The fact that state and federal government funds were used to develop osteopathic medical schools during that period of time was

a clear indication that osteopathic medicine had come to be viewed by many within the public as being essentially identical to allopathic medicine. In that regard it is important to note that in 1965 the federal government gave osteopathic physicians the right to engage fully in the care of patients funded by the federal Medicare and Medicaid programs, and in 1966 the Department of Defense reversed its position and no longer prevented osteopathic physicians from serving in the medical corps of one of the branches of service. It is clear, therefore, that by the 1960s the public perception of osteopathic medicine had changed dramatically from what it had been during the first half of the 20th century. Indeed, by 1973, all states provided graduates of osteopathic medical schools licenses for the unlimited practice of medicine.

In 1980, the results of a major physician workforce study conducted by a government appointed committee were released to the public. The report concluded that the country was going to experience a major oversupply of physicians by the year 2000. As a result of the committee's findings, the government provided no further support for the development of new medical schools in the country, resulting in no new allopathic medical schools being established during the next two decades. It is extremely important to note, however, that four new osteopathic medical schools were established during the 1990s (Lake Erie College of Osteopathic Medicine, Midwestern University College of Osteopathic Medicine in Arizona, Touro University College of Osteopathic Medicine – California, and the Kentucky College of Osteopathic Medicine).

The establishment of four new osteopathic medical schools during the 1990s is particularly noteworthy, since it occurred during a time when federal policymakers, as well as major professional organizations representing the allopathic and osteopathic medical communities, continued to assert that the country was on the verge of a major oversupply of physicians. Indeed, in 1996, the U.S. Congress passed

legislation that included provisions for limiting physician supply by capping the number of Medicare-funded graduate medical education positions in the country. And in 1997, the major organizations representing the allopathic and osteopathic medical professions, as well as allopathic and osteopathic medical schools and hospitals, issued a joint statement calling for limits on physician supply.

Despite the changes that had occurred, there continued to be confusion about osteopathic medicine within the allopathic medicine community and among members of the general public. As a result, the Josiah Macy Jr. Foundation decided in the mid 1990s to host a conference to explore a set of issues relevant to the state of osteopathic medicine in the country. The Foundation commissioned three papers to serve as the foundation for the conference discussions. The background papers were focused on the history of osteopathic medicine, the contemporary philosophy and practice of osteopathic medicine, and osteopathic medical education. The conference, which was held in 1995, brought together individuals holding leadership positions in both the allopathic and osteopathic communities to discuss the different perspectives that existed about osteopathic medicine, and to clarify points of confusion. The 1995 conference was focused largely on exploring how individuals holding various leadership roles in osteopathic medicine viewed different aspects of osteopathic medicine, and the changes that should occur to further enhance an understanding of osteopathic medicine by the allopathic medicine community, and by the public at large. Because of the nature of the discussions that occurred during the conference, the Foundation decided to sponsor a second conference in 1996 to explore some of the issues in more detail.

The 1996 conference brought together individuals holding leadership positions in both the allopathic and osteopathic communities to discuss how they should proceed to address issues of common concern. A major discussion item in the 1996 conference was whether

osteopathic medicine should be viewed as a distinct profession simply by virtue of the fact that it continued to accept osteopathic manipulation treatment as a defining characteristic. Some of the attendees believed that this should no longer be the case. Since there was a growing body of evidence showing that the majority of graduates of osteopathic medical schools were enrolling in allopathic graduate medical education programs, and an increasing number of osteopathic physicians were not utilizing osteopathic manipulation techniques in their practices, a number of the participants believed that graduates of osteopathic and allopathic medical schools should all be considered members of the medical profession. Nonetheless, the participants from the osteopathic medicine community expressed their view that osteopathic medicine should continue to be identified as a distinct profession.

It is important to note that some of the conference participants who held leadership roles in the allopathic community expressed concern about the establishment of the new osteopathic schools during the 1990s at a time when the federal government was taking steps to limit physician supply. They attempted unsuccessfully to persuade the osteopathic leadership in attendance at the conference to endorse a position against the formation of new osteopathic medical schools. The effort failed to gain general support primarily because many in the osteopathic community, despite acknowledging that the country was facing an oversupply of physicians, were still interested in increasing the presence of osteopathic medicine in communities and states where there were no osteopathic medical schools and a relatively small number of osteopathic physicians in practice.

To put this in perspective, it is important to recognize that the increase that has occurred in the number of osteopathic medical schools in the country does not simply reflect a response to contemporary concerns about the size of the physician workforce. Not only were four new osteopathic medical schools established during the 1990s,

when policy analysts were convinced that the country was on the verge of experiencing a major oversupply of physicians, but five more new schools were established during the period 2001 to 2005, when concerns about physician oversupply still existed. Now that academic medicine and policymakers are foreshadowing that there will be a major physician *shortage* in the coming years, it is important to be clear that the increase that has occurred in the number of students enrolled in osteopathic medical schools during the past decade is not simply a response to those concerns.

There can be little doubt that a major factor motivating the development of the new osteopathic medical schools was the desire of members of the osteopathic medicine community to establish a greater presence for osteopathic medicine in the country by increasing the number of osteopathic physicians practicing in various communities, and by establishing osteopathic medical schools in some states that did not already have one. At the same time, it should be noted that the new schools were established with a special commitment to provide physicians for underserved communities in rural America. As the 20th century came to an end, there were only about forty thousand osteopathic physicians in practice in the country, osteopathic medical schools existed in only eighteen states, and there were no major satellite campuses in existence in any state.

