# REPORT 2 OF THE COUNCIL ON MEDICAL EDUCATION (A-24) The Current Match Process and Alternatives (Resolution 302-A-23)

# EXECUTIVE SUMMARY

This report was written in response to Resolution 302, brought forth by the Resident and Fellow Section at the 2023 Annual Meeting of the House of Delegates. This resolution was referred for study. Now AMA Policy <u>D-310.944</u>, it asks that that the American Medical Association "study alternatives to the current residency and fellowship Match process which would be less restrictive on free market competition for applicants."

This report summarizes the history of The Match<sup>®</sup> and time before The Match, differentiates between the application process versus The Match, explains aspects of The Match process as well as independent match processes, and offers perspective from the National Resident Matching Program<sup>®</sup> (NRMP<sup>®</sup>). The Council on Medical Education understands the concerns presented by the authors of Resolution 302-A-23 and their frustrations related to lack of control over their own destinies. This report illuminates the importance of ongoing communication and transparency by the NRMP as well as collaboration among all invested parties. Further, this report makes clear that there are no currently identified alternatives other than an unstructured, open market approach, which the Council believes would be detrimental to the majority of trainees in comparison to the current Match process. Thus, attention should be focused on what can be done to improve The Match and other specialty matches rather than focusing on its replacement, as a match process continues to be the best solution for trainees at this time.

HOD ACTION: Recommendations in Council on Medical Education 2 <u>adopted as amended</u> and the remainder of the report <u>filed</u>.

## REPORT OF THE COUNCIL ON MEDICAL EDUCATION

CME Report 02-A-24

| Subject:      | The Current Match Process and Alternatives (Resolution 302-A-23) |
|---------------|--|
| Presented by: | Cynthia Jumper, MD, MPH, Chair                                   |
| Referred to:  | Reference Committee C  |

1 INTRODUCTION

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3 At the 2023 Annual Meeting of the House of Delegates, Resolution 302-A-23 entitled "Antitrust 4 Legislation Regarding the AAMC, ACGME, NRMP and Other Relevant Associations or 5 Organizations" asked "that our American Medical Association study alternatives to the current residency and fellowship Match process which would be less restrictive on free market competition 6 7 for applicants." The Resident and Fellow Section (RFS), authors of the resolution, noted concerns 8 related to preservation of the process of free market competition, antitrust laws, and The Match<sup>®</sup>. 9 Their resolution stated, "The Match poses significant anticompetition concerns and the procompetitive effect of streamlining residency job applications and increasing percentage of 10 position filled needs to be outweighed by the anticompetitive effect of the lack of negotiation 11 power of residents."<sup>1.</sup> 12 13 14 The resolution, now American Medical Association (AMA) Policy D-310.944, was referred for 15 study. This report seeks to address this directive by providing historical context, differentiating 16 between the application process versus The Match, explaining aspects of The Match process as well as independent match processes, and offering perspective from the National Resident 17 Matching Program<sup>®</sup> (NRMP<sup>®</sup>). It seeks to illuminate what can be done within the confines of The 18

Match to make it better and clarify that there are no currently identified "alternatives" other than the free market approach. To provide context, The Match is defined by the NRMP as "a computerized mathematical algorithm, 'the matching algorithm,' to place applicants into the most preferred residency and fellowship positions at programs that also prefer them."<sup>2</sup> It is intended to favor the rank list of the applicant.

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25 BACKGROUND

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27 History of The Match

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29 The trainee internship experience began in the late 1800s and was formalized shortly thereafter. 30 Such positions began to outnumber the students available. "In the early 1900s, competition among hospitals for interns and among medical students for good internships led to increasingly early 31 32 offers of internships to students. By the 1940s, appointments were often made as early as the beginning of the junior year of medical school. ... From 1945 through 1951, efforts were made to 33 enforce a uniform date for accepting offers. However, students were still faced with offers having 34 35 very short deadlines, compelling them to accept or reject offers without knowing what other offers might be forthcoming."<sup>3</sup> Such challenges led to the creation of a centralized clearinghouse to allow 36 for students to benefit from uniform appointment dates while reducing congestion and pressure. 37

1 The clearinghouse was created by the National Interassociation Committee on Internships, who

2 later changed its name to the National Intern Matching Program (NIMP). It included national

3 organizations such as the AMA (Council on Medical Education), American Hospital Association,

4 Association of American Medical Colleges (AAMC) and federal hospitals involved in resident

training.<sup>4</sup> Dissatisfaction among students led to proposals of algorithms that were felt to be more
 equitable.

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8 The NIMP was established as a 501c(3) and operated through the 1960s. In 1966, the Millis 9 Commission Report, authorized by the AMA Council on Medical Education, examined medical 10 education in the U.S., particularly the length and quality of graduate medical education. It supported a broader move to integrated residency training.<sup>5</sup> The NIMP became the NIRMP in 11 12 1968. The organization, in 1972, revised its participation requirements such that The Match 13 expanded to include all first-year resident positions and required all institutions participating in The Match to select U.S. senior students in allopathic medical schools through it. By 1975, the NIRMP 14 15 had become the NRMP.

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17 The NRMP oversees The Match, which is the mathematical algorithm to match applicants and 18 programs to their most preferred ranked choices. In 2012, researchers Lloyd Shapley and Alvin 19 Roth won the Nobel Prize in Economics for developing the "theory of stable allocations and the 20 practice of market design" which led to the development of the algorithm used for The Match. 21 They "pioneered theoretical concepts to understand and solve the matching problem and clarified 22 those ideas and applied them to engineer algorithms that are now widely used in the real world."<sup>6</sup> 23 The current algorithm has been used since 1998. The Match continues to be updated to address the 24 changing needs of applicants and to yield a favorable match while producing a stable outcome. 25

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In the past, osteopathic medical students could also participate in the <u>American Osteopathic</u>
<u>Association</u> (AOA) national match process through the <u>National Matching Services</u> (NMS).
Starting in July 2015, the AOA and the Accreditation Council for Graduate Medical Education
(ACGME) began a transition to a single accreditation system (SAS) to combine the AOA and
NRMP match programs. Between 2015 and 2020, AOA programs applied for accreditation to the
ACGME, and if granted, these programs could take residents through the NRMP match. By 2020,

most AOA programs had transitioned to the SAS or had withdrawn and were no longer taking new

residents but were allowed to complete the training of the residents remaining in their programs
 under AOA accreditation until the last resident finished. The intent of the SAS was to foster

inclusion for osteopathic medical students as well as residents at former AOA programs. Data from

36 2020-2023 indicates that Doctor of Osteopathic Medicine (DO) applicants have an increased match

37 rate from 90.7% to 91.6%, which also correlates with the opening of more DO schools.<sup>7</sup>

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# 39 The Match process

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41 The intention of The Match is to make the best possible match for all participants and ensure the

42 uniform process is fair, efficient, transparent, and reliable. Referred to as the Main Residency

43 Match, it is part of a larger undertaking that begins with applying to and interviewing with training 44 Match in the second second

44 programs. Most applicants use the <u>Electronic Residency Application Service<sup>®</sup></u> (ERAS<sup>®</sup>), a product 45 of the AAMC, to apply to programs per their chosen specialty. This centralized online application

45 of the AANC, to apply to programs per their chosen specialty. This centralized online application 46 service delivers applications and supporting documents to residency programs. Next, applicants

47 register for The Match in the NRMP's <u>Registration</u>, <u>Ranking</u>, and <u>Results<sup>®</sup></u> (R3<sup>®</sup>) system.

