

## REPORTS OF THE COUNCIL ON MEDICAL EDUCATION

The following reports were presented by John P. Williams, MD, Chair:

### 1. THE IMPACT OF PRIVATE EQUITY ON MEDICAL TRAINING

*Reference committee hearing: see report of Reference Committee C.*

#### **HOUSE ACTION: RECOMMENDATIONS ADOPTED REMAINDER OF REPORT FILED**

*See Policies H-215.981, H-310.901, H-310.904, H-310.929, H-310.943,  
D-310.947 and D-310.948*

#### INTRODUCTION

American Medical Association (AMA) [Policy D-310.947](#), adopted at the June 2021 Special Meeting, asks that our AMA:

Work with relevant stakeholders including specialty societies and the Accreditation Council for Graduate Medical Education to study the level of financial involvement and influence private equity firms have in graduate medical education training programs and report back to the House of Delegates with possible publication of their findings.

This report is in response to the directive. Testimony on this item raised concern for recent incidents where private equity has impacted graduate medical education (GME) funded training positions, such as the Hahnemann closure in the fall of 2019. Additional testimony recognized the importance of recent Council reports on similar topics.

#### BACKGROUND

*What is private equity?*

The [American Investment Council](#) (AIC), an advocacy and resource organization established to develop and provide information about the private investment industry, describes private equity (PE) such that “private equity invests capital in companies that are perceived to have growth potential and then works with these companies to expand or turnaround the business. This capital is contributed by large institutional investors and is organized into a fund. After three to seven years of ownership and working with the company, the fund manager will seek to ‘exit’ the company by taking the business public or selling it for a higher valuation than it was purchased. This exit distributes profits from the sale (‘returns’) to the investors in the fund and the fund manager.”<sup>1</sup>

The [Medicare Payment Advisory Commission](#) (MedPAC) adds to this definition: “Private equity refers broadly to any activity where investors buy an ownership, or equity, stake in companies or other financial assets that are not traded on public stock or bond exchanges.”<sup>2</sup>

According to the [National Association of Securities Dealers Automated Quotations](#) (NASDAQ), a private equity firm is one that uses its own capital or capital raised from investors to take companies private with the aim of running them better and later taking them public or selling them at a profit.<sup>3</sup>

Simply put, PE firms invest in health systems and in health care to make a profit. Investors pool money to accumulate large sums of cash that are used to invest through the purchase of a business (e.g., physician practice or health system) with the goal of streamlining operations and cutting costs to make a short-term profit after selling the business. Sometimes, the return on the investment can be 20-30% of the original investment.

Strategies used by PE firms to ultimately turn a profit include the merging of multiple health care practices, reducing staff, closing down portions of a hospital or health care practice’s operations, focusing on growing a specific aspect of a health care practice’s offerings, and renegotiating reimbursement rates with insurers.<sup>4</sup> As PE is not publicly traded, there is little transparency to the public regarding the business dealings of the PE firm, and with a focus on short-term profit, there is often little regard to the downstream effects of these strategies on employees, patients, or in the present case, the residents/fellows training at the institution.

In 2020, it was found that hospitals acquired by PE were associated with larger increases in net income, charges, charge to cost ratios, and case mix index as well as with improvement in some quality measures when compared to control.<sup>5</sup> In 2018, PE hospitals were on average located in lower-income, more-rural areas and had fewer patients discharged and employees per bed.<sup>6</sup>

In recent years, the AMA Council on Medical Education and Council on Medical Service have studied related issues as demonstrated in their reports, “[Graduate Medical Education and the Corporate Practice of Medicine](#)” (CME 2-N-20), “[Protection of Resident and Fellow Training in the Case of Hospital or Training Program Closure](#)” (CME 3-N-20), “[Corporate Investors](#)” (CMS 11-A-19) and related [issue brief](#), and “[Sources of Funding for Graduate Medical Education](#)” (CME 1-I-15). Further, the AMA developed a guide designed to answer some of the [frequently asked questions](#) posed by trainees faced with closure of their hospital or residency program.

### *Extent of Private Equity in Health Care*

Investments by PE firms in U.S. health care increased from \$23.1B in 2015 to \$78.9B in 2019<sup>7</sup> with hospitals that are owned by PE firms being a subset of investor-owned hospitals that has increased in recent years.