EXPANSION OF OSTEOPATHIC MEDICAL SCHOOL ENROLLMENT 2001–2015

In order to establish a new osteopathic medical school, the institution or organization planning to establish the school must be granted Pre-accreditation status by the AOA's Commission on Osteopathic College Accreditation (COCA), and it cannot begin to recruit and enroll students until it has received Provisional Accreditation. In order to obtain Pre-accreditation status, the institution must submit a feasibility study that demonstrates to COCA's satisfaction the viability of the new college. Most important, the institution must demonstrate that the college will have the financial resources needed to operate the school. To meet that requirement, the college must have access to the funds required to operate the school for at least four years, a reserve fund of at least \$12.5 million that is unencumbered and owned solely by the school, and an operating reserve fund equal to one-fourth of the unencumbered reserve fund. To obtain Provisional Accreditation, the college must also demonstrate that it has sufficient training opportunities available for students to complete the school's required clinical clerkships. Finally, the college must commit to becoming a member of an Osteopathic Postdoctoral Training Institution (OPTI) in order to facilitate the development, growth, and

maintenance of osteopathic graduate medical education opportunities for its graduates. If the college of medicine is to become a part of a university, the university must be approved to operate a medical school by the regional body approved by the federal Department of Education for that purpose. The new colleges of osteopathic medicine granted the required accreditation status by COCA after the turn of the century are described below.

As noted previously, the development of major satellite campuses by some of the new and existing medical schools has contributed to the increase that has occurred since the turn of the century in the total number of students enrolled in osteopathic medical schools. The major satellite campuses, designated either as a Branch Campus or an Additional Location, are able to enroll a large number of students and provide a full four-year curriculum. In order to develop a Branch Campus site, the school must demonstrate to COCA that it has the ability to offer a full, four-year educational program at the site. The school must appoint a chief academic officer to manage the program, and the program must have a separate budget. An osteopathic medical school may also seek approval from COCA to establish an Additional Location site where it will provide at least the first two years of its educational program, but the school is not required to establish a separate administrative structure or budget to manage the site.

The number of students that a school may enroll at a Branch Campus or Additional Location must be approved by COCA based on the resources available to support the educational program. The enrollment may be equal to the enrollment at the school's main campus. Because the Branch Campuses and Additional Locations that were approved by COCA since the turn of the century are important for fully appreciating the expansion of osteopathic medical education that has occurred during the period, the sites established by the osteopathic medical schools that existed before the turn of the century are also included in the section that follows. It should be

noted that several of the new schools established since 2001 have already developed new satellite campuses.

New Osteopathic Medical Schools

Edward Via College of Osteopathic Medicine

The Edward Via College of Osteopathic Medicine (VCOM) is located in Blacksburg, Virginia, a city located in the southwestern part of the state, with a population of approximately 45,000 people. In the late 1990s, officials at Virginia Tech University, a state-supported public university, and the leadership of the Harvey W. Peters Research Foundation, a private foundation established by Marion Bradley Via, conducted a study that documented the presence of an extreme shortage of healthcare providers in the southwest region of the state. As a result, the university began to explore the possibility of establishing a new allopathic medical school for the specific purpose of contributing to meet the state's need for primary care physicians who would serve the population of the southwest Virginia region. Because the state was not supportive of the effort at that time, Mrs. Via encouraged those involved in the planning process to consider the development of a private osteopathic medical school in the region. After she died, her son, Edward Via, worked with the Chairman of the Board of Virginia Tech to establish the school.

The college was founded in 2002 and enrolled a charter class of 162 students in 2003. Although VCOM is a private school, it is located in a new building on the campus of the Corporate Research Center of the Virginia Polytechnic Institute and State University (Virginia Tech University). VCOM has a collaborative agreement with the university that allows its students to take advantage of many of the student services available to the Virginia Tech students, and that provides certain support services to VCOM.

Since being established, the school has established four-year Branch Campus programs in Spartanburg, South Carolina, and Auburn, Alabama. In both cases, VCOM partnered with a local higher education institution to establish and develop the Branch Campus. The school has established multiple affiliations with hospitals in Virginia, North Carolina, and South Carolina to provide clinical education experiences for its students.

In 2013, VCOM announced plans to develop a clinical campus site in Abingdon, Virginia, in conjunction with Johnston Memorial Hospital (JMH), a local hospital that has agreed to begin to establish graduate medical education programs in the area. VCOM will base its academic and administrative support activities in the Abingdon Higher Education Center. The development of the clinical education campus is expected to lead to the development of educational programs in a number of other health professions disciplines and ultimately to the development of an academic health center in conjunction with JMH.

A.T. Still University School of Osteopathic Medicine in Arizona

A.T. Still University (ATSU) is located in Kirksville, Missouri, a city with a population of approximately 17,000 people located in the northwest part of the state. Kirksville is the site where the first osteopathic medical school was established by A.T. Still in 1892. The school in Kirksville has a long history of sending students to Phoenix, Arizona, for clinical education experiences in local hospitals, so it was not surprising when the university's leadership decided to expand its programs by establishing a presence in the greater Phoenix area.

