The Osteopathic Emergency Medicine Applying Guide

Liza Smith MD, Zach Jarou MD, Lucienne Lutfy-Clayton MD, Emily Hillman MD, Elizabeth Karr, DO, Ross Christensen, Adam Kellogg MD, and Megan Stobart-Gallagher, DO
This applying guide is intended for the osteopathic medical student seeking to pursue a successful match in the ACGME system.

Background & Overview:
Historically, there have been two paths for the osteopathic student (DO) pursuing Emergency Medicine (EM)—applying to osteopathic-affiliated residency programs under the American Osteopathic Association (AOA) match or to allopathic residency programs under the Accreditation Council for Graduate Medical Education (ACGME) match, otherwise known as the National Resident Matching Program (NRMP).

In February 2014, the ACGME, AOA, and American Association of Colleges of Osteopathic Medicine (AACOM) announced a path towards formation of a single graduate medical education accreditation system. Under this plan, AOA-approved programs can apply for ACGME accreditation by June 2020, when the AOA will cease all primary accreditation activities and all EM training programs will be under the ACGME umbrella.

Starting with 2017-2018 match season, many osteopathic programs will have already converted to their initial ACGME accreditation. Many of these “traditional” AOA-approved programs will also be pursuing an additional “Osteopathic Recognition” in which programs plan to pursue an osteopathic-focused learning environment. This may include, but not be limited to, integrated Osteopathic Principles into clinical rounds, dedicated Osteopathic Manipulation conference, and dedicated rotations focusing on core Osteopathic principles. Allopathic graduates will be accepted into these programs, but there will be some pre-matriculation requirements, yet to be determined. More information regarding “Osteopathic Recognition” and its requirements for programs can be found on the ACGME website.

Why have osteopathic students historically wanted to apply to allopathic (ACGME) programs?

The reasons often given by rotating students and residents who went to osteopathic schools:

- The opportunity to train in larger medical centers
- Option for three-year training programs
- Academic affiliations of the training programs
- Larger sized programs and the stability that comes with them
- Greater perceived opportunities for fellowships
- More programs to choose from
- Avoid uncertainty with the current transition to ACGME accreditation for AOA programs
• Ability to obtain EM board certification with either ABEM or AOBEM

What are your chances?

In the 2016 match, of the 290 osteopathic students who applied to emergency medicine, only 76% of those matched.\(^1\) Approximately 12% of ACGME EM slots go to osteopathic students (Table 1).\(^2\) The osteopathic applicant will need to be smart about his or her application.

Table 1.\(^2\)

<table>
<thead>
<tr>
<th>Specialty</th>
<th>Number of Positions</th>
<th>Number Filled</th>
<th>U.S. Senior</th>
<th>U.S. Grad</th>
<th>Osteo</th>
<th>Canadian</th>
<th>5th Pathway</th>
<th>U.S. IMG</th>
<th>Non-U.S. IMG</th>
<th>Number Unfilled</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emergency Medicine</td>
<td>1,895</td>
<td>1,894</td>
<td>1,486</td>
<td>73</td>
<td>224</td>
<td>1</td>
<td>0</td>
<td>87</td>
<td>23</td>
<td>1</td>
</tr>
</tbody>
</table>

Despite the competitive nature of applying to ACGME residency programs as an osteopathic medical student, the number of osteopathic graduates matching in emergency medicine through the NRMP Match has been very stable over time (Figure 1).\(^2\)

Figure 1.\(^2\)
What are the obstacles in applying?

To ensure your ability to match, it is imperative to have a strong application. A big obstacle to an osteopathic student’s application to the ACGME system is perceived competitiveness. The issue of bias against DO students in the selection process is very real. In the 2016 NRMP PD survey, only 81% of traditionally allopathic programs will typically interview and rank DO students, narrowing the number of programs available to apply to overall (Figure 2). There is no ‘official list’ of programs who are or are not welcoming of DO applicants, so it will take some legwork in order to best create your application list (see below for more information).

Figure 2.

A successful match will require planning in order to have taken the USMLE (should you choose to do so) and have two EM rotations scheduled early in the fourth year, preferably before October. SLOEs should submitted to ERAS as early as possible. It will require some research to make sure the programs you apply to are open to interviewing and matching osteopathic applicants.

Maximizing Your Application

To even the playing field, you need to make yourself as competitive as possible to allow programs to compare you apples-to-apples with your allopathic peers. It is important to avoid any “red flags” on your application that would diminish your chances of matching. These include: failing classes, failing or scoring low on COMLEX and USMLE examinations, felonies, professionalism issues, and gaps in training. If you do have any of these “red flags”, it will make it very difficult for you to match in EM. Please refer to the “At-risk Applicant Applying Guide” for ways to address these issues.
If possible, make sure to be actively involved in your school’s Emergency Medicine Interest Group (EMIG). A good mentor can be critical—find an EM faculty mentor who is involved with an ACGME residency. These faculty are the most familiar with the application process and will be able to give the highest quality advice. They can give you feedback on your application and help you figure out how many places to apply as well as guidance as to where to apply.