<u>American Hospital Association (AHA) Annual Survey</u>	<u>FY 2019<sup>8</sup></u>	<u>FY 2015<sup>9</sup></u>
Total Number of All U.S. Hospitals <sup>8</sup>	6,090	5,564
Number of U.S. Community Hospitals (i.e., all nonfederal, short-term general, and other special hospitals)	5,141	4,862
• Number of Nongovernment Not-for-Profit Community Hospitals	2,946	2,845
• Number of Investor-Owned (For-Profit) Community Hospitals	1,233	1,034
• Number of State and Local Government Community Hospitals	962	983
Number of Federal Government Hospitals	208	212
Number of Nonfederal Psychiatric Hospitals	625	401
Other Hospitals (i.e., nonfederal long term care hospitals and hospital units within an institution such as a prison hospital or school infirmary)	116	89

While there is no clear picture of how many for-profit hospitals, or those owned by PE, have one or more GME programs, the most recent results of the National GME Census of active GME programs provide a glimpse. Results indicated that 7,695 programs’ trainees are paid by a nonprofit entity; 1,620 programs’ trainees are paid by a for-profit; while 3,550 programs did not answer.<sup>10</sup> When analyzing this data, it is important to note that the salary-paying entity may not always be the same as the sponsoring institution or hospital.

As the number of investor-owned (for-profit) hospitals grows in GME, the greater the dependency of GME programs on their stability and success. Conversely, the closure of such institutions directly impacts GME programs including the residents, fellows, and physician faculty who rely on them for training and employment. One such recent example was the sudden closure of Hahnemann.

### EXAMPLES OF PRIVATE EQUITY AND FOR-PROFIT OWNERSHIP OF GME

#### *Closure of Hahnemann University Hospital*

In fall 2019, Hahnemann University Hospital (HUH), a 500-bed teaching hospital and community safety net in downtown Philadelphia, closed. The closure was the culmination of 20+ years of financial troubles and changing ownerships. Tenet Healthcare Corporation, a for-profit health care company, acquired the hospital in 1998. American Academic Health System, LLC (AAHS), an affiliate of the private equity firm Paladin Healthcare Capital, LLC, purchased HUH in 2018 in partnership with a Chicago-based health care real estate private equity firm, Harrison Street Real Estate Capital, LLC. At the time, suspicions loomed that the purchase of the hospital was really a means to acquire and develop the valuable Center City Philadelphia real estate property rather than to provide patient care in service to the community. While there is a state law that a hospital cannot be closed with less than 90 days’ notice, AAHS filed for bankruptcy and shut down HUH’s service to the community in about half that time. This left 572 trainee physicians without an Accreditation Council for Graduate Medical Education (ACGME)-accredited program in which to continue their medical education.<sup>11</sup> This included 140 newly matched trainees and 59 individuals on J-1 visas who were required to find a position with another GME program within 30 days of the hospital closing or face deportation from the U.S.<sup>12</sup>

To improve their financial gain, AAHS attempted to sell its government-funded residency slots as “assets” during bankruptcy proceedings, which was allowed by the presiding judge at the time.<sup>6</sup> Bids included a coalition of local hospitals (\$55 million) intending to keep the residency positions in the Philadelphia region, as well as a health care firm in California (\$60 million) that wanted to increase the number of funded physicians in its hospitals. However, the Centers for Medicare & Medicaid Services (CMS) objected to the judge’s ruling, arguing that the allocation of Medicare-funded slots is their sole purview and that the auction would set a dangerous precedent. As a result, the auction did not go forward,<sup>13</sup> and the residency positions were redistributed by CMS using their existing process which prioritizes local hospitals without charge.<sup>14</sup>

Not only were these professionals left to endure the stress of finding new training positions elsewhere throughout the country, but they were also faced with the loss of the long-tail medical liability insurance coverage needed to continue practice. The [AMA](#) and other organizations took action in support of the affected trainees. Specifically, the AMA joined the Pennsylvania Medical Society (PAMED) and the Philadelphia County Medical Society (PCMS), as well as the Educational Commission for Foreign Medical Graduates (ECFMG), Association of American Medical Colleges (AAMC), and ACGME to pursue a solution for the physicians affected by the closure. This advocacy included encouraging the purchasing of tail coverage by the institutions that accepted HUH trainees among a host of other measures.