The ATSU School of Osteopathic Medicine in Arizona (SOMA) was established in 2006 in Mesa, Arizona, a city with a population of almost one-half million people located within the greater Phoenix

metropolitan area. The school was established in the Arizona Health and Technology Park, property jointly owned by A.T. Still University and the Vanguard Health System. The ATSU had located the Arizona School of Health Sciences on the site in 1995, and the Arizona School of Dentistry and Oral Health in 2003. The medical school enrolled its charter class of 108 students in 2007.

The SOMA educational program is quite distinctive. Students are based at the SOMA campus in Mesa for the first year of the program, but are then assigned in groups of ten to one of eleven community campuses for the next three years. Thus, each of the community campus sites serves as the academic home for groups of 2nd, 3rd, and 4th year students. Ten of the community campuses are based in federally qualified Community Health Centers. The ten Community Health Centers that serve as community campus sites are distributed throughout the country, ranging as far east as New York City, and as far west as Hawaii. Providing adequate administrative support and academic oversight of the campus programs has proven to be a major challenge because of the wide geographic distribution of the sites. As a result of local factors, SOMA has discontinued sending students to one of the sites, and is contemplating whether to discontinue the use of a second site. Two new sites are under development in major metropolitan areas (Washington, D.C., and Chicago, Illinois).

Lincoln Memorial University DeBusk College of Osteopathic Medicine

Lincoln Memorial University (LMU) is located in Harrogate, Tennessee, a small town of approximately 5,000 people in northeast Tennessee near the state's border with Kentucky and Virginia. The university has an enrollment of approximately 1,850 undergraduate students and 1,500 graduate students. Although the university has no doctoral degree programs in the biological sciences, it does have a nursing school and a physical therapy program.

In 2004, Autry DeBusk, the chairman of the university's Board of Trustees who was at the time a member of the Medicare Payment Advisory Commission (MedPAC), initiated planning for the university to develop a medical school. After conducting a year-long feasibility analysis, a decision was made to proceed with the development of a new osteopathic medical school. The school was founded in 2006 and enrolled a charter class of 162 students in 2007. The school, which is located in a new building on the campus, provides administrative and academic support for clinical education sites located in seven neighboring states. The school is now accredited to enroll 243 students each year.

Touro College of Osteopathic Medicine – New York

The Touro College of Osteopathic Medicine – New York was founded in 2006 and enrolled a charter class of 135 students in 2007. The college is located in Harlem, New York, in a renovated building that served at one time as a department store. The college provides clinical education experiences for its students at sites in New York, New Jersey, and Pennsylvania. In 2014, the college opened a four-year program at an Additional Location site in Middletown, New York. The school is a member of the Touro College and University System, which also includes the Touro University College of Osteopathic Medicine – California and its branch campus in Nevada (Touro University Nevada College of Osteopathic Medicine).

Pacific Northwest University of Health Sciences College of Osteopathic Medicine

Pacific Northwest University of Health Sciences is a private, non-profit university in Yakima, Washington, a city with a population of approximately 95,000 people located in central Washington. The university was founded for the purpose of training health professionals

who would provide needed healthcare services to people living in the Pacific Northwest, particularly those living in underserved communities. The founding of the university was primarily the result of the work of several local individuals who believed that it was important to establish a new medical school in the Pacific Northwest. Their interest was supported by politicians in the area, as well as by various community organizations, including the state osteopathic association.

The College of Osteopathic Medicine, the first health sciences school established in the university, was founded in 2005 and enrolled a charter class of 75 students in 2008. The college was accredited in 2013 to increase its class size to 135 students. The university, which is located in a new building in Yakima, has plans to add additional health sciences programs in the future. The college currently provides clinical education experiences for its students in Washington, Alaska, Idaho, Montana, and Oregon. The university plans to establish additional programs in the future in a number of the health sciences (i.e., psychology, public health, physician assistant, and nursing).

Rocky Vista University College of Osteopathic Medicine

Rocky Vista University (RVU) is a private health sciences university in Parker, Colorado, a city of approximately 50,000 people located 19 miles southeast of Denver. The RVU College of Osteopathic Medicine (RVUCOM) is the first, for-profit medical school established in the United States in the modern era. Yife Tien, the former owner of the American University of the Caribbean (AUC), founded RVU after selling AUC and wishing to establish a for-profit medical school in the southwest region of the United States. He explored a number of options before settling on Parker. The RVUCOM was founded in 2006 and enrolled a charter class of 162 students in 2008. The university, which is located on the Parker campus in a new building that contains

a patient care clinic, plans to open additional health sciences programs in the future.

The COM has entered into a private/public partnership agreement with Southern Utah University to establish a satellite campus of the medical school on the university's campus. The campus is located in Cedar City, Utah, a city in southwest Utah half way between Las Vegas, Nevada, and Salt Lake City, Utah. The college has also partnered with Parkview Medical Center in Pueblo, Colorado, to establish a new internal medicine residency program funded by the Health Resources and Services Administration (HRSA).