If your school isn’t affiliated with a training program or if it lacks EM faculty for advisement, consider joining EMRA, SAEM, or other professional organizations. Through EMRA’s (Emergency Medicine Residents’ Association) Medical Student Council, you can be paired with a resident mentor. Students can also participate in large-group virtual advising sessions through EMRA Hangouts. Other options include:

- Involvement your school’s chapter of American College of Osteopathic Emergency Physicians (ACOEP) student section. The ACOEP has regional osteopathic mentors
- Attendance a regional or national conference; many have advising forums and/or the opportunity to network with program faculty
- Asking your upperclassmen for advice ~ how/where did they find a mentor?
- Reaching out to a program you’re interested in to see if they have faculty that will advise you. Faculty mentors are often available during your out-of-town rotations; consider asking one of their residency leaders for advising.

In planning to maximize your EM application, the three areas where that are most critical are: your board scores, your EM rotation performance, and your letters of recommendation:

1. **Board Scores:** We STRONGLY RECOMMEND that you consider the USMLE (Step 1 and Step 2 CK). If you are only able to take Step 1 that is much better than taking neither. Failure to take at least one may hinder the competitiveness of your application. These tests allow your knowledge base to be compared directly to your MD peers; there is no accurate conversion to translate a COMLEX score to a USMLE score.

As an osteopathic medical student you are required to take COMLEX Level 1, 2CE/PE, AND Level 3, regardless of the residency you choose. The USMLE will not assist you with licensure; it serves as a tool for program directors (PDs) to compare you. The USMLE is currently the preferred exam for a likely majority of ACGME PD’s and a good score will increase your chances at matching. It is imperative that you study specifically for the USMLE and are scoring above the national average on practice exams before actually sitting for the exam; while the USMLE and COMLEX exams are similar, there are differences.
USMLE scores around 235 or greater will help you get a competitive number of interviews. Scores less than 220 may make it much more difficult for you to get interviews (Figure 3). If possible, try to take Step 2 early in 4th year so that you can have your scores released by October 1st, especially if your Step 1 score is <220. For USMLE Step 1 scores <220, a back-up plan is strongly advised.

Figure 3.

![Average USMLE Step 1 and Step 2 CK Scores Programs Consider When Granting Interviews](chart)

The boxes in the boxplots above represent the interquartile range (or IQR, which is the range between the 25th and 75th percentiles) and the line in the box is the median. The x-shaped symbol is the mean.

For context, the average COMLEX scores of DOs who match into allopathic EM programs are 593 and 610, for level 1 and level 2 respectively. Keep in mind that many allopathic residency directors may be unwilling to accept only a COMLEX score, or will look for a grossly higher COMLEX score than the equivalent USMLE score. This may change as the applicant pool expands at historical ACGME programs and programs become more comfortable with interpreting the COMLEX.

2. **Rotations:** You will need to try to secure at least two EM audition electives, at least one of which should be at an ACGME residency or at least an academic medical center. You will want to complete two EM clerkships as early as possible in your fourth year, ideally before mid-September, in order to have your Standard Letter of Evaluations (SLOEs) available when the Electronic Residency Application Service (ERAS) opens on September 15th. You will be side by side with your allopathic peers on these rotations and will demonstrate your performance in an academic setting similar to the residencies to which you will be applying.

Note that many academic programs use the Visiting Student Application Service (VSAS) for audition rotations, which often opens to accepting applications in
early March. Keep your eye out for any program-specific application requirements. For example, programs may require a USMLE Step 1 score or a brief personal statement. Programs may use audition rotations as a recruitment tool as much as you will use it to explore the program.

3. **Letters of Recommendation:** The letters of recommendation that carry the most weight are going to be in the SLOE (Standardized Letter of Evaluation) format and come from residency program leadership. You should aim to get two SLOEs from academic residencies, preferably group SLOEs written by the educational teams where you rotate. These letters carry more weight than the traditional letters of recommendation because they provide context for direct comparison of you to your EM-bound peers by people integral to the EM match process. These standard letters are one of the most frequent omissions from osteopathic applications, making it difficult to accurately compare them to the rest of the applicant pool.

While community EM months can be great learning experiences and expose you to how the majority of EM physicians practice, they will not significantly assist your application to an allopathic EM residency. A letter of recommendation, or even a SLOE written by a doctor at a community ED is not the same thing as one from an ACGME program and should not be counted as equivalents. If your school requires a community EM experience, you will have to do extra clerkships in EM, and in some instances, even forgo credit to gain opportunity and advancement in your application.

**How Many Programs should I apply to?**

Data show that applicants who ranked 9 programs had a ~90% match rate in EM. Those with 12 or more programs pushed that match rate up to 95-99% (Figure 4).\(^1\) Depending on the strength of your overall application (USMLE scores, EM clerkship performance, SLOEs, etc), you should consider applying to somewhere between 30-40 realistic programs in order to obtain 12 interviews and have a good chance of a successful match.