Ultimately, a federal bankruptcy judge approved a settlement with AAHS in early 2020 to pay for the long-tail medical liability insurance coverage for the residents, fellows, and alumni of the hospital’s training programs.<sup>15</sup> Since Pennsylvania required that all physicians have tail coverage from previous employers, this effort was particularly important.<sup>16</sup>

Together, the AMA and AMA Foundation committed \$70,000 to assist the trainees affected. Many other organizations contributed to the Hahnemann University Displaced Resident Fund including the American Osteopathic Association, American Board of Medical Specialties, Council of Medical Specialty Societies, National Board of Medical Examiners, PAMED, PCMS, and AAMC. In addition, the ECFMG, now a member of Intealth, created a fund for trainees who had J-1 visas.<sup>17</sup> The ACGME also took several steps to support these trainees such as the enactment of their [Extraordinary Circumstances Policy](#) to expediently arrange for the transfer of trainees, drafting a compilation of available positions, and making two separate filings with the bankruptcy court.<sup>18</sup>

#### *Closure of Emergency Medicine department at Summa Health Care*

[Summa Health](#)<sup>TM</sup> is an integrated nonprofit health care delivery system in the Akron, OH area that sponsors 19 GME programs, of which 15 are ACGME-accredited residency and fellowship programs. While Summa’s employed physician group provided most of the educational and clinical services for these programs, the emergency medicine (EM) services (i.e., staffing of five emergency departments; faculty for EM residency program) were provided by a contracted third-party vendor owned by the private equity company U.S. Acute Care Solutions (USACS). A contract dispute between Summa Health<sup>TM</sup> and USACS in late 2016 ended in nonrenewal of the longstanding contract. The EM service physicians were forced to leave the institution and program. The program acquired new leadership and faculty but ultimately lost accreditation causing disruption of services for patients as well as for the trainees within the EM residency program.<sup>19</sup>

The experience for the trainees who went through the change in groups and subsequent closure of the program was difficult for all and devastating for some. It was particularly difficult for the PGY3s given they had long-standing relationships and mentoring from their former attendings, faculty, and program leadership, not to mention a familiarity and comfort from working in a stable learning environment. The AMA, AMA Foundation, and others offered financial support to the affected trainees in need of relocating.<sup>20</sup>

This experience led to a revision of Summa’s [GME Disaster or Interruption in Patient Care Policy](#) as well as a comprehensive restructuring of the institutional contracting process. This overhaul included clarifying the definition of a disaster to include a “catastrophic loss of faculty”; reinforcing the authority and responsibilities of the GME Committee (GMEC) members to call an emergency GMEC meeting to discuss a potential impending disaster; making transparent the disaster action steps and procedure; creating a linkage of the GME Disaster Policy to the new contracting process; cataloging all clinical and education service agreements and contracts that involved third-party groups; and quarterly review by the Designated Institutional Official (DIO) of the status of each agreement at a GMEC meeting to provide the committee oversight of this aspect of the learning environment. USACS continues to invest in

education and has shared best practices from other institutions where they provide care and operate residencies. In September 2019, Summa's EM Program was given initial accreditation status by the ACGME effective immediately.<sup>21</sup> Emergency medicine training at Summa is once again thriving.

### *Example of extensive PE ownership of GME*

[HCA Healthcare](#) is the nation's leading provider of GME and has 5000+ trainees working across 61 hospitals in 16 states. They were responsible for 20% of the 667 new EM residency slots created in the U.S. from 2016-2019.<sup>22</sup> In 2006, HCA was acquired by Bain Capital, Kohlberg Kravis Roberts & Co. (KKR), and Merrill Lynch and facilitated massive multi-hospital consolidation with seemingly marginal benefit for patients as well as increased cost-to-charge ratios/profits.<sup>23,24,25</sup> In 2011, HCA became a public company again. In the meantime, the PE investors had turned a \$956 million contribution into \$3.14 billion in proceeds.<sup>25</sup> HCA bought back 3.8 million shares from Bain for about \$294 million and spent \$750 million to buy back 9.4 million of its common shares from KKR in 2016.<sup>26</sup> The potential impacts of HCA's enormous market share within GME is concerning and highlights the need for publicly funded, independent research on the impact of private equity in GME and health care delivery alike.