48 Applicants are invited to interview per the criteria set by each program. Both applicants and

49 programs submit their rank order preferences in the R3 system by a predetermined deadline,

50 usually in early March. The NRMP runs their matching <u>algorithm</u> according to the preferences

submitted and all parties are notified of the results later that month. Matched applicants and

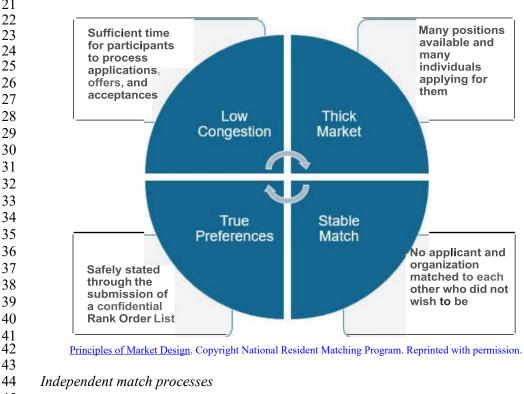
programs enter into an agreement. Unmatched applicants and programs may elect to participate in

2 the NRMP's Supplemental Offer and Acceptance Program (SOAP) during Match Week. See 3 Appendix A for an infographic of this process. The NRMP website provides data on the Main 4 Residency Match (including 2023) as well as research reports, survey reports, and research briefs. 5 6 The NRMP's Main Residency All In Policy asserts that if a program is registering for the Main 7 Residency Match®, then they must register and attempt to fill all positions through the Match (or 8 another national matching plan).<sup>8</sup> This policy only applies to those positions a program wishes to 9 fill. Programs planning to participate in The Match cannot offer positions outside The Match. If 10 that were to happen prior to program registration and activation, then the program is ineligible to enroll in The Match (unless the NRMP grants an exception). Per the Fellowship Match All In 11 Policy, Specialties Matching Service<sup>®</sup> (SMS<sup>®</sup>) Match sponsors may voluntarily implement the All 12 13 In Policy for their fellowship matches. AMA Policy <u>D-310.977(6)</u> "does not support the current 14 'All-In' policy for the Main Residency Match to the extent that it eliminates flexibility within the 15 match process."9 16

- 17 In its current form, the NRMP contends that The Match process is uncongested, defers acceptance,
- 18 promotes true preferences, and establishes a thick market "which allows for multi-specialty
- applications and couple matching (including for mixed-specialty couples)."<sup>10</sup> It is built upon the 19 20 following core components:

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According to the NRMP, "U.S. medical school graduates and students and graduates of 46

47 international medical schools can be offered positions outside of the Main Residency Match

provided it is in a program that does not participate in the Match and thus not subject to the All In 48

49 Policy. No applicant can accept a position outside of the Match after the Rank Order List

- 50 Certification Deadline."<sup>11</sup> Some programs choose to participate in an early match process, and the
- percentage of outside-the-match offers varies by specialty.<sup>12</sup> Not all are affiliated with the NRMP. 51

1 For example, students in the Health Professions Scholarship Program and the Uniformed Services 2 University of the Health Sciences who wish to apply for military PGY-1 positions go through a 3 similar process overseen by the Joint Service Graduate Medical Education Selection Board. While 4 they still use the ERAS system, military medical students complete a different application that 5 includes ranking programs. Deadlines also differ, as materials are submitted late August through 6 mid-October, and results are announced in mid-December. The military does not use a computer-7 generated algorithm, rather it is a process of discussions and negotiations. An applicant can be 8 placed in a program that they did not even rank.<sup>13</sup> Other examples include: 9 10 Preventive Medicine and Public Health: First implemented in 2017, the American College • 11 of Preventive Medicine (ACPM) oversees their own match called the Residency 12 Standardized Acceptance Process (SAP).<sup>14</sup> 13 14 Plastic Surgery and Ophthalmology: The San Francisco Residency Match, more commonly • referred to as SF Match, is a residency and fellowship matching service that has been used 15 by several specialties and subspecialties for over 40 years. It includes residencies in plastic 16 17 surgery and ophthalmology, overseen by the American Council of Academic Plastic Surgeons and Association of University Professors of Ophthalmology respectively. It also 18 19 currently includes 25 fellowship matches, ranging from abdominal transplant surgery to 20 rhinology. 21 22 Urology: For over 30 years, the American Urological Association, in conjunction with the • 23 Society of Academic Urologists, has overseen the Urology Residency Match Program. 24 25 Neuromuscular medicine: Starting in 2020, the American Association of Neuromuscular & • 26 Electrodiagnostic Medicine started its own standardized match process called the 27 Neuromuscular Fellowship Application Portal that uses an online hub through which residents submit application materials, communicate with programs, and receive offers.<sup>15</sup> 28 29 The first cycle hosted a partial match process, whereby programs submitted rank lists but applicants did not rank programs. The following cycle was a full match process.<sup>15</sup> 30 31 32 DISCUSSION 33 34 Before The Match and other match processes 35 36 The time before The Match and other match processes presented real challenges, added stress to 37 the residency application process, and fueled unequal treatment. One reflection written about the 38 time before The Match noted, "Medical students and hospitals once negotiated directly with each 39 other. Competition for talent was fierce amid a tight labor market, with residency programs 40 extending offers to medical students up to two years before graduation. This process had significant 41 downsides: Students had to deal with exploding offers and felt pressure to commit to a program 42 before getting sufficient exposure to different medical specialties. Medical students, residents, and hospitals all backed reform."<sup>16</sup> While The Match offered solutions to those who experienced life 43 44 before it, a new generation of residency applicants has questioned its efficacy. 45 46 Perceived challenges faced by residency applicants 47 48 As summarized in the introduction, the RFS, as authors of the original resolution, noted concerns

49 about lack of negotiation power of residents. Consternations were also raised regarding the