William Carey University College of Osteopathic Medicine

William Carey University is located in Hattiesburg, Mississippi, a city of approximately 50,000 people located in the central region of the state. The university, which is operated by the Mississippi Baptist Convention, has an enrollment of approximately 3,600 students. The university has no doctoral programs in the biological sciences, but does have a nursing program and six master's degree programs. In 2007, the university's Board of Trustees authorized the university president to establish a medical school. The College of Osteopathic Medicine was founded in 2008 and enrolled its charter class of 108 students in 2010. The college, which is located in a new building on campus, provides clinical education experiences for its students in Florida, Alabama, Mississippi, Arkansas, and Louisiana.

Marian University College of Osteopathic Medicine

Marian University is a Catholic university located in Indianapolis, Indiana. The university is a liberal arts institution that has an enrollment

of approximately 2,700 students. The university has no doctoral programs in the biological sciences, but does have a nursing school. The university, which was a designated college until 2009, began a strategic expansion process in 2000.

The Indiana Osteopathic Association (IOA), which had been interested for years in the establishment of an osteopathic medical school in the state, issued an invitation to institutions across the state to submit a proposal for establishing a school. In January 2010, the IOA endorsed the proposal it had received from Marian University that indicated Marian's commitment to establishing an osteopathic medical school as a part of the university. At the same time, the university's Board of Trustees endorsed the proposal and charged the university leadership to proceed with the planning required to establish the new school.

The Marian University College of Osteopathic Medicine (MUCOM) was officially founded in 2010 and enrolled a charter class of 162 students in 2013. The MUCOM is the university's first doctoral level program and, together with the university's School of Nursing, will be housed together in a new 140,000 square foot building located on the university's main campus. The college has entered into affiliation agreements with several major health systems in the state, which will provide clinical education experiences for its students. The college has received generous financial support from a number of donors, as well as state funds to support student scholarships.

Alabama College of Osteopathic Medicine

The Alabama College of Osteopathic Medicine (ACOM) is in Dothan, Alabama, a city with a population of approximately 70,000 people located in the southeast region of the state. The college was founded in 2010 as a result of an agreement reached between the Alabama Medical Education Consortium (AMEC) and the Houston County Healthcare Authority.

The AMEC was established in 2005 to coordinate statewide planning activities for increasing the number of primary care physicians in the state, primarily by providing opportunities for third- and fourth-year medical students from schools around the country to take clinical rotations in the state. Eight osteopathic medical schools had a formal relationship with AMEC to provide support for the 15 core clinical education sites that had been established across the state to provide all the required clinical rotations.

The Houston County Healthcare Authority (HCHA) oversees the operation of the Southeast Alabama Medical Center, a 420-bed hospital in southeast Alabama that serves the surrounding tri-state region. The HCHA charged the medical center leadership to recruit a dean who could lead the development of a new medical school and established ACOM as a private, non-profit institution with a separate governing body. The ACOM serves as the academic division of HCHA, which also established a new foundation.

The college of medicine enrolled a charter class of 162 students in 2013. The school is located in a new 110,000 square foot building on a campus about one mile from the medical center. The college offers its students joint degree programs by partnering with Troy University (MBA) and West Florida University (MPH).

Campbell University Jerry M. Wallace School of Osteopathic Medicine

Campbell University is in Buies Creek, North Carolina, a community with a population of approximately 3,000 people located about 30 miles south of Raleigh, North Carolina, and 30 miles north of Fayetteville. The university has approximately 3,000 students enrolled on its main campus. In addition, there are approximately 1,800 students enrolled in professional and graduate degree programs.

The university already conducts physical therapy, physician assistant, and pharmacy programs, and intends to open a new nursing school. The university has no doctoral programs in the biological sciences. There are approximately 1,400 students enrolled on campuses in Raleigh, the Research Triangle, and several military bases. The medical school, which is housed in a new building, enrolled a charter class of 162 students in 2013.

Liberty University College of Osteopathic Medicine

Liberty University is in Lynchburg, Virginia, a city with a population of approximately 80,000 people located in the western region of the state. The university is the largest non-profit, private university in the country. There are approximately 12,000 students on campus and approximately 90,000 students who are enrolled in online courses. The university has a law school, a nursing school, and a number of master's degree programs, but no doctoral programs in the biological sciences. In 2010, the Board of Trustees passed a resolution that called for the university leadership to plan for the development of a new medical school. The school, which is housed in a new building, was founded in 2012 and enrolled a charter class of 162 students in 2014. The university intends to establish a Center for Medical and Health Sciences that will include a master's level nursing program and other health professions programs. The college is establishing clinical affiliations with a number of hospitals in the region.

New Branch Campuses

Touro University College of Osteopathic Medicine

Touro University College of Osteopathic Medicine – California was founded in 1977. The college established a Branch Campus outside Las Vegas, Nevada, in 2003. The Branch Campus was approved to admit a class of 125 students. The Branch Campus enrolled 135 students in 2014.

Lake Erie College of Osteopathic Medicine

The Lake Erie College of Osteopathic Medicine (LECOM) was established in Erie, Pennsylvania, a city with a population of approximately 100,000, in 1992. In 2003, the college established a Branch Campus in Bradenton, Florida, a city on Florida’s Gulf Coast. The Branch Campus enrolled a charter class of 150 students in 2004. In 2014, 198 first year students were enrolled at the Bradenton site.