## PRIVATE EQUITY AND THE GME LEARNING ENVIRONMENT

As mentioned previously, PE is fundamentally driven by the desire to generate a positive margin for investors through a variety of strategies. Ultimately, these strategies are to grow, repackage, and sell.<sup>27</sup> While it does not appear that PE invests in hospitals, health systems, or practices with the intent of eliminating or dramatically altering GME, such programs as well as their trainees can be impacted. Examples include but are not limited to:

- Erosion of educational mission: One key outcome of GME training is the intentional exploration of self-directed learning and pursuit of scholarly activity. The focus of PE is on creating a wide profit margin through operational decisions and efficiencies, and these are likely to directly or indirectly impact a trainee's ability to learn. Education and learning require time and mentoring, especially in GME, and thus it is inherently inefficient. PE firms driven toward profit are likely to eliminate or minimize key aspects of trainee professional development.
- Disruption to trainee supervision: A sudden transition of leadership can result in new faculty not familiar with ACGME common program requirements and/or institutional requirements which mandate resident supervision of trainees.
- Residents are not employees: Trainees are commonly in a unique situation in which they are able to provide significant value to a health system by caring for patients and making independent decisions that generate clinical revenue. For institutions driven by profit, however, there may be undue pressure for trainees to contribute to the positive margin either through their medical practice or being utilized as a relatively low-cost employee (e.g., shift scheduling).
- Replacing residents with non-physicians: There is concern that some for-profit institutions are driving to replace resident physicians with non-physicians in order to not be beholden to regulatory rules, reduce recruiting budgets, and pay lower cumulative salaries over the long term.
- Academic instability: The situation at Hahnemann has been described as a "...concerning trend that underscores the dissonance in mission of private equity and academic medicine."<sup>28</sup> This dissonance creates an unstable, if not adverse, working and learning environment that unquestionably impacts trainees and their professional growth.

## IMPACT ON PHYSICIANS IN TRAINING

As referenced in the above examples, trainees and faculty are significantly impacted by disruptions to GME imposed by PE. The interruption to a trainee's education and experience can impact their ability to finish as scheduled, which has natural implications for their future careers and leaves them at financial risk. The potential loss of long-tail medical liability insurance coverage needed to continue practice as well as confusion regarding the amount of funding that would travel with a transferring trainee from a suddenly closed program is problematic.

Additionally, the stress of uncertainty, having to find a new GME program, needing to upend their lives to move to the next location, and the cost of moving and rehoming place a heavy weight on the shoulders of residents, faculty, and their families. This problem is further compounded by the likely change of mentorship and planned educational trajectory for learners as they re-enter at another institution.

International medical graduates (IMGs) with J-1 visas must adhere to rules set forth by their J-1 visa status. In the event of a sudden hospital/GME program closure, the implication for these trainees is that they face deportation to their home country if they do not find a new position at another GME program within 30 days of such closure. This short timeline presents significant challenges to professional continuity for reasons in which the IMG has no control.

Further, the trainees may not have received clarity from all the boards on how the closure could impact the number of rotations or number of procedures (especially those nearing the end of training) they need to complete. The ABIM did state that “all accredited training continues to meet ABIM’s policies for initial certification eligibility. Additionally, should a trainee have a ‘gap’ in training due to relocation, we are committed to working with you and the receiving institutions/program directors to ensure that the maximum flexibility possible under ABIM’s Leave and Deficits in Required Training Time policies can be applied.”<sup>29</sup>

As a result of the Hahnemann closure, CMS changed its rules related to the transfer of indirect medical education (IME) and direct graduate medical education (DGME) funding to accepting institutions. Current Medicare policy allows a temporary cap adjustment for hospitals that accept displaced residents from a hospital or program that is closing so that these hospitals can receive Medicare funding for the displaced residents for the duration of their training. The definition of a displaced resident was such that the resident be physically present at the hospital training on the day prior to or the day of hospital or program closure; however, the revised definition now states that a resident will be considered displaced from the day the hospital or training program publicly announces the closure.<sup>30</sup> This rule, however, does not impact GME trainees whose salaries are not paid for through Medicare funds (e.g., trainees in programs that are not accredited by the ACGME, such as sub-subspecialties that receive approval/certification from specialty societies). Without guarantees for ongoing trainees, the educational continuity of these learners is dramatically impacted.

The impact on the income of trainees is another important consideration. One study found that while there was significant growth of newly ACGME accredited for-profit affiliated EM residency programs from 2016–2021, the for-profit affiliated programs paid lower salaries to first-year trainees than the nonprofit affiliated programs (even after controlling for other factors that could influence salary). It concluded that better oversight of the salary determination process is needed to protect trainees from underpayment and ensure equity.<sup>31</sup> While this study was specific to EM programs, there could be broader implications to other specialties where PE investment is a factor.

Finally, the emotional and psychological toll on trainees working in an unfamiliar, possibly unwelcoming, learning environment likely has significant implications on professional identity formation. Most trainees do not understand and have not received formal education regarding the corporate practice of medicine and thus may not understand or appreciate the economic forces that directly or indirectly impact their education.