50 possibility of residency/fellowship out-of-match offers being better than those in The Match;

however, there is no data to support this notion. Discussions of these concerns among trainees are 1 2 evident on social media platforms and the internet. For example, The Student Doctor Network, "a 3 non-profit educational website dedicated to building a diverse doctor workforce." has hosted forums that debate this very issue.<sup>16</sup> In a 2021 forum called "What are the alternatives to the 4 5 Match? What do you think would happen if it were abolished?", trainees raised several points for 6 consideration. They shared that it is within the realm of possibility that programs would have zero 7 incentive to increase wages to be more competitive if The Match went away. Without The Match 8 or some unified system of application, programs could try to fill their spots earlier and such timing 9 may not align with the applicant's desired specialty training. In the non-physician job market, a 10 candidate often has to make a decision about accepting a position without knowing the full extent of the employment details.<sup>17</sup> The NRMP and other matches are not involved in any negotiations or 11 12 agreements between programs and applicants, and if what a program is willing to offer to an 13 applicant is unacceptable to the applicant, the applicant can simply not include that program in 14 their rank list.

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## 16 The impact of The Match on competition for residency positions

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Another concern raised by the RFS is alleged lack of competition. In 1890, Congress passed The 18 19 Sherman Act, the first antitrust law, followed in 1914 by two additional antitrust laws-the Federal 20 Trade Commission Act (which formed the FTC) and the Clayton Act. Challenges to The Match were brought forth in a class-action lawsuit in 2002, alleging The Match as violating the Sherman 21 Antitrust Act as described in the AMA Journal of Ethics.<sup>18</sup> However, U.S. Code 37b was passed 22 23 into law in 2004, entitled "Confirmation of antitrust status of graduate medical resident matching 24 programs," to "confirm that the antitrust laws do not prohibit sponsoring, conducting, or 25 participating in a graduate medical education residency matching program, or agreeing to do so; and ensure that those who sponsor, conduct or participate in such matching programs are not 26 27 subjected to the burden and expense of defending against litigation that challenges such matching programs under the antitrust laws."<sup>19</sup> 28

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30 Concern was also raised about The Match possibly having a negative impact on resident salaries. A 31 2006 economic study by Bulow and Levin is frequently cited to support this claim<sup>20</sup>. However, Bulow and Levin also noted that The Match "was developed for efficiency reasons, and on that 32 score, it appears to do guite well."<sup>20</sup> Research published since the Bulow-Levin paper does not 33 support their conclusions. Agarwal noted that "The Match is not the likely cause of low salaries."21 34 35 According to Konishi & Sapozhnikov, "competitive salary vector is the best-case scenario for 36 applicants in the decentralized market. [... T]he reference salary vector adopted by Bulow and Levin (2006) for the decentralized market outcome might not have a strong justification and could 37 be regarded as rather optimistic."<sup>22</sup> Also, it is important to consider that most resident salaries are 38 39 funded by clinical revenues from the sponsoring institution and federal government sources, 40 particularly Medicare graduate medical education funds from a budget set by Congress. Since 41 clinical revenue and institutional funding can vary by specialty and setting, disparities in pay may result, even across residency programs at the same institution unfortunately. 42 43 44 Resolution 308 implied that a free-market approach may be more beneficial for trainees. As

Resolution 308 implied that a free-market approach may be more beneficial for trainees. As described earlier in this report regarding the history of The Match and the era before its implementation, the free market posed many problems. Returning to such a process would not likely improve the challenges experienced previously. Economists agree that a free-market approach is not without flaws.<sup>23,24</sup> For example, "Apart from agriculture, few real-world markets are perfectly competitive."<sup>25</sup> Roth asserts that a centralized matching system can improve the welfare of all participants in that market and, depending on its design, can address the problems of unraveling and the congestion.<sup>26</sup> It seems that further analysis of what works well and what does

not work well is warranted in order to improve The Match process. As described in this report, the 1 2 NRMP and others are committed to continued review and improvement.

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4 The Council on Medical Education recently addressed mechanisms to advocate for the needs of 5 residents in its report, "Organizations to Represent the Interests of Resident and Fellow Trainees" 6 (CME 5-I-23), which was adopted at the Interim 2023 Meeting. It also reviewed duty hour 7 standards; work conditions; the impact of private equity; and the roles of government agencies, 8 accreditors, medical staff organizations, associations, and unions. The adoption of that report 9 signifies renewed efforts to advocate for the interests of trainees.

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#### Coalition for Physician Accountability recommendations 11

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13 The Coalition for Physician Accountability (CPA) is comprised of representatives from national organizations (including the AMA) responsible for the oversight, education, and assessment of 14 15 medical students and physicians throughout their medical careers. In April 2021, the CPA's 16 Undergraduate Medical Education-Graduate Medical Education Review Committee (UGRC) 17 released 28 recommendations for comprehensive improvement of the UME-GME transition. The 18 UGRC was comprised of several workgroups, one of which focused on the mechanics of the 19 application/selection process from the graduate medical education perspective. The final 20 recommendations were categorized according to themes and refer to the residency application 21 process as well as The Match and other matching processes. Two themes of note address an 22 equitable, mission-driven application review (Recommendations #14-20) as well as optimization of 23 the application, interview, and selection processes (Recommendations #21-24). Specifically, 24 Recommendation #23 states that "Innovations to the residency application process should be 25 piloted to reduce application numbers and concentrate applicants at programs where mutual interest 26 is high, while maximizing applicant placement into residency positions. Well-designed pilots 27 should receive all available support from the medical community and be implemented as soon as 28 the 2022-2023 application cycle; successful pilots should be expanded expeditiously toward a unified process."2 29

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- 31 Recent NRMP proposals
- 32

33 The NRMP maintains that it is committed to considering ways to inform the transition to residency 34 or improve the matching process. In 2021, the NRMP issued a statement on the feasibility of an 35 early match. Specifically, NRMP was asked to pilot the Early Result and Acceptance Program 36 (ERAP) proposed for obstetrics and gynecology. This pilot program was created through a grant 37 provided by the AMA's Reimagining Residency program. The NRMP concluded that an early match would disadvantage applicants, and that changes to the process could potentially cause 38 39 behavior changes that could negatively affect outcomes for all participants.<sup>10</sup>

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41 To consider the feasibility of a proposed Two-Phase Main Residency Match (that would replace

The Match and SOAP), the NRMP Board of Directors opened a call for comment period in 42

August-September 2022. The goal was to "alleviate some of the stressors inherent in the current 43

transition to residency based on available evidence."<sup>28</sup> After considering the over 8,000 responses 44 to the call, the NRMP Board of Directors decided to not pursue the proposal as written, stating that 45

"Although the benefits/advantages articulated by the community are significant, the 46

risks/disadvantages are considered of greater consequence."<sup>29</sup> The AAMC hosted several listening 47

sessions with their constituency to discuss this two-phase proposal and issued a statement 48

49 concluding that a long-term evaluation plan would be needed with a focus on "learners and

- 50 equity."<sup>30</sup> The AAMC also noted that ERAS would still play a role in a two-phase match and
- 51 recommended further discussions.

1 AMA ENGAGEMENT

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3 The AMA has been actively engaged in monitoring this process, is in regular communication with 4 the NRMP, and actively participates in the CPA. The AMA Medical Student Section (MSS) and 5 RFS each offer to their members the opportunity to apply to represent the AMA on the NRMP 6 Board. Both AMA sections have solicited for or nominated members every year for at least the last 7 ten years. The NRMP board offers three seats for student directors and three seats for resident 8 physician directors. The NRMP no longer has designated AMA seats for students or residents due 9 to a change in their bylaws in 2017. To promote effective communication, fostering relationships 10 among key parties is vital. The AMA will continue to look for opportunities to collaborate with the NRMP and other matching organizations. 11

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13 Through the AMA's ChangeMedEd initiative, efforts are underway across the continuum with visionary partners to create bold innovations. Specifically, <u>Reimagining Residency</u> is a grant 14 program dedicated to promoting systemic change in graduate medical education (GME). "It

15 supports bold and innovative projects that provide a meaningful and safe transition from 16

undergraduate medical education to graduate medical education."<sup>31</sup> Several Reimagining Residency 17

- projects directly address the transition from undergraduate medical education (UME) to GME. 18
- "Right Resident, Right Program, Ready Day One," a collaboration with the Association of 19
- 20 Professors of Gynecology & Obstetrics (APGO), raises cross-specialty standards for the residency
- 21 application and interview process. It promotes signaling to reduce the number of applications

22 submitted by formalizing communication about true preferences. APGO has also developed an

23 Alignment Check Index (ACI). This adjunct to AMA's FREIDA platform seeks to better align

applicant preferences and characteristics with those being sought by specific residency programs. A 24

- 25 project at New York University (NYU), called the "Transition to Residency Advantage," builds on
- experience with UME coaching to train a cadre of GME coaches and then effect a learner-driven 26 27 warm handoff from UME to GME. Two additional projects, the "California Oregon Medical
- 28 Partnership to Address Rural Disparities in Rural Education and Health" (COMPADRE) and the
- University of North Carolina's "Fully Integrated Readiness for Service Training" (FIRST) are 29
- 30 creating pathways to rural practice that entail dedicated pathways from medical school to residency
- 31 that meet the needs of those areas. Also, the AMA helps to inform future GME advocacy by

addressing concerns regarding the challenges faced by the current GME system. A 2023 32 compendium of such GME advocacy initiatives is available for review. 33

- 34
- 35 Council on Medical Education efforts
- 36

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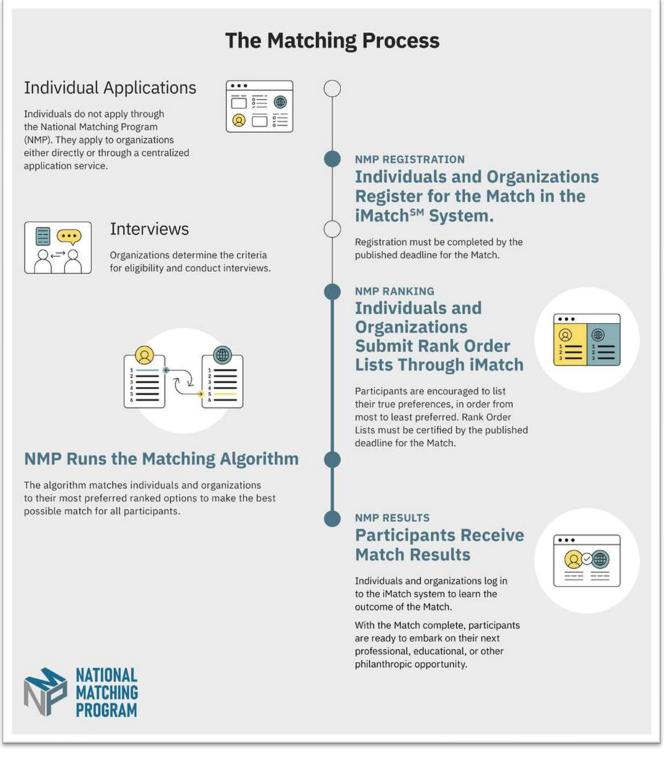
37 Since 2012, the Council on Medical Education has offered several reports that address residency and The Match as listed below. Additional Council reports can be accessed in the AMA Council 38 39 Report Finder database.

- 40 Organizations to Represent the Interests of Resident and Fellow Trainees" (CME 5-I-23) • 41
  - Optimizing Match Outcomes (CME Report 3-A-21) •
  - Standardizing the Residency Match System and Timeline (CME Report 3-A-19) •
- The Transition from Undergraduate Medical Education to Graduate Medical Education 43 • (CME Report 5-I-19) 44
- Options for Unmatched Medical Students (CME Report 5-A-17) 45 •
- Standardizing the Allopathic Residency Match System and Timeline (CME Report 6-A-46 • 47
- 48 Resident and Fellow Compensation and Health Care System Value (CME Report 4-A-16) •
- Transparency in the National Resident Matching Program Match Agreement (CME Report 49 • 50 12-A-12)

| 1        | Relevant AMA Policy  |  |  |
|----------|--|--|--|
| 2        |  |  |  |
| 3        | The AMA has ample policy in support of trainees that address such topics as The Match, other   |  |  |
| 4        | match processes, residency application process, and graduate medical education. These policies   |  |  |
| 5<br>6   | exemplify the AMA's commitment to closely monitor these issues and engage with the NRMP and<br>others to antimize successful aquitable metabing. See Armondix P for the following full reliaison |  |  |
|          | others to optimize successful, equitable matching. See Appendix B for the following full policies:   |  |  |
| 7        | <u>Study of the Current Match Process and Alternatives D-310.944</u> Desidents and Fallenne' Dill of Dialete II 210.012  |  |  |
| 8<br>9   | <ul> <li><u>Residents and Fellows' Bill of Rights H-310.912</u></li> <li><u>Preliminary Year Program Placement H-310.910</u></li> </ul>  |  |  |
| 9<br>10  | <ul> <li><u>Preliminary Year Program Placement H-310.910</u></li> <li><u>Closing of Residency Programs H-310.943</u></li> </ul>  |  |  |
| 10       | <ul> <li>Protection of Resident and Fellow Training in the Case of Hospital or Training Program</li> </ul>   |  |  |
| 11       | <ul> <li><u>Protection of Resident and Periow Training in the Case of Prospital of Training Program</u><br/>Closure D-310.948</li> </ul>   |  |  |
| 12       | <ul> <li>Residency Interview Schedules H-310.998</li> </ul>  |  |  |
| 13       | • <u>Residency metvicw schedules II-510.556</u>  |  |  |
| 15       | Of note, Policy <u>D-310.977</u> "National Resident Matching Program Reform" includes the following  |  |  |
| 16       | clauses that state the AMA:  |  |  |
| 17       | (4) will continue to review the NRMP's policies and procedures and make  |  |  |
| 18       | recommendations for improvements as the need arises, to include making the conditions of   |  |  |
| 19       | the Match agreement more transparent while assuring the confidentiality of the match;  |  |  |
| 20       | (5) will work with the Accreditation Council for Graduate Medical Education (ACGME)  |  |  |
| 21       | and other appropriate agencies to assure that the terms of employment for resident   |  |  |
| 22       | physicians are fair and equitable and reflect the unique and extensive amount of education   |  |  |
| 23<br>24 | and experience acquired by physicians;<br>(6) does not support the current the "All-In" policy for the Main Residency Match to the   |  |  |
| 24<br>25 | extent that it eliminates flexibility within the match process;  |  |  |
| 26       | (7) will work with the NRMP, and other residency match programs, in revising Match   |  |  |
| 27       | policy, including the secondary match or scramble process to create more standardized  |  |  |
| 28       | rules for all candidates including application timelines and requirements;   |  |  |
| 29       | (8) will work with the NRMP and other external bodies to develop mechanisms that limit   |  |  |
| 30       | disparities within the residency application process and allow both flexibility and standard   |  |  |
| 31       | rules for applicants;  |  |  |
| 32       |  |  |  |
| 33       | Additional related policies, such as those listed below, can be accessed in the <u>AMA Policy Finder</u>   |  |  |
| 34       | database:  |  |  |
| 35       | <u>Strengthening Interview Guidelines for American Indian and Alaska Native Medical</u>  |  |  |
| 36       | School, Residency, and Fellowship Applicants H-295.852   |  |  |
| 37       | <u>Mitigating Demographic and Socioeconomic Inequities in the Residency and Fellowship</u> Sclastics Pressure D 210 045  |  |  |
| 38       | Selection Process D-310.945  |  |  |
| 39<br>40 | <u>Eliminating Questions Regarding Marital Status, Dependents, Plans for Marriage or</u><br>Children, Sexual Orientation, Gender Identity, Age, Race, National Origin and Religion               |  |  |
| 40<br>41 | During the Residency and Fellowship Application Process H-310.919  |  |  |
| 41       | <ul> <li>Strategies for Enhancing Diversity in the Physician Workforce D-200.985</li> </ul>  |  |  |
| 43       | <ul> <li><u>Strategies for Elinateting Diversity in the Physician Workforce D-200.985</u></li> <li>US Physician Shortage H-200.954</li> </ul>  |  |  |
| 44       | <ul> <li>Collective Bargaining: Antitrust Immunity D-383.983</li> </ul>  |  |  |
| 45       | <ul> <li>AMA's Aggressive Pursuit of Antitrust Reform D-383.990</li> </ul>   |  |  |
| 46       | <ul> <li>Antitrust Relief for Physicians Through Federal Legislation H-383.990</li> </ul>  |  |  |
| 40       | <ul> <li>Antitust Relief H-383.992</li> </ul>  |  |  |
| 48       | - <u>Antitust Relief 11-363.772</u>  |  |  |
| 49       | SUMMARY AND RECOMMENDATIONS  |  |  |
| 50       |  |  |  |

| 1  | The Council on Medical Education understands the concerns presented by the authors of                  |  |  |
|----|--|--|--|
| 2  | Resolution 302-A-23 and their frustrations related to lack of control over their own destinies. This   |  |  |
| 3  | report describes the origins of The Match and its current state as well as information about           |  |  |
| 4  | independent match processes. It also clarifies the difference between the AAMC's ERAS                  |  |  |
| 5  | application process versus NRMP's Match process, acknowledges challenges, and summarizes               |  |  |
| 6  | recent considerations and recommendations. This report illuminates the importance of ongoing           |  |  |
| 7  | communication and transparency by the NRMP as well as collaboration among all invested parties.        |  |  |
| 8  | Further, this report makes clear that there are no currently identified alternatives other than an     |  |  |
| 9  | unstructured, open market approach, which the Council believes would be detrimental to the             |  |  |
| 10 | majority of trainees in comparison to the current Match process. Accordingly, attention should be      |  |  |
| 11 | focused on what can be done to improve The Match and other specialty matches rather than               |  |  |
| 12 | focusing on its replacement, as a match process continues to be the best solution for trainees at this |  |  |
| 13 | time.  |  |  |
| 14 |  |  |  |
| 15 | The Co   | uncil on Medical Education therefore recommends that the following recommendations be        |  |
| 16 | adopted and the remainder of this report be filed. That our AMA:                                       |  |  |
| 17 | _  |  |  |
| 18 | 1.   | AMA Policy <u>D-310.977</u> , "National Resident Matching Program Reform" be amended by      |  |
| 19 |  | addition to read as follows. Our AMA:  |  |
| 20 |  |  |  |
| 21 |  | (20) Encourages the piloting of innovations to the residency application process with aims   |  |
| 22 |  | to reduce application numbers per applicant, focus applicants on programs with reciprocal    |  |
| 23 |  | interest, and maximize residency placement. With support from the medical education          |  |
| 24 |  | community, successful pilots should be expanded to enhance the standardized process.         |  |
| 25 |  |  |  |
| 26 |  | (21) Continues to engage the National Resident Matching Program® (NRMP®) and other           |  |
| 27 |  | matching organizations on behalf of residents and medical students to further develop        |  |
| 28 |  | ongoing relationships, improve communications, and seek additional opportunities to          |  |
| 29 |  | collaborate including the submission of suitable nominees for their governing bodies as      |  |
| 30 |  | appropriate. (Modify Current HOD Policy)   |  |
| 31 |  |  |  |
| 32 | 2.   | Reaffirm AMA Policies <u>H-310.900</u> "Resident and Fellow Physicians Seeking to Transfer   |  |
| 33 |  | GME Program" and <u>H-310.912</u> "Residents and Fellows' Bill of Rights." (Reaffirm HOD     |  |
| 34 |  | Policy)  |  |
| 35 |  |  |  |
| 36 | 3.   | Rescind AMA policy <u>D-310.944</u> , "Study of the Current Match Process and Alternatives," |  |
| 37 |  | as having been accomplished by this report. (Rescind HOD Policy)                             |  |
| 38 |  |  |  |
| 39 |  |  |  |
| 40 | Fiscal note: \$1,000   |  |  |

# APPENDIX A: THE MATCH PROCESS



How a Match Works. Copyright National Resident Matching Program. Reprinted with permission.

## APPENDIX B: RELEVANT AMA POLICY

### National Resident Matching Program Reform D-310.977

Our AMA:

(1) will work with the National Resident Matching Program (NRMP) to develop and distribute educational programs to better inform applicants about the NRMP matching process, including the existing NRMP waiver and violations review policies;

(2) will actively participate in the evaluation of, and provide timely comments about, all proposals to modify the NRMP Match;

(3) will request that the NRMP explore the possibility of including the Osteopathic Match in the NRMP Match;

(4) will continue to review the NRMP's policies and procedures and make recommendations for improvements as the need arises, to include making the conditions of the Match agreement more transparent while assuring the confidentiality of the match;

(5) will work with the Accreditation Council for Graduate Medical Education (ACGME) and other appropriate agencies to assure that the terms of employment for resident physicians are fair and equitable and reflect the unique and extensive amount of education and experience acquired by physicians;

(6) does not support the current the "All-In" policy for the Main Residency Match to the extent that it eliminates flexibility within the match process;

(7) will work with the NRMP, and other residency match programs, in revising Match policy, including the secondary match or scramble process to create more standardized rules for all candidates including application timelines and requirements;

(8) will work with the NRMP and other external bodies to develop mechanisms that limit disparities within the residency application process and allow both flexibility and standard rules for applicants;

(9) encourages the National Resident Matching Program to study and publish the effects of implementation of the Supplemental Offer and Acceptance Program on the number of residency spots not filled through the Main Residency Match and include stratified analysis by specialty and other relevant areas;

(10) will work with the NRMP and ACGME to evaluate the challenges in moving from a time-based education framework toward a competency-based system, including: a) analysis of time-based implications of the ACGME milestones for residency programs; b) the impact on the NRMP and entry into residency programs if medical education programs offer variable time lengths based on acquisition of competencies; c) the impact on financial aid for medical students with variable time lengths of medical education programs; d) the implications for interprofessional education and rewarding teamwork; and e) the implications for residents who achieve milestones earlier or later than their peers;

(11) will work with the Association of American Medical Colleges (AAMC), American Osteopathic Association (AOA), American Association of Colleges of Osteopathic Medicine (AACOM), and National Resident Matching Program (NRMP) to evaluate the current available data or propose new studies that would help us learn how many students graduating from US medical schools each year do not enter into a US residency program; how many never enter into a US residency program; whether there is disproportionate impact on individuals of minority racial and ethnic groups; and what careers are pursued by those with an MD or DO degree who do not enter residency programs;

(12) will work with the AAMC, AOA, AACOM and appropriate licensing boards to study whether US medical school graduates and international medical graduates who do not enter residency programs may be able to serve unmet national health care needs;

(13) will work with the AAMC, AOA, AACOM and the NRMP to evaluate the feasibility of a national tracking system for US medical students who do not initially match into a categorical residency program; (14) will discuss with the National Resident Matching Program, Association of American Medical Colleges, American Osteopathic Association, Liaison Committee on Medical Education, Accreditation Council for Graduate Medical Education, and other interested bodies potential pathways for reengagement in medicine following an unsuccessful match and report back on the results of those discussions;

(15) encourages the Association of American Medical Colleges to work with U.S. medical schools to identify best practices, including career counseling, used by medical schools to facilitate successful matches for medical school seniors, and reduce the number who do not match;

(16) supports the movement toward a unified and standardized residency application and match system for all non-military residencies;

(17) encourages the Educational Commission for Foreign Medical Graduates (ECFMG) and other interested stakeholders to study the personal and financial consequences of ECFMG-certified U.S. IMGs who do not match in the National Resident Matching Program and are therefore unable to get a residency or practice medicine;

(18) encourages the AAMC, AACOM, NRMP, and other key stakeholders to jointly create a no-fee, easily accessible clearinghouse of reliable and valid advice and tools for residency program applicants seeking cost-effective methods for applying to and successfully matching into residency; and

(19) will work with appropriate stakeholders to study options for improving transparency in the resident application process.

### Study of the Current Match Process and Alternatives D-310.944

Our American Medical Association will study alternatives to the current residency and fellowship Match process which would be less restrictive on free market competition for applicants.

### Residents and Fellows' Bill of Rights H-310.912

1. Our AMA continues to advocate for improvements in the ACGME Institutional and Common Program Requirements that support AMA policies as follows: a) adequate financial support for and guaranteed leave to attend professional meetings; b) submission of training verification information to requesting agencies within 30 days of the request; c) adequate compensation with consideration to local cost-of-living factors and years of training, and to include the orientation period; d) health insurance benefits to include dental and vision services; e) paid leave for all purposes (family, educational, vacation, sick) to be no less than six weeks per year; and f) stronger due process guidelines.

2. Our AMA encourages the ACGME to ensure access to educational programs and curricula as necessary to facilitate a deeper understanding by resident physicians of the US health care system and to increase their communication skills.

3. Our AMA regularly communicates to residency and fellowship programs and other GME stakeholders this Resident/Fellows Physicians' Bill of Rights.

4. Our AMA: a) will promote residency and fellowship training programs to evaluate their own institution's process for repayment and develop a leaner approach. This includes disbursement of funds by direct deposit as opposed to a paper check and an online system of applying for funds; b) encourages a system of expedited repayment for purchases of \$200 or less (or an equivalent institutional threshold), for example through payment directly from their residency and fellowship programs (in contrast to following traditional workflow for reimbursement); and c) encourages training programs to develop a budget and strategy for planned expenses versus unplanned expenses, where planned expenses should be estimated using historical data, and should include trainee reimbursements for items such as educational materials, attendance at conferences, and entertaining applicants. Payment in advance or within one month of document submission is strongly recommended.

5. Our AMA will partner with ACGME and other relevant stakeholders to encourage training programs to reduce financial burdens on residents and fellows by providing employee benefits including, but not limited to, on-call meal allowances, transportation support, relocation stipends, and childcare services.

6. Our AMA will work with the Accreditation Council for Graduate Medical Education (ACGME) and other relevant stakeholders to amend the ACGME Common Program Requirements to allow flexibility in the specialty-specific ACGME program requirements enabling specialties to require salary reimbursement or "protected time" for resident and fellow education by "core faculty," program directors, and assistant/associate program directors.

7. Our AMA encourages teaching institutions to offer retirement plan options, retirement plan matching, financial advising and personal finance education.

8. Our AMA adopts the following "Residents and Fellows' Bill of Rights" as applicable to all resident and fellow physicians in ACGME-accredited training programs:

**RESIDENT/FELLOW PHYSICIANS' BILL OF RIGHTS** 

Residents and fellows have a right to:

A. An education that fosters professional development, takes priority over service, and leads to independent practice.

With regard to education, residents and fellows should expect: (1) A graduate medical education experience that facilitates their professional and ethical development, to include regularly scheduled didactics for which they are released from clinical duties. Service obligations should not interfere with

educational opportunities and clinical education should be given priority over service obligations; (2) Faculty who devote sufficient time to the educational program to fulfill their teaching and supervisory responsibilities; (3) Adequate clerical and clinical support services that minimize the extraneous, time-consuming work that draws attention from patient care issues and offers no educational value; (4) 24-hour per day access to information resources to educate themselves further about appropriate patient care; and (5) Resources that will allow them to pursue scholarly activities to include financial support and education leave to attend professional meetings.

B. Appropriate supervision by qualified physician faculty with progressive resident responsibility toward independent practice.

With regard to supervision, residents and fellows must be ultimately supervised by physicians who are adequately qualified and allow them to assume progressive responsibility appropriate to their level of education, competence, and experience. In instances where clinical education is provided by non-physicians, there must be an identified physician supervisor providing indirect supervision, along with mechanisms for reporting inappropriate, non-physician supervision to the training program, sponsoring institution or ACGME as appropriate.

C. Regular and timely feedback and evaluation based on valid assessments of resident performance. With regard to evaluation and assessment processes, residents and fellows should expect: (1) Timely and substantive evaluations during each rotation in which their competence is objectively assessed by faculty who have directly supervised their work; (2) To evaluate the faculty and the program confidentially and in writing at least once annually and expect that the training program will address deficiencies revealed by these evaluations in a timely fashion; (3) Access to their training file and to be made aware of the contents of their file on an annual basis; and (4) Training programs to complete primary verification/credentialing forms and recredentialing forms, apply all required signatures to the forms, and then have the forms permanently secured in their educational files at the completion of training or a period of training and, when requested by any organization involved in credentialing process, ensure the submission of those documents to the requesting organization within thirty days of the request. D. A safe and supportive workplace with appropriate facilities.

With regard to the workplace, residents and fellows should have access to: (1) A safe workplace that enables them to fulfill their clinical duties and educational obligations; (2) Secure, clean, and comfortable on-call rooms and parking facilities which are secure and well-lit; (3) Opportunities to participate on committees whose actions may affect their education, patient care, workplace, or contract. E. Adequate compensation and benefits that provide for resident well-being and health.

(1) With regard to contracts, residents and fellows should receive: a. Information about the interviewing residency or fellowship program including a copy of the currently used contract clearly outlining the conditions for (re)appointment, details of remuneration, specific responsibilities including call obligations, and a detailed protocol for handling any grievance; and b. At least four months advance notice of contract non-renewal and the reason for non-renewal.

(2) With regard to compensation, residents and fellows should receive: a. Compensation for time at orientation; and b. Salaries commensurate with their level of training and experience. Compensation should reflect cost of living differences based on local economic factors, such as housing, transportation, and energy costs (which affect the purchasing power of wages), and include appropriate adjustments for changes in the cost of living.

(3) With regard to benefits, residents and fellows must be fully informed of and should receive: a. Quality and affordable comprehensive medical, mental health, dental, and vision care for residents and their families, as well as retirement plan options, professional liability insurance and disability insurance to all residents for disabilities resulting from activities that are part of the educational program; b. An institutional written policy on and education in the signs of excessive fatigue, clinical depression, substance abuse and dependence, and other physician impairment issues; c. Confidential access to mental health and substance abuse services; d. A guaranteed, predetermined amount of paid vacation leave, sick leave, family and medical leave and educational/professional leave during each year in their training program, the total amount of which should not be less than six weeks; e. Leave in compliance with the Family and Medical Leave Act; and f. The conditions under which sleeping quarters, meals and laundry or their equivalent are to be provided.

F. Clinical and educational work hours that protect patient safety and facilitate resident well-being and education.

With regard to clinical and educational work hours, residents and fellows should experience: (1) A reasonable work schedule that is in compliance with clinical and educational work hour requirements set forth by the ACGME; and (2) At-home call that is not so frequent or demanding such that rest periods are significantly diminished or that clinical and educational work hour requirements are effectively circumvented. Refer to AMA Policy H-310.907, "Resident/Fellow Clinical and Educational Work Hours," for more information.

G. Due process in cases of allegations of misconduct or poor performance.

With regard to the complaints and appeals process, residents and fellows should have the opportunity to defend themselves against any allegations presented against them by a patient, health professional, or training program in accordance with the due process guidelines established by the AMA.

H. Access to and protection by institutional and accreditation authorities when reporting violations. With regard to reporting violations to the ACGME, residents and fellows should: (1) Be informed by their program at the beginning of their training and again at each semi-annual review of the resources and processes available within the residency program for addressing resident concerns or complaints, including the program director, Residency Training Committee, and the designated institutional official; (2) Be able to file a formal complaint with the ACGME to address program violations of residency training requirements without fear of recrimination and with the guarantee of due process; and (3) Have the opportunity to address their concerns about the training program through confidential channels, including the ACGME concern process and/or the annual ACGME Resident Survey.

9. Our AMA will work with the ACGME and other relevant stakeholders to advocate for ways to defray additional costs related to residency and fellowship training, including essential amenities and/or high cost specialty-specific equipment required to perform clinical duties.

10. Our AMA believes that healthcare trainee salary, benefits, and overall compensation should, at minimum, reflect length of pre-training education, hours worked, and level of independence and complexity of care allowed by an individual's training program (for example when comparing physicians in training and midlevel providers at equal postgraduate training levels).

11. The Residents and Fellows' Bill of Rights will be prominently published online on the AMA website and disseminated to residency and fellowship programs.

12. Our AMA will distribute and promote the Residents and Fellows' Bill of Rights online and individually to residency and fellowship training programs and encourage changes to institutional processes that embody these principles.

### Preliminary Year Program Placement H-310.910

1. Our AMA encourages the Accreditation Council for Graduate Medical Education, the American Osteopathic Association, and other involved organizations to strongly encourage residency programs that now require a preliminary year to match residents for their specialty and then arrange with another department or another medical center for the preliminary year of training unless the applicant chooses to pursue preliminary year training separately.

2. Our AMA encourages appropriate stakeholders to explore options to decrease the burden upon medical students who must apply to separate preliminary PGY-1 and categorical PGY-2 positions.

3. Our AMA will work with the Accreditation Council for Graduate Medical Education to encourage programs with PGY-2 positions in the National Resident Matching Program (NRMP) with insufficient availability of local PGY-1 positions to create local PGY-1 positions that will enable coordinated applications and interviews for medical students.

4. Our AMA encourages the NRMP, the San Francisco Match, the American Urological Association, the Electronic Residency Application Service, and other stakeholders to reduce barriers for medical students, residents, and physicians applying to match into training programs, including barriers to "couples matching," and to ensure that all applicants have access to robust, informative statistics to assist in decision-making.
5. Our AMA encourages the NRMP, San Francisco Match, American Urological Association, Electronic Residency Application Service, and other stakeholders to collect and publish data on a) the impact of separate matches on the personal and professional lives of medical students and b) the impact on medical students who are unable to successfully "couples match" with their significant others due to staggered entry into residency, utilization of unlinked match services, or other causes.

Closing of Residency Programs H-310.943

1. Our AMA: (a) encourages the Accreditation Council for Graduate Medical Education (ACGME) to address the problem of non-educational closing or downsizing of residency training programs; (b) reminds all institutions involved in educating residents of their contractual responsibilities to the resident; (c) encourages the ACGME and the various Residency Review Committees to reexamine requirements for "years of continuous training" to determine the need for implementing waivers to accommodate residents affected by non-educational closure or downsizing; (d) will work with the American Board of Medical Specialties Member Boards to encourage all its member boards to develop a mechanism to accommodate the discontinuities in training that arise from residency closures, regardless of cause, including waiving continuity care requirements and granting residents credit for partial years of training; (e) urges residency programs and teaching hospitals be monitored by the applicable Residency Review Committees to ensure that decreases in resident numbers do not place undue stress on remaining residents by affecting work hours or working conditions, as specified in Residency Review Committee requirements; (f) opposes the closure of residency/fellowship programs or reductions in the number of current positions in programs as a result of changes in GME funding; and (g) will work with the Centers for Medicare and Medicaid Services (CMS), ACGME, and other appropriate organizations to advocate for the development and implementation of effective policies to permit graduate medical education funding to follow the resident physician from a closing to the receiving residency program (including waivers of CMS caps), in the event of temporary or permanent residency program closure.

2. Our AMA will work with the Centers for Medicare and Medicaid Services (CMS) to establish regulations that protect residents and fellows impacted by program or hospital closure, which may include recommendations for:

A. Notice by the training hospital, intending to file for bankruptcy within 30 days, to all residents and fellows primarily associated with the training hospital, as well as those contractually matched at that training institution who may not yet have matriculated, of its intention to close, along with provision of reasonable and appropriate procedures to assist current and matched residents and fellows to find and obtain alternative training positions that minimize undue financial and professional consequences, including but not limited to maintenance of specialty choice, length of training, initial expected time of graduation, location and reallocation of funding, and coverage of tail medical malpractice insurance that would have been offered had the program or hospital not closed;

B. Revision of the current CMS guidelines that may prohibit transfer of funding prior to formal financial closure of a teaching institution;

C. Improved provisions regarding transfer of GME funding for displaced residents and fellows for the duration of their training in the event of program closure at a training institution; and

D. Protections against the discrimination of displaced residents and fellows consistent with H-295.969.
3. Our AMA will work with the Accreditation Council for Graduate Medical Education, Association of American Medical Colleges, National Resident Matching Program, Educational Commission for Foreign Medical Graduates, Centers for Medicare and Medicaid Services, and other relevant stakeholders to identify a process by which displaced residents and fellows may be directly represented in proceedings surrounding the closure of a training hospital or program.

4. Our AMA will work with the Accreditation Council for Graduate Medical Education, Association of American Medical Colleges, National Resident Matching Program, Educational Commission for Foreign Medical Graduates, Centers for Medicare and Medicaid Services, and other relevant stakeholders to: A. Develop a stepwise algorithm for designated institutional officials and program directors to assist residents and fellows with finding and obtaining alternative training positions;

B. Create a centralized, regulated process for displaced residents and fellows to obtain new training positions; and

C. Develop pathways that ensure that closing and accepting institutions provide liability insurance coverage to residents, at no cost to residents.

<u>Protection of Resident and Fellow Training in the Case of Hospital or Training Program Closure D-310.948</u> Our AMA will:

1. ask the Centers for Medicare & Medicaid Services (CMS) to stipulate in its regulations that residency slots are not assets that belong to the teaching institution;

2. encourage the Association of American Medical Colleges (AAMC), American Association of Colleges of Osteopathic Medicine (AACOM), and National Resident Matching Program (NRMP) to develop a process

similar to the Supplemental Offer and Acceptance Program (SOAP) that could be used in the event of a sudden teaching institution or program closure;

3. encourage the Accreditation Council for Graduate Medical Education (ACGME) to specify in its Institutional Requirements that sponsoring institutions are to provide residents and residency applicants information regarding the financial health of the institution, such as its credit rating, or if it has recently been part of an acquisition or merger;

4. work with AAMC, AACOM, ACGME, and relevant state and specialty societies to coordinate and collaborate on the communication with sponsoring institutions, residency programs, and resident physicians in the event of a sudden institution or program closure to minimize confusion, reduce misinformation, and increase clarity;

5. encourage ACGME to revise its Institutional Requirements, under section IV.E., Professional Liability Insurance, to state that sponsoring institutions must create and maintain a fund that will ensure professional liability coverage for residents in the event of an institution or program closure; and

6. continue to work with ACGME, interested specialty societies, and others to monitor issues, collect data, and share information related to training programs run by nonprofit and for-profit entities and their effect on medical education.

## Residency Interview Schedules H-310.998

1. Our AMA encourages residency and fellowship programs to incorporate in their interview dates increased flexibility, whenever possible, to accommodate applicants' schedules. Our AMA encourages the ACGME and other accrediting bodies to require programs to provide, by electronic or other means, representative contracts to applicants prior to the interview. Our AMA encourages residency and fellowship programs to inform applicants in a timely manner confirming receipt of application and ongoing changes in the status of consideration of the application.

2. Our AMA will: (a) oppose changes to residency and fellowship application requirements unless (i) those changes have been evaluated by working groups which have students and residents as representatives, (ii) there are data which demonstrates that the proposed application components contribute to an accurate representation of the candidate, (iii) there are data available to demonstrate that the new application requirements reduce, or at least do not increase, the impact of bias that affects medical students and residents from underrepresented minority backgrounds, and (iv) the costs to medical students and residents are mitigated; and (b) continue to work with specialty societies, the Association of American Medical Colleges, the National Resident Matching Program and other relevant stakeholders to improve the application process in an effort to accomplish these requirements.

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