



Breaking Down the Choice Between D.O. & M.D. Paths

Jonathan Bruner, D.O.
Curriculum Developer - Level 1,
Kaplan Medical



Breaking Down the Choice Between D.O. & M.D. Paths

Introduction

Medical Doctor (M.D.) and Doctor of Osteopathic Medicine (D.O.) are the two types of fully licensed physicians in the United States. The two types have many similarities, and some differences, that make each path unique; however, both paths will ultimately prepare students with the necessary tools to provide the best possible care for their patients. This white paper will compare and contrast the D.O. and M.D. paths to help educators and advisors provide students with the information they need to decide which path is best for them.

Origins

The M.D. profession can trace its roots back to a German doctor, Christian Friedrich Samuel Hahnemann. He is thought to have coined the term “allopathy” in the early 19th century. The word “allopathy” distinguished this branch of medicine from alternative medicine or homeopathy. Since then, “allopathy” has come to be known as the, “treatment of disease by remedies that produce effects opposite to the symptoms” (American University of Antigua College of Medicine, 2021).

The D.O. profession had its first College of Osteopathic Medicine established in Kirksville, Missouri in 1892 by A.T. Still, M.D., D.O. He established the college because, as Dr. Greg Hansen, D.O. writes in the Journal of Osteopathic Medicine, “existing medicine approaches treated symptoms, not causes, lacked efficacy, and were morally corrupt” (Hansen, 2006). Dr. Still was a M.D. who felt that patients should be treated like people and not like a disease. He believed that the structure of the body was intimately related to its function and that an approach that took into account the entire patient was the best way to practice.



Medical School

Each path maintains its own medical schools and accreditation process. Both M.D. and D.O. medical schools are four years in length. Usually, the first two years are spent in the classroom (although some curriculums are making this shorter) and the last two years students train at different rotations in the clinical setting. The classroom work with each path involves learning very similar basic and clinical sciences. In some instances where there are both types of schools on one campus, the two will be enrolled in the same classes.

D.O. students will receive additional training in osteopathic philosophy which will include at minimum 200 hours of learning hands-on palpatory techniques and treatments for musculoskeletal related issues. Many D.O. schools also offer an “Osteopathic Undergraduate Fellowship” that is an additional year of training between the second and third years to further enhance their osteopathic education. Following the classroom training, D.O. rotations tend to take place in more of a community setting and M.D. rotations tend to take place at larger, tertiary care facilities.

Residency

Over the last couple of years, the American College of Graduate Medical Education (ACGME) finalized the process for merging the residency training for M.D.’s and D.O.’s into one system. Prior to this, there were two systems in place: the ACGME and the American College of Osteopathic Graduate Medical Education (ACGOME). Since the foundational training in both systems was similar, it was very common for a D.O. student to train in a M.D. residency program. This became so prevalent, that continuing to have two systems did not make much sense.

In order to maintain an osteopathic identity, residency programs in ACGME now have the ability to obtain “Osteopathic Recognition” that integrates the osteopathic philosophy into the program and provides their residents with continued osteopathic education at the Graduate Medical Education (GME) level. So now, US medical residency programs are open to graduates of both D.O. and M.D. medical schools. Training lasts anywhere from three to five years depending on the field. Non-surgical fields tend to be three years, while surgical fields tend to be five. Most programs have integrated the first year internship into the program.



2021 matching statistics for the National Resident Matching Program, according to the American Medical Association, included:

- 92.8% of US M.D. Seniors Matched
- 89.1% of US D.O. Seniors Matched

Due to the merger, this was the largest Match in history with over 38,000 positions being offered from almost 6,000 different residency programs.

Board Examinations - Overview

Board examinations differ for D.O. and M.D. students. United States osteopathic students must pass the Comprehensive Osteopathic Medical Licensing Examination (COMLEX-USA) to graduate from medical school. According to the COMLEX-USA webpage, the COMLEX-USA is “a three-level, national standardized licensure examination designed for licensure for the practice of osteopathic medicine. The COMLEX-USA Examination Series is designed to assess osteopathic medical knowledge, knowledge fluency, clinical skills, and other competencies essential for practice as an osteopathic generalist physician. It is also a graduation requirement for attaining a DO (Doctor of Osteopathic Medicine) degree from colleges of osteopathic medicine in the United States, and for entry into and promotion within graduate medical education (residency) training programs.”

M.D. students, by contrast, take the United States Medical Licensing Examination or USMLE. According to the USMLE website, the USMLE “is a three-step examination for medical licensure in the U.S. The USMLE assesses a physician's ability to apply knowledge, concepts, and principles, and to demonstrate fundamental patient-centered skills that are important in health and disease and that constitute the basis of safe and effective patient care.”