### *Public Service Loan Forgiveness Program*

The involvement of private equity can also impact a physician’s eligibility for the [Public Service Loan Forgiveness Program](#) (PSLF). The PSLF Program forgives the remaining balance on an individual’s direct loans after making 120 qualifying monthly payments under a qualifying repayment plan while working full-time for a qualifying employer. From the 2019 data presented in the AHA table above, 4,116 hospitals are PSLF-eligible, or roughly about 68 percent of hospitals in the U.S. Although most residency and fellowship programs are in nonprofit institutions, the for-profit or nonprofit status of programs is not generally readily discernible to a medical student or resident investigating training options. Additionally, residents and fellows who are training in a nonprofit university-based residency or fellowship program will be excluded from the PSLF Program if they are officially employees of an affiliated for-profit hospital or health system. During the match process, medical students may not be aware of or have access to information about the for-profit status of the entity that will pay their salary as GME often takes place within complicated institutional arrangements of “sponsoring” and “participating” institutions. Even if residents and fellows rotate to several nonprofit clinical sites and funds are contributed to that salary by nonprofit or government institutions, the institution writing the salary check may not be a nonprofit and thus not be a qualifying employer for the PSLF Program. This system can create multiple hurdles for physicians hoping to enter the PSLF Program and means that students will need to be cautious about choosing institutions as part of the residency matching process and physicians must do the same when picking their future place of employment.

In July 2022, the Department of Education (DOE) announced [proposed rule changes](#) including amendments to regulations governing PSLF in the Direct Loan program to improve the application process and to clarify and expand



definitions for full-time employment, qualifying employers, and qualifying monthly payments. The AMA responded to the open comment period encouraging the DOE to adopt the clarifying language developed by the California Medical Association and Texas Medical Association following the definition of “employee” or “employed” so that CA and TX physicians working full-time in private nonprofit hospitals and other organizations that meet the definition of “public service organization” and satisfy all the other PSLF requirements may lawfully participate in the program. The AMA letter also encouraged extension of the current PSLF waiver deadline and expansion of the program so that more associations and a larger range of nonprofits be considered “qualified employers.” Further, the letter urged reconsideration of the proposed definition of “public education service” as being too narrow and unclear, as well as reconsideration of the proposal which would allow a total and permanent disability discharge application to be certified by a nurse practitioner, physician’s assistant, or a licensed certified psychologist, in addition to an MD or DO.

## PERSPECTIVES FROM STAKEHOLDERS

Medical specialties that have notably attracted the majority of PE investment include dermatology, orthopaedics, radiology, cardiology, gastroenterology, urgent care/emergency medicine, anesthesiology, and ophthalmology.

To illustrate, dermatology practices represent 15 percent of recent private equity acquisitions of medical practices even though dermatologists account for only one percent of physicians in the U.S.<sup>32</sup> PE firms invest in dermatology management groups (DMGs) which operate multiple clinics and have been known to acquire smaller, physician-owned practices. Research suggests that this consolidation of dermatology practices may be associated with changes in practice management and that PE firms have a financial stake in an increasing number of dermatology practices in the U.S.<sup>33</sup> PE’s interest in dermatology points to several factors including: treatment of skin cancer, which is the most common cancer in the U.S.<sup>34</sup>; a growing older population in need of skin care; a specialty with a history of fragmentation; demand for dermatologists; and profitability of the specialty as well as its specialized services such as Mohs and dermatopathology.<sup>35</sup> However, there are considerations for dermatologists. As stated by AMA President Jack Resneck, Jr., MD, “Practice acquisitions at inflated prices in a competitive quest to quickly consolidate fragmented markets and sell practices at a profit to future investors may eventually lead to bankruptcies, leaving dermatologists without practices and patients without services.”<sup>36</sup> Further, the impact on dermatology training programs is unclear. The American Academy of Dermatology and American Board of Dermatology do not appear to have issued statements regarding private equity and its role in the specialty or impact on GME.