The “numbers question” truly requires an individualized answer from an advisor familiar with the EM application process who can help you assess how competitive an applicant you are. For a less competitive applicant it is important to have a frank discussion about a parallel plan in case the interviews are not forthcoming.
Which programs should I apply to?

One common strategy is to look at the composition of the current residency classes at an institution—if they have DOs, especially if they have matched someone from your school, they will likely consider your application. If they have no DOs, you need to be realistic with the likelihood of an interview, however it is still worth the application if you truly are interested in the program. In this instance, you may not want to count this program in the overall number of places you are applying to. In other words, apply to 30-40 programs which you think you have a high likelihood of getting into and which commonly accept DO students. Once again, reach out to an advisor if you are unsure about your competitiveness, if you think there might be red flags in your application, or if you have board scores that make you less competitive.

Rather than applying to every program in the country, osteopathic students may benefit from focusing on geographical areas which have historically matched higher percentages of their applicant type. Between the years 2012 and 2016, Indiana, Iowa, Mississippi, Ohio, and Texas matched the most osteopathic students per ACGME residency program per year (Figure 5).
In terms of raw numbers, on average over the past five years, New York, Pennsylvania, Texas, Ohio, and Michigan have accepted the most osteopathic students into ACGME programs each year (Table 2).

Table 2.

<table>
<thead>
<tr>
<th>State</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>Average Number of DO Residents Matched into ACGME Programs</th>
<th>Number of ACGME Programs (as of 2015)</th>
</tr>
</thead>
<tbody>
<tr>
<td>New York</td>
<td>30</td>
<td>23</td>
<td>26</td>
<td>42</td>
<td>43</td>
<td>32.8</td>
<td>21</td>
</tr>
<tr>
<td>Pennsylvania</td>
<td>27</td>
<td>24</td>
<td>18</td>
<td>18</td>
<td>22</td>
<td>21.8</td>
<td>12</td>
</tr>
<tr>
<td>Texas</td>
<td>21</td>
<td>19</td>
<td>21</td>
<td>24</td>
<td>17</td>
<td>20.4</td>
<td>9</td>
</tr>
<tr>
<td>Ohio</td>
<td>15</td>
<td>18</td>
<td>23</td>
<td>17</td>
<td>21</td>
<td>18.8</td>
<td>9</td>
</tr>
<tr>
<td>Michigan</td>
<td>13</td>
<td>11</td>
<td>15</td>
<td>19</td>
<td>19</td>
<td>15.4</td>
<td>11</td>
</tr>
<tr>
<td>Illinois</td>
<td>11</td>
<td>13</td>
<td>9</td>
<td>9</td>
<td>17</td>
<td>11.8</td>
<td>8</td>
</tr>
<tr>
<td>New Jersey</td>
<td>4</td>
<td>9</td>
<td>10</td>
<td>7</td>
<td>9</td>
<td>7.8</td>
<td>7</td>
</tr>
<tr>
<td>California</td>
<td>2</td>
<td>4</td>
<td>8</td>
<td>9</td>
<td>10</td>
<td>6.6</td>
<td>14</td>
</tr>
<tr>
<td>Florida</td>
<td>5</td>
<td>10</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>6.6</td>
<td>5</td>
</tr>
<tr>
<td>Massachusetts</td>
<td>4</td>
<td>5</td>
<td>9</td>
<td>7</td>
<td>6</td>
<td>6.2</td>
<td>5</td>
</tr>
</tbody>
</table>
Another way to find programs welcoming to DOs is by using EMRA Match, a searchable online EM residency database. Residency programs can be sorted by the percentage of DO residents in training there. Just because a program has few or no DOs does not mean they are definitely closed to their applications.

Some programs who give consideration to both types of students will rank academically equal MDs above DOs. Not surprisingly, to be successful in matching you need to stand out as a candidate and be strategic in planning your application.

What are some tools and resources that can help me?

There are a lot of great resources out there. Here are a few of the high-quality ones:

- EMRA Match
- CDEM Curriculum
- EMRA Hangouts

Should I worry about board certification?

In short, not right now. However, it might be something to think about when considering a program with Osteopathic Recognition - which may potentially expect you to become AOBEM certified. Currently, osteopathic graduates of AOA-accredited residency programs are required to take the AOBEM board certification.

Osteopathic graduates of ACGME residency programs can become either AOBEM or ABEM board certified in EM. Both certifications require recertification testing and continuing medical education (CME) requirements. These can be found in more detail on their respective websites.

Key Points

1. Taking the USMLE Step 1 and Step 2 will allow your knowledge base to be compared apples to apples with your allopathic peers. A USMLE Step 1 score <220 warrants taking Step 2 CK early as well as a back-up plan.
2. Try to complete two audition electives at allopathic residency-based training programs before October of your fourth year.
3. Aim to get 2 Standard Letter of Evaluations (SLOEs) from ACGME EM programs submitted as early as possible, ideally before ERAS opens on September 15th.
4. Be strategic with your application: do some legwork to identify programs that are open to interviewing and matching osteopathic candidates.
5. Find an advisor familiar with the EM application process to discuss your application, help gauge your competitiveness, and come up with a back-up plan if needed.
References