Philadelphia College of Osteopathic Medicine

The Philadelphia College of Osteopathic Medicine (PCOM) is one of the original osteopathic medical schools, having been established in 1899. In 2004, the college established a Branch Campus in Suwanee, Georgia, a city of approximately 20,000 people located approximately 35 miles south of Atlanta. The Branch Campus enrolled a charter class of 86 students in 2005, and is now approved to admit over 140 students each year. In 2014, 144 first-year students enrolled at the site. The PCOM in Philadelphia is now approved to admit a class of 275 students.

Edward Via College of Osteopathic Medicine

In 2010, Edward Via College of Osteopathic Medicine (VCOM) established a Branch Campus in Spartanburg, South Carolina, through affiliation agreements with Spartanburg Regional Hospital and Wofford College. Spartanburg is a city with a population of approximately 40,000 people. The affiliation agreement with Wofford College allows VCOM students to take advantage of many of the services and facilities available to Wofford students. The college, which is housed in a new building, enrolled a charter class of 162 students on the Spartanburg campus in 2011. In the past few years, Clemson University has also become actively involved in programmatic activities conducted by VCOM at its Spartanburg campus.

In 2012, VCOM announced plans to establish a Branch Campus in Auburn, Alabama, a city with a population of approximately 60,000 people located in northern Alabama. The Branch Campus is located on the campus of the Auburn Research Park in conjunction with the Auburn Research and Technology Foundation. Auburn University approached VCOM to explore the possibility of establishing the campus after the state was not supportive of Auburn's interest in possibly establishing a new allopathic medical school. VCOM expects to enroll a class of 162 students in a new building on the Auburn campus site in fall 2015. Other universities in the area are also planning to collaborate with VCOM as the campus becomes operational.

New Additional Locations

Michigan State University College of Osteopathic Medicine

The Michigan State University College of Osteopathic Medicine was founded in 1969. The college is located on the campus of Michigan State University, which is located in East Lansing, Michigan, a city with a population of approximately 50,000 in the south central region of the state. In 2005, the college increased the size of its entering class in East Lansing from 147 to 205 students. In 2007, the college announced that it would establish two Additional Location sites in southeastern Michigan. One of the new sites is located at the Detroit Medical Center, and the other is on the campus of Macomb Community College. The college enrolled 50 students at each site in 2009.

Lake Erie College of Osteopathic Medicine

In 2009, Lake Erie College of Osteopathic Medicine (LECOM) established an Additional Location site at Seton Hill University in Greensburg, Pennsylvania. In 2014, 115 first year students enrolled at the site. LECOM in Pennsylvania is now approved to admit a class of 370 students.

Western University College of Osteopathic Medicine of the Pacific

The Western University College of Osteopathic Medicine, which is located in Pomona, California, was founded in 1977. In 2011, the college established an Additional Location site in Lebanon, Oregon, a city with a population of 20,000 people. In 2014, 111 first year

students enrolled at the Oregon site. The college now has a combined first-year enrollment of over 300 students.

Ohio University Heritage College of Osteopathic Medicine

The Ohio University Heritage College of Osteopathic Medicine, which was founded in 1975, is located on the campus of Ohio University in Athens, Ohio, a city with a population of approximately 25,000 in the southeast region of the state. The college currently enrolls an entering class of approximately 142 students. In 2012, the college announced that it planned to open an Additional Location for educating its students in Dublin, Ohio, a suburb of Columbus. In 2013, it announced plans to establish another Additional Location in the Cleveland metropolitan region. In 2014, 50 first-year students enrolled at the Dublin site. The college plans to enroll 32 students at the Cleveland site in 2015.

Touro College of Osteopathic Medicine

Touro College of Osteopathic Medicine – New York was established in 2006 and enrolled a charter class in 2007. In 2014, the college opened an Additional Location site in Middletown, New York. Middletown is located in the Hudson Valley approximately 65 miles northwest of Harlem. The college enrolled a class of 135 students at the Middletown site.

DISCUSSION

The eleven new osteopathic medical schools established since the turn of the century share certain characteristics. First, all of the schools are private institutions. Second, none of the schools exist as academic units within a comprehensive research university. Third, the majority of the schools enrolled a charter class of over 150 students, and all but one enrolled a charter class of more than 100 students. Fourth, each of the schools has a limited number of academic departments and a relatively small number of full-time faculty. Fifth, the schools were established with a commitment for increasing primary care physicians in the regions where they are located. Sixth, none of the schools has a major teaching hospital as a primary clinical affiliate for clerkship experiences for their students. Finally, the core clinical education experiences provided during the third and fourth years of each school's educational program are provided at multiple sites that are often located some distance from the medical school. The students' preceptors at the sites are practicing physicians, the majority of whom are allopathic physicians.

In contrast, ten of the fifteen new allopathic medical schools founded since 2003 were established by public universities; two of the schools were established by private universities, and three were established as freestanding 501(c)(3) corporations. Two of the three corporate entities have a working agreement in place with a public university. It is also noteworthy that six of the new schools were established in partnership with major health systems, and in four of those cases the name of the health system is part of the official name of the medical school. Another major difference between the new osteopathic and allopathic schools is the size of each of the schools' charter classes. In contrast to the experience with the osteopathic schools, only one of the new allopathic schools had a charter class of more than 65 students, and

none even had a projected class size of more than 125 students. Like the new osteopathic schools, the new allopathic schools have a limited number of departments and a relatively small number of full-time faculty. However, all of the schools have major affiliation agreements with hospitals located in the communities where the school is located to provide some clinical education experiences for their students.

Because the new osteopathic medical schools are still in various stages of development, it is not possible to predict the nature of the changes that may occur in the schools' organizational and administrative structures in the years ahead, as well as the scope of the academic programs associated with the schools. In order to gain some insight into what the future may hold, it is useful to examine the nature of the nineteen schools that existed before the turn of the century. Although there seems to be a general assumption within the academic community that osteopathic medical schools are freestanding, independent institutions, and that the scope of the educational programs provided by the schools is quite limited, the fact is that ten of the nineteen schools that existed at the beginning of the 21st century are academic units embedded within a comprehensive university or university system in a manner quite similar to that which exists for the majority of allopathic medical schools.

At the present time, three of the nineteen schools that existed prior to 2000 are academic units within major public universities (Michigan State University, Ohio University, and Rowan University); three are academic units within large private universities (Nova Southeastern University, New York Institute of Technology, and the University of New England); and one is an academic unit within a small private university (University of Pikeville). Two of the schools are core academic units within health sciences universities that exist within a major university system (University of North Texas Health Sciences Center and the Oklahoma State University Center for Health Sciences); and eight are core academic units within freestanding health sciences universities

(A.T. Still University, Midwestern University, Western University of Health Sciences, Lake Erie College of Osteopathic Medicine, Des Moines University, and Kansas City University of Medicine and Biosciences). One of the two remaining schools is an independent school within a large, nationally distributed higher education system (Touro College and University System), and one (West Virginia School of Osteopathic Medicine) is a freestanding public institution that falls under the governance of the state's Higher Education Commission. It is also interesting to note that two of the freestanding health sciences universities (A.T. Still University and Midwestern University) have campuses in two different states, and each campus has a separately accredited osteopathic medical school.

Given that almost all the osteopathic medical schools that had been established prior to the turn of the century exist within traditional academic environments, it is not surprising that the overwhelming majority of the schools provide opportunities for their students to participate in academic programs similar in nature to those provided by allopathic medical schools. For example, all but one of the schools offer opportunities for their students to enroll in joint degree programs, and the majority provide opportunities for students to pursue special scholarly tracks. As a general rule, the degree-granting programs with whom the medical schools partnered to offer a joint degree are based within the medical school's parent institution, but several of the schools offer a particular joint degree program by partnering with an academic unit in another university. In addition, some of the schools provide students opportunities to become involved in international studies experiences. It is also worth noting that because of the scope of the health professions programs that are offered by the schools' parent institutions, most of the medical schools are able to offer a variety of interprofessional educational programs. Thus, the educational opportunities that are available to students in established osteopathic medical schools are quite similar to those that exist within allopathic schools.

While the allopathic and osteopathic medical schools offer comparable educational program opportunities, it should be noted that there are substantial differences in how the schools provide clinical education experiences for their students. Most allopathic medical schools exist as a part of an academic medical center and continue to use major teaching hospitals as the primary sites for the majority of the clinical education experiences provided to their students (clerkships), and full-time clinical faculty are present in those settings. In contrast, only one of the osteopathic medical schools (LECOM) can be considered to be a member of an academic medical center by virtue of the fact that the school is a part of a major health system in northern Pennsylvania. Nonetheless, several additional osteopathic schools have a strong relationship with a major hospital or hospital system in the area where they are located. The environment of those sites is quite different from what exists at most major teaching hospitals that serve as primary clinical affiliates of allopathic medical schools.

Osteopathic medical schools generally provide their students clinical education experiences by assigning them to community hospitals, clinics, and physicians' offices, and they use practicing physicians as the students' preceptors. Because osteopathic medical schools largely depend on volunteer clinical faculty to provide instruction in those settings, the schools tend to have a large number of regional settings where clinical clerkships are provided. The relatively large number of osteopathic medical students enrolled in most of the schools, and the inability of most regional sites to accommodate a large number of students, has meant that some of the schools have had to develop clinical education sites some distance from the location of the medical school, often in distant states. It is important to note, however, that students enrolled in osteopathic medical schools are able to obtain experiences in major teaching hospitals by pursuing elective experiences in those institutions.

The distributed model for clinical education utilized by osteopathic medical schools creates several very real challenges for the schools. Most important is their ability to provide appropriate oversight of the student experiences while maintaining productive relationships with the participating hospitals, ambulatory care settings, and the volunteer faculty. In recent years, schools have also begun to experience competition for clinical teaching sites because of the increase in the number of osteopathic medical schools, the growing number of allopathic schools employing a distributed model for some of their students, and efforts by Caribbean schools to place their students in settings on the mainland.

While the lack of a traditional academic medical center environment has been viewed by many over the years as a major shortcoming of the educational experiences provided by osteopathic medical schools, there are valid reasons for questioning this criticism. Serious questions have been raised in recent years about the quality of the educational experiences that allopathic medical schools provide their students by assigning them to clerkship rotations on the inpatient services of major teaching hospitals. The concerns that have been raised about those experiences relate to the changes that have occurred in the inpatient environment of major teaching hospitals during the past decade.

Because of hospital efforts to shorten the length of stay for patients admitted for care, and to shift the care of patients with well-defined conditions from the inpatient to outpatient environment, medical students assigned to inpatient services in large teaching hospitals have limited contact with patients who have clinical conditions most relevant to the stage of their educational development. In addition, as the clinical faculty providing care in major teaching hospitals have become increasingly dependent on meeting clinical productivity measures, their commitment to spending focused time with students has become progressively limited. As a result, there is a growing tendency within allopathic medical schools to limit

clerkship experiences in major teaching hospitals in order to provide experiences in hospitals located on regional clinical campuses or in ambulatory care-based settings.

Finally, there are clear differences that exist within the academic environments of allopathic and osteopathic medical schools that relate to the scope of the schools' research endeavors and their clinical care programs. The academic community within osteopathic medicine has acknowledged that for the most part their schools lack a rich research environment, and it is particularly relevant that there is limited research being conducted to examine in depth the effectiveness of osteopathic manipulation. A focused research center has been established at one of the schools to address this situation, but to date it has not produced meaningful information. Given the challenges that exist in the current academic research environment, it would be extremely difficult for any of the schools to develop a robust biomedical research environment similar to those that exist in a number of allopathic medical schools.

As noted previously, only a few of the osteopathic medical schools have a relationship with a major teaching hospital similar to the usual relationship that exists between an allopathic medical school and a teaching hospital. Thus the scope of the clinical care services provided by the full-time clinical faculty of osteopathic medical schools is quite limited in comparison with those provided by the full-time clinical faculty of allopathic medical schools. It should be noted, however, that a number of the osteopathic medical schools that existed prior to the onset of the 21st century do have extensive clinical program activities in ambulatory care centers either owned by, or under contract with, the school's parent institution.

CONCLUSION

The increase that has occurred during the past fifteen years in the number of osteopathic medical schools in the country is truly remarkable. The number of schools has increased from 19 to 30. As a result of the development of the new schools and new major satellite campuses, the number of students enrolled in osteopathic medical schools has increased by approximately 140%. Because of the increase that has occurred in the number of students graduating from osteopathic medical schools, the number of osteopathic physicians in the country will exceed 80,000 by the end of the decade, more than twice the number that existed in 2000.

Given that nine new osteopathic medical schools were established during the period beginning in 1990 and ending in 2005, a time when it was generally believed that the country was going to face a major oversupply of physicians in the years ahead, it is clear that the development of new osteopathic medical schools was not a direct response to concerns that the country was going to face a shortage of physicians. This stands in marked contrast to the development of the new allopathic medical schools that have been established in recent years. In fact, the development of new allopathic medical schools really didn't begin until 2006 when the Association of American Medical Colleges (AAMC) issued a policy statement indicating that the country was likely to experience a major shortage of physicians in the years ahead, calling on its member schools (allopathic medical

schools) to assist in the effort needed to increase physician supply by increasing enrollment by 30%, and also acknowledging that new schools might need to be developed to meet the projected target. In response, many allopathic medical schools did begin to increase their enrollments, and new allopathic medical schools began to be established. Based on the differences in the timeframe within which the new osteopathic and allopathic medical schools began to be established, it is clear that the reasons for the development of the new osteopathic and new allopathic schools were quite different.

In reality and to a great extent, the development of the new osteopathic medical schools has been due to the desire of individual members of the osteopathic medicine profession, as well as the osteopathic medicine community at large, to increase the presence of osteopathic medicine within the country as a way of increasing the public's recognition that osteopathic medicine is a profession fully comparable to allopathic medicine. Accomplishing this goal is entirely consistent with the osteopathic medicine community's efforts that have been underway in the country for over 100 years.

The evolution of the osteopathic medicine profession over the years has received little attention from the mainstream. This is perhaps best illustrated by the fact that four major scholarly books published during the last three decades of the 20th century, which describe in great detail how the medical profession, the medical education system, and the healthcare system in the United States have transformed during the 20th century, provide no substantive information about the major changes that were occurring in osteopathic medicine in this country at the same time.

It is not surprising, therefore, that current members of the osteopathic medicine community would be committed to establishing a greater appreciation of osteopathic medicine within both the medical profession and the general public. The development of the new osteopathic medical school in Indiana is perhaps the clearest

example of this. The founding of the school was the direct result of an initiative undertaken by the state's osteopathic medicine association to establish an osteopathic medical school in a state that has one of the largest and most geographically distributed allopathic medical schools in the country. In other states, the development of a new osteopathic medical school was very much influenced by the willingness of individuals related in some way to the osteopathic medicine community to use their influence to convince the leaders of local institutions to establish an osteopathic medical school.

The nature of the institutions willing to participate in efforts to establish a new osteopathic medical school or a major satellite campus of an existing school suggests the growing acceptance by the general public and within the academic medicine community of the comparability of the osteopathic and allopathic medicine professions. For example, five of the eleven osteopathic medical schools founded since 2001 were established by private universities, and one was established by a major private university system. In addition, one of the new medical schools was established by a local county health authority, and another was established by creating a partnership agreement with a major public university. Finally, it is important to note that several of the new major satellite campuses (Branch Campuses and Additional Locations) were established as a result of a partnership agreement between an osteopathic medical school and a university, and several others were the result of partnerships with major hospitals or health systems located in the communities where the educational programs were to be established.

The arrangements noted above indicate clearly that many community leaders now recognize that the presence of an osteopathic medical school can be an important community asset. It is already clear that there will be additional osteopathic medical schools established during the current decade. The total number of students enrolled in osteopathic schools will continue to increase at a rapid rate, not only

because of the development of more new schools, but also because of the development of new satellite campuses by existing schools.

In looking to the future, it is worth noting that the continued growth in the number of students enrolled in, and graduating from, osteopathic medical schools will contribute to the further integration of the allopathic and osteopathic medicine professions. Because it will not be possible, under any conceivable set of circumstances, for the number of osteopathic medicine residency programs, and the number of positions available in the programs, to increase to any significant degree, there will be limited opportunities for the growing number of osteopathic medical school graduates to obtain residency training in osteopathic residency programs. The increase in enrollment will therefore result in an ever increasing percentage of osteopathic medical school graduates completing their professional training in allopathic graduate medical education programs.

It is important to recognize, however, that the majority of osteopathic medical school graduates already choose to train in allopathic medicine programs, and this occurs despite the fact that there are positions available in osteopathic medicine residency programs that do not fill each year. It is clear, therefore, that a larger percentage of osteopathic medical school graduates will receive their specialty training in allopathic programs that do not provide training in osteopathic manipulative treatment. Given that, it will be increasingly difficult for members of the osteopathic medicine community to make the argument that osteopathic physicians practice a distinctive form of medicine based on the utilization of osteopathic manual manipulation techniques. In that regard, it is important to note that the leadership of the two professions have agreed that allopathic and osteopathic residency programs in individual specialties will at some point in the future have to meet an identical set of standards in order to be accredited. Given the circumstances that led to the agreement, it seems likely that some of the existing osteopathic residency programs

may not be able to meet the standards to be established by the Accreditation Council for Graduate Medical Education (ACGME), the body that is currently responsible for the accreditation of allopathic training programs. The commitment to develop the single accreditation system further reinforces the belief that the osteopathic and allopathic medicine professions should not be viewed as being different when it comes to providing patient care.

The development of a common set of accreditation standards for allopathic and osteopathic residency programs raises legitimate concerns about the future of the different approaches now in place for the accreditation of the educational programs conducted by allopathic and osteopathic medical schools. In that regard, it is interesting to note that one of the issues that was raised during the 1996 Macy Foundation conference *Current Challenges to M.D.s and D.O.s* focused on the existence of separate accreditation systems. Indeed, one of the recommendations adopted by the conference participants was that the two professions (sic) invite representatives from the other profession to participate on their accreditation review committees and on site visits to medical schools and residency programs. Unfortunately, the professional organizations that were responsible for the accreditation process of allopathic and osteopathic programs (i.e., the AMA, the AAMC, and the AOA) were never able to reach an agreement on how that could be accomplished. As a result, there has been no progress during the past twenty years on establishing a common approach for accrediting the educational programs of allopathic and osteopathic medical schools, despite the fact that the schools are producing graduates that are equally well prepared to enter graduate medical education programs.

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NEW OSTEOPATHIC MEDICAL SCHOOLS FOUNDED AFTER THE TURN OF THE 21ST CENTURY

Medical School	Governance	Location
Edward Via COM	Private Corporation	Blacksburg, VA
A.T. Still SOMA	A.T. Still U **	Mesa, AZ
DeBusk COM	Lincoln Memorial University	Harrogate, TN
Touro U COM - NY	Touro U System	New York, NY
Rocky Vista U COM	Rocky Vista University ** For Profit University	Parker, CO
Pacific NW U COM	Pacific Northwest University **	Yakima, WA
William Carey U COM	William Carey University	Hattiesburg, MS
Marian U COM	Marian University	Indianapolis, IN
Alabama COM	Private Corporation	Dothan, AL
Jerry M. Wallace COM	Campbell University	Buies Creek, NC
Liberty U COM	Liberty University	Lynchburg, VA

Note: The three universities noted above (**) are health sciences universities that provide an academic home for the college of medicine. The other five universities listed above are traditional liberal arts universities that decided to establish a college of medicine as a part of the university.

Year Founded	Charter Class	Students Enrolled
2001	2003	150
2005	2007	100
2005	2007	150
2005	2007	125
2006	2008	162
2007	2008	70
2009	2010	108
2011	2013	162
2011	2013	162
2011	2013	162
2013	2014	162

NEW BRANCH CAMPUSES

Medical School	Branch Location	Year Established	Charter Class	Students Enrolled
Touro U COM - CA	Henderson, NV	2003	2004	125
Lake Erie COM	Bradenton, FL	2003	2004	150
Philadelphia COM	Suwanee, GA	2004	2005	86
Edward Via COM	Spartanburg, SC	2010	2011	162
	Auburn, AL	2012	2015	162

NEW ADDITIONAL LOCATIONS

Medical School	Additional Location Site	Year Established	Charter Class	Students Enrolled
Michigan State U COM	Macomb, MI	2009	2009	50
	Detroit, MI	2009	2009	50
Lake Erie COM	Greensburg, PA	2009	2009	115
Western U COM	Lebanon, OR	2011	2014	111
Ohio U COM	Dublin, OH	2012	2014	50
	Cleveland, OH	2013	2015	32
Touro U COM - NY	Middletown, NY	2013	2014	135

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