There is a belief by some osteopathic students that to remain competitive with certain residency programs, they should take the USMLE exams in addition to the required COMLEX-USA exams. This idea is addressed in a NBOME blog from 2020 that states, “The ACGME does not require one licensing exam over another—passing either COMLEX-USA or USMLE meets that requirement,” (NBOME, 2020).

Board Examinations - Comparison

In 2019, Molly Johannessen, PhD, hosted a webinar for Kaplan Medical discussing the similarities and differences between COMLEX-USA and USMLE, focusing on the parallels between COMLEX-USA Level 1 and USMLE Step 1 (Kaplan, 2019). Both of the exams are for future physicians



that demonstrate competency in subject matter before moving onto the next level. They are both taken after students learn a large amount of foundational biomedical science knowledge and have an emphasis on clinical presentations, foundational biomedical sciences, body-system basis, and the application of medical competencies. Lastly, both COMLEX-USA and USMLE are a series of three exams that are similar in structure and length. The COMLEX-USA exams are called Levels, while the USMLE exams are a series of Steps.

Some of the differences between Level 1 and Step 1 include the specific definition of competencies, definitions of normal versus abnormal processes, and coding of scores. The biggest difference between the two exams is that COMLEX-USA is the integration of osteopathic philosophy into the exam.

She recommends that D.O. students seeking to place in the NRMP take both COMLEX-USA and USMLE, but notes that not all D.O. students need to take USMLE exams. She also notes that it's important to understand what the focus of each exam is and how to prepare for each exam differently.

Board Examinations - Challenges

Having two different board examination paths to becoming a physician poses some challenges. In mid-2020, the Coalition for Physician Accountability created a new committee called the Undergraduate Medical Education (UME) to Graduate Medical Education (GME) Review Committee, or UGRC for short. The Coalition for Physician Accountability charged the committee with identifying solutions to challenges observed in the transition from UME to GME (Coalition for Physician Accountability, 2021). "The transition from medical school to residency has been identified as an area of medical education and training that is ripe for improvement," writes the Coalition for Physician Accountability (2021) on their website. Among the challenges in the transition from UME to GME cited by the Coalition for Physician Accountability is, "unacceptable levels of stress on learners and program directors throughout the entire process," as well as overreliance on licensing examination scores, inequities in the system related to specific types of applicants, and lack of transparency to students about the way that residency selection actually works (Undergraduate Medical Education to Graduate Medical Education Review Committee, 2021).

In light of these and other challenges that are, "causing severe strain on the entire system" (Undergraduate Medical Education to Graduate Medical Education Review Committee, 2021), the UGRC recently published a series of 42 recommendations that could potentially make the entire



medical education process easier (National Board of Medical Examiners, 2021) by streamlining and even unifying certain aspects of D.O. and M.D. training. One of those key recommendations was that residency programs start evaluating and accepting students that take either COMLEX-USA or USMLE. The committee proposed that COMLEX-USA and USMLE be reported within the Electronic Residency Application System (ERAS) within a single field.

As the UGRC writes in Recommendation 24, osteopathic students make up 25% of the medical students in U.S. medical schools and although they are required to take the COMLEX-USA exam series, they often take the USMLE as well. The reason for this is that some residency programs require a USMLE score, rather than COMLEX-USA. As the UGCR states, “This creates substantial increase in cost, time, and stress for osteopathic students who believe duplicate testing is necessary to be competitive in the Match,” (Undergraduate Medical Education to Graduate Medical Education Review Committee, 2021). In Recommendation 24, the UGRC also proposes that “a combined field should be created in ERAS which normalizes the scores between the two exams and allows programs to filter based only on the single normalized score.” By normalizing licensing exam scores between the USMLE and COMLEX-USA, the UGRC writes, structural bias will decrease, as will financial stress for applicants—particularly D.O. students who must dedicate time, attention, and money to taking both the USMLE and COMLEX-USA.

Board Examinations - Recent Changes

In 2019, when the USMLE Invitational Conference on USMLE Scoring (InCUS) recommended tasking the Coalition for Physician Accountability with reforming the match process, they also made other recommendations. Among the InCUS recommendations was to make Step 1 of the USMLE Pass-Fail rather than numerically scored (Cimino, 2021). Similarly, in December 2020, the NBOME announced that the COMLEX-USA Level 1 test, equivalent to the USMLE Step 1 test, will also be graded as Pass/Fail, rather than scored numerically (National Board of Osteopathic Medical Examiners, 2020). Without a numerical score, residency applicants’ qualifications, as well as “competencies and unique characteristics” (Murphy, March 2020) will have to be measured in other ways. One very likely way will be that residency programs will shift uniformly to looking at Step 2 CK (for USMLE) and Level 2 CE (for COMLEX-USA) scores.