Another example of PE growth is within ophthalmology, for reasons similar to dermatology. As of 2019, 30-35 PE firms were in this market.<sup>27</sup> PE’s focus is on large and regionally important practices as well as those with a strong ambulatory surgery center (ASC) component. It is believed that such interest in ASCs will increase, as “stable ASC profits and comparatively low enterprise complexity are most in keeping with a corporate environment—much more so than the massive complexity and volatility of the underlying practices themselves.”<sup>46</sup> The American Academy of Ophthalmology (AAO) notes, “Purchases of private equity in the health care market have soared in recent years with hospitals and larger practice acquiring smaller practices. The Academy urges every physician who is considering a practice equity acquisition to perform careful due diligence and seek good counsel.” The [AAO](#) offers information to physicians who are considering such opportunities.<sup>47</sup>

In April 2022, the American College of Emergency Physicians (ACEP) issued a statement on Private Equity and Corporate Investment in Emergency Medicine. In it, they expressed increased concerns about the expanding presence of PE and corporate investment in health care, including emergency medicine.<sup>48</sup>

Prior to this, the American Academy of Emergency Medicine (AAEM) Resident and Student Association issued an open letter addressing their concerns with regards to training in an environment influenced by corporate entities. Specifically, they urge the profession to, “Purge our specialty societies from the influence and funding from corporate entities” among other recommendations.<sup>49</sup> Further, this letter calls for a moratorium on new EM residency training programs until issues are addressed, namely concerns about program quality as well as the oversupply of EM physicians.

Likewise, a 2021 position paper from the American College of Physicians (ACP) concluded, “Ultimately, professionalism, medical ethics, and the patient-physician relationship must guide how physicians navigate the business side of medicine. Nonprofits must act like nonprofits and have a community-oriented mission, private equity firms and investor-owned organizations must attend to the needs of patients and not just shareholders, and physicians should not have a financial stake in an organization with which they have a referral relationship.”<sup>50</sup>

The ACGME is actively monitoring this situation as indicated in the 2021 National Reporting of Findings from their Clinical Learning Environment Review (CLER) Site Visits. This report noted, “Over the past few years, U.S. health care has experienced a number of accelerated changes. There has been a dramatic increase in mergers and acquisitions of hospitals and related health care entities, resulting in increasingly large and complex health care organizations. There has also been rapid entry of private equity in ownership of physician group practices, particularly among certain specialty-based clinical practices.” By examining clinical learning environments (CLE) during this rapid evolution of the U.S. health care system, the ACGME can illuminate the challenges and opportunities related to how CLEs engage their trainees in planning for and implementing system changes. ACGME programs continue to assist the GME community in testing and sharing new approaches to improving complex challenges in the CLE. Also, the ACGME will revise its institutional requirements in 2022 as part of a 10-year major revision cycle. Thus, the CLER Evaluation Committee is studying the results of their current report and past reports to highlight opportunities for improvement to be considered by the Institutional Review Committee.<sup>51</sup>

Despite the significant level of concern that has been expressed, not all stakeholders have implemented policies designed to combat the impact of PE on GME. The associations and societies that represent residents and physicians should have a vested interest in the impact that PE may have on trainees who belong in the GME programs of said specialties. However, few have released policy statements or positions on the subject; for those who have not, such action may be considered. Further, the water gets muddied when physicians associated with PE firms are outspoken in their societies or if the leadership of such societies has financial relationships with PE-backed management firms.

Clearly there is concern about PE and its impact on the practice of medicine, but little is known or commented about the impact of PE on GME, whether that be for an individual residency program or for an institution.

#### CHANGES TO DATE

As a result of the Hahnemann closure, CMS implemented a rule change related to the transfer of GME funding from one institution to another in the case of sudden closure of an institution or a program. As described earlier, this change updated the definition of a “displaced resident” and applies to residents currently training in the closing program as well as residents who are not physically present because they have not started training or do not intend to return to training at the closing institution.<sup>30</sup> Allowing the closing hospital to temporarily transfer the slots as soon as the closing is made public allows trainees flexibility in finding new programs and allows for more certainty in the continuity of training. This change was encouraged by AMA and AAMC.<sup>52</sup>

The Summa example provides other changes that have occurred at an institutional or systemic level that have helped to optimize training at that institution while also taking provisional steps to prevent dramatic closures from recurring in the future.

While positive developments, there remains concern that the positive changes implemented to date are only temporary and may not lead to lasting change or prevent dramatic closures from happening again as a result of PE investment.

#### *Proposed federal legislation*

In October 2021, the Stop Wall Street Looting Act ([S. 3022](#)) was introduced to subject certain private funds to joint and several liability with respect to the liabilities of firms acquired and controlled by those funds. The sponsor described it as “a comprehensive bill to fundamentally reform the private equity industry and level the playing field by forcing private investment firms to take responsibility for the outcomes of companies they take over, empowering workers, and protecting investors.”<sup>53</sup> A similar bill by the same name, [H.R. 5648](#), also was introduced. Such legislation could pave the way for greater scrutiny and accountability of PE, and ultimately, more protection for trainees and residency programs.