Board Examinations - Merger?

A USMLE and COMLEX-USA merger seems unlikely for the same reason that osteopathy was established as separate in the first place. While merging the two exams could make the process of matching easier,



it has the potential to further remove what makes osteopathy distinct. For the tests to merge, the entire premise of separate D.O. schools and their accreditation process and organization would likely need to change.

Which Path is Best for Students?

There are many reasons students choose one path or the other. These reasons involve factors such as the individual preferences of the student, their core beliefs regarding medical care, and/or previous experiences with the medical field. One reason students may opt to pursue one degree or the other is because of a prior exposure to medicine. Students that grew up under the care of a M.D. or D.O., or have physician family members, will be more familiar with one of the approaches and therefore may have a preference for it. Another aspect that could lead someone to choose osteopathic medicine is the focus toward facilitating the body to heal itself (Murphy, October 2020). One way this is accomplished is through additional education in osteopathic manipulative medicine (OMM) (American Osteopathic Association, n.d.).

OMM involves a physician's hands-on approach to improving the patient's musculoskeletal system (Moon, 2019). For example, if a patient presents with sinus congestion, a D.O. might additionally use an osteopathic manipulative treatment to promote the drainage of mucus out of the sinus passages. Additionally, osteopathic medical schools pride themselves on their holistic methods of treating patients, a reduced focus on medications (ATSU Museum of Osteopathic Medicine, n.d.), a significant focus on musculoskeletal training, and an emphasis on patient-centered care (American Association of Colleges of Osteopathic Medicine, n.d.).

An additional deciding factor can be test scores and grades. Traditionally, D.O. medical schools place an emphasis more on students that are interested in the primary care field and that have had previous life experiences. This leads D.O. schools to higher average ages of students and average MCAT scores and GPAs that are slightly lower than M.D. schools. While the hope is the student is choosing the path that most aligns with their beliefs, some students will take whichever path that accepts them. Both medical schools will attempt to avoid this through the interview process.

Conclusion

While D.O.'s were established as a medical discipline separate from M.D.'s originally, over the years the two have overlapped in many ways. The successful merging of the D.O. and M.D. Match suggests the two groups are working together now more than ever allowing for similar preparedness for student



success. This ensures the best choice for a student is to learn what makes each field unique and proceed down the path that most aligns with their beliefs. No matter which path a student chooses, the future of the US medical system is in great hands with having both D.O. and M.D. approaches and a willingness for collaboration.

References

- Altus, A. (2018). What the final AOA Match means for DO. *The DO*. Available at <https://thedo.osteopathic.org/2018/12/what-the-final-aoa-match-means-for-do-students/>
- American Medical Association (2021). 2021 Match hits record highs despite pandemic's disruptions. *AMA*. Available at <https://www.ama-assn.org/residents-students/match/2021-match-hits-record-highs-despite-pandemic-s-disruptions>
- American Association of Colleges of Osteopathic Medicine (n.d.). A Brief History of Osteopathic Medicine. Available at <https://www.aacom.org/become-a-doctor/about-osteopathic-medicine/history-of-osteopathic-medicine>
- American Board of Medical Specialties (2021). ABMS Board Eligibility. *American Board of Medical Specialties*. Available at <https://www.abms.org/board-certification/board-certification-requirements/board-eligibility/>
- American Osteopathic Association (n.d.). OMT: Osteopathic Manipulative Treatment. Available at <https://osteopathic.org/what-is-osteopathic-medicine/osteopathic-manipulative-treatment/>
- American University of Antigua College of Medicine (2021). Allopathic Medicine. Available at <https://www.auamed.org/blog/what-does-allopathic-medicine-mean/>
- ATSU Museum of Osteopathic Medicine (n.d.). A.T. Still Biography. Available at <https://www.atsu.edu/museum-of-osteopathic-medicine/museum-at-still>
- Cimino, C. (2021). Why you should care about the CPA UGRC report. *Kaplan*. Available at <https://www.kaptest.com/blogs/med-educators/post/why-you-should-care-about-the-cpa-ugrc-report>
- Coalition for Physician Accountability (2021). UME-GME. *Coalition for Physician Accountability*. Available at <https://physicianaccountability.org/ume-gme/>
- Undergraduate Medical Education to Graduate Medical Education Review Committee (2021). *Coalition for Physician Accountability*. Accessible at <https://physicianaccountability.org/wp-content/uploads/2021/04/UGRC-Initial-Summary-Report-and-Preliminary-Recommendations-1.pdf>
- Hajar, R. (2015). History of Medicine Timeline. *Heart Views*, 16(1):43-45. <https://doi.org/10.4103/1995-705x.153008>
- Hansen, G.P. (2006). Beyond OMT: Time for a New Chapter in Osteopathic Medicine? *Journal of Osteopathic Medicine*, 106(3), 110-116. https://doi.org/10.7556/jom_2006_03.0005
- Holland, TM. (2017). DO vs. MD: What's the difference? *UCLA Geffen School of Medicine*. Available at <https://medschool.ucla.edu/body.cfm?id=1158&action=detail&ref=1019>
- Kaplan. (2019). Webinar in Review: Level 1 vs. Step 1 Prep for Success. *Kaplan*. Available at <https://www.kaptest.com/blogs/med-educators/post/step-1-vs-level-1-webinar-review>
- Match a Resident (2019). 5 W's of the ACGME Merger (MD/DO Merger). *Match a Resident*. Available at <https://blog.matchareresident.com/5-ws-of-the-acgme-merger-mddo-merger/>
- Moon, K. (2019). Which is the best path to medicine: MD vs DO. *Forbes*. Available at <https://www.forbes.com/sites/kristenmoon/2019/01/30/which-is-the-best-path-to-medicine-md-vs-do/?sh=4a008a6f6866>
- Moon, K. (2021). The Real Reason Why It's Harder Than Ever To Get Into Medical School — And What Aspiring Physicians Can Do To Improve Their Chances. *Forbes*. Available at <https://www.forbes.com/sites/kristenmoon/2021/06/17/the-real-reason-why-its-harder-than-ever-to-get-into-medical-school--and-what-aspiring-physicians-can-do-to-improve-their-chances/>
- Murphy, B. (2020, Mar 13). USMLE Step 1 moves to pass-fail: Answers to 7 key questions. *American Medical Association*. Available at <https://www.ama-assn.org/residents-students/usMLE/usMLE-step-1-moves-pass-fail-answers-7-key-questions>

- Murphy, B. (2020, Oct 6). DO vs. MD: How much does the medical school degree type matter? *American Medical Association*. Available at <https://www.ama-assn.org/residents-students/preparing-medical-school/do-vs-md-how-much-does-medical-school-degree-type>
- National Board of Osteopathic Medical Examiners. (2018). American Medical Association Officially Recognizes COMLEX-USA's Equality with USMLE. *National Board of Osteopathic Medical Examiners*. Available at <https://www.nbome.org/news/american-medical-association-officially-recognizes-comlex-usas-equality-with-usml-e/>
- National Board of Medical Examiners (2020). COMLEX-USA Level 1 to eliminate numeric scores. *National Board of Medical Examiners*. Available at <https://www.nbome.org/news/comlex-usa-level-1-to-eliminate-numeric-scores/>
- National Board of Osteopathic Medical Examiners (2021). COMLEX-USA. *National Board of Osteopathic Medical Examiners*. Available at <https://www.nbome.org/assessments/comlex-usa/>
- National Board of Osteopathic Medical Examiners (2021). COMLEX-USA. *National Board of Osteopathic Medical Examiners*. Available at <https://www.nbome.org/assessments/comlex-usa/>
- National Board of Medical Examiners (2021). Homepage. *National Board of Osteopathic Medical Examiners*. Available at <https://www.usmle.org/>
- National Board of Medical Examiners (2021). Preliminary Recommendations of the Undergraduate Medical Education to Graduate Medical Education Review Committee (UGRC) Released. *National Board of Medical Examiners*. <https://www.nbme.org/news/preliminary-recommendations-undergraduate-medical-education-graduate-medical-education-review>
- National Board of Medical Examiners (2021). Road to DO Licensure. *National Board of Osteopathic Medical Examiners*. Available at <https://www.nbome.org/blogs/road-to-do-licensure/myths-and-misconceptions-match-2020/>
- National Resident Matching Program (2018). Charting outcomes in the Match: Senior Students of U.S. Osteopathic Medical Schools. Available at <https://www.nrmp.org/wp-content/uploads/2018/06/Charting-Outcomes-in-the-Match-2018-Osteo.pdf>
- The DO. (2017). 7 of the top 10 least expensive private medical schools are DO schools. *American Osteopathic Association*. Available at <https://www.ama-assn.org/residents-students/preparing-medical-school/do-vs-md-how-much-does-medical-school-degree-type>
- The DO. (2021). NRMP Match results in 6,597 new DO residents. *The DO*. Available at <https://thedo.osteopathic.org/2021/03/nrmp-match-results-in-6597-new-do-residents/>
- Wildermuth, E. (2019). Understanding the Merge: Institutionalizing Differentiation in Health Care. *Doximity*. <https://opmed.doximity.com/articles/understanding-the-merge-institutionalizing-differentiation-in-health-care>