#### RELEVANT AMA POLICY

The AMA has extensive policy addressing the financial involvement of for-profit institutions in GME and the influence of private equity firms on the practice of medicine. The most specific policies related to this topic are as follows:

- [D-310.948](#), “Protection of Resident and Fellow Training in the Case of Hospital or Training Program Closure,” addresses concerns related to the protection of residents and fellows in the case of training program closures and specifically encourages the AMA to work with other stakeholders to ensure that GME trainees can continue safely on their training pathway despite needing to change institutions mid-training.
- [H-310.904](#), “Graduate Medical Education and the Corporate Practice of Medicine,” acknowledges that the learning environment for trainees must be free of conflict between fiduciary responsibilities of an institution and the educational mission.
- [H-310.943](#), “Closing of Residency Programs,” provides recommendations for some medical education regulatory bodies to actively monitor GME programs for non-educational closing and accommodate those trainees who are impacted when GME programs close for this reason. In addition, it calls for federal regulation to increase transparency and accountability of the training institution in the event of hospital or training program closure.
- [H-310.929](#), “Principles for Graduate Medical Education,” identifies a list of principles for GME including the institutional responsibility as it relates to supporting trainees and their program as well as promoting an environment that is conducive to learning.
- [H-160.891](#), “Corporate Investors,” provides a list of detailed guidelines for physicians who are contemplating investor partnerships.
- [H-215.981](#), “Corporate Practice of Medicine,” opposes federal legislation that preempts state laws prohibiting the corporate practice of medicine, offers guidance to state societies, and encourages continued monitoring of the corporate practice of medicine.

These policies addressing PE are listed in full detail in Appendix A.

## SUMMARY AND RECOMMENDATIONS

Understanding of the impact and mitigating any potential negative consequences of PE and for-profit entities in GME will take a concerted effort on the part of the medical and academic communities. There are numerous layers of complexity in what is a rapidly evolving health care practice model and increasing data collection to recognize trends and ultimately outcomes is warranted. AMA Policy D-310.948 instructs the AMA to work with the ACGME to monitor issues related to training programs run by corporate entities and the effect on medical education. Research into this work should continue in concert with affected specialty societies and others.

Specialty associations and societies that represent trainees and physicians have a vested interest in the impact of PE on GME training, yet few have studied the issue and released policy or statements on the subject. The AMA Council on Medical Education encourages this work from the physician and medical education communities.

The AMA must continue to advocate that full GME funding follows trainees of a suddenly closed institution to the new location and that funding stays with the institution for the duration of the displaced resident’s term. For institutions and systems, tail coverage for malpractice insurance should be mandated and institutional transparency increased to trainees on the closure process as well as disclosure of the intent to sell or close. Benefits (such as COBRA) should be continued in instances where new residency programs are not found in a timely manner. Finally, upon a shutdown, all trainees should be protected from being held captive at a hospital that is not actively admitting patients but hasn’t officially “closed.” The AMA must also continue to work with the ACGME, ABMS, and ABOMS to accommodate trainees who have been displaced because of program or institutional closure.

## *Conclusion*

It is likely that the involvement of PE in health care systems, physician practices, and thus, GME programs, is not going away. As this space evolves, sponsoring institutions must be open to many kinds of partnerships that can support excellent residency and fellowship programs. This includes diligent monitoring of these programs to minimize disruptions to training and ensure that continuity of excellent education is maintained. The commitment to the educational mission is not only a commitment to residents, fellows, and faculty, but also to the communities and patients they serve.



The Council on Medical Education therefore recommends that the following recommendations be adopted, and the remainder of this report be filed. That our AMA:

1. Affirm that an institution or medical education training program academic mission should not be compromised by a clinical training site's fiduciary responsibilities to an external corporate or for-profit entity.
2. Encourage GME training institutions, programs, and relevant stakeholders to:
  - a. demonstrate transparency on mergers and closures, especially as it relates to private equity acquisition of GME programs and institutions, and demonstrate institutional accountability to their trainees by making this information available to current and prospective trainees;
  - b. uphold comprehensive policies which protect trainees, including those who are not funded by Medicare dollars, to ensure the obligatory transfer of funds after institution closure;
  - c. empower designated institutional officials (DIOs) to be involved in institutional decision-making to advance such transparency and accountability in protection of their residents, fellows, and physician faculty;
  - d. develop educational materials that can help trainees better understand the business of medicine, especially at the practice, institution, and corporate levels;
  - e. develop policies highlighting the procedures and responsibilities of sponsoring institutions regarding the unanticipated catastrophic loss of faculty or clinical training sites and make these policies available to current and prospective GME learners.
3. Encourage necessary changes in Public Service Loan Forgiveness Program (PSLF) to allow medical students and physicians to enroll in the program even if they receive some or all of their training at a for-profit or governmental institution.
4. Support publicly funded independent research on the impact that private equity has on graduate medical education.
5. Encourage physician associations, boards, and societies to draft policy or release their own issue statements on private equity to heighten awareness among the physician community.
6. Encourage physicians who are contemplating corporate investor partnerships to consider the ongoing education and welfare for trainee physicians who train under physicians in that practice, including the financial implications of existing funding that is used to support that training.
7. Amend Policy [D-310.948](#) "Protection of Resident and Fellow Training in the Case of Hospital or Training Program Closure" by addition to read as follows:

Our AMA: (6) will continue to work with ACGME, interested specialty societies, and others to monitor issues, collect data, and share information related to training programs run by corporate and nonprofit entities and their effect on medical education.

8. Reaffirm the following policies:
  - [H-310.904](#), "Graduate Medical Education and the Corporate Practice of Medicine"
  - [H-310.943](#), "Closing of Residency Programs"
  - [H-310.929](#), "Principles for Graduate Medical Education"
  - H-215.981, "Corporate Practice of Medicine"
9. Rescind AMA Policy D-310.947 as having been accomplished by this report.

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#### APPENDIX A - Relevant AMA Policy

##### Corporate Investors H-160.891

1. Our AMA encourages physicians who are contemplating corporate investor partnerships to consider the following guidelines:
  - a. Physicians should consider how the practice’s current mission, vision, and long-term goals align with those of the corporate investor.
  - b. Due diligence should be conducted that includes, at minimum, review of the corporate investor’s business model, strategic plan, leadership and governance, and culture.
  - c. External legal, accounting and/or business counsels should be obtained to advise during the exploration and negotiation of corporate investor transactions.
  - d. Retaining negotiators to advocate for best interests of the practice and its employees should be considered.
  - e. Physicians should consider whether and how corporate investor partnerships may require physicians to cede varying degrees of control over practice decision-making and day-to-day management.
  - f. Physicians should consider the potential impact of corporate investor partnerships on physician and practice employee satisfaction and future physician recruitment.
  - g. Physicians should have a clear understanding of compensation agreements, mechanisms for conflict resolution, processes for exiting corporate investor partnerships, and application of restrictive covenants.
  - h. Physicians should consider corporate investor processes for medical staff representation on the board of directors and medical staff leadership selection.

- i. Physicians should retain responsibility for clinical governance, patient welfare and outcomes, physician clinical autonomy, and physician due process under corporate investor partnerships.
2. Our AMA supports improved transparency regarding corporate investment in physician practices and subsequent changes in health care prices.
3. Our AMA encourages national medical specialty societies to research and develop tools and resources on the impact of corporate investor partnerships on patients and the physicians in practicing in that specialty.
4. Our AMA supports consideration of options for gathering information on the impact of private equity and corporate investors on the practice of medicine.

#### [Graduate Medical Education and the Corporate Practice of Medicine H-310.904](#)

Our AMA: (1) recognizes and supports that the environment for education of residents and fellows must be free of the conflict of interest created between a training site's fiduciary responsibility to shareholders and the educational mission of residency or fellowship training programs; (2) encourages the Accreditation Council for Graduate Medical Education (ACGME) to update its "Principles to Guide the Relationship between Graduate Medical Education, Industry, and Other Funding Sources for Programs and Sponsoring Institutions Accredited by the ACGME" to include corporate-owned lay entity funding sources; and (3) will continue to monitor issues, including waiver of due process requirements, created by corporate control of graduate medical education sites.

#### [Corporate Practice of Medicine H-215.981](#)

1. Our AMA vigorously opposes any effort to pass federal legislation preempting state laws prohibiting the corporate practice of medicine.
2. At the request of state medical associations, our AMA will provide guidance, consultation, and model legislation regarding the corporate practice of medicine, to ensure the autonomy of hospital medical staffs, employed physicians in non-hospital settings, and physicians contracting with corporately owned management service organizations.
3. Our AMA will continue to monitor the evolving corporate practice of medicine with respect to its effect on the patient-physician relationship, financial conflicts of interest, patient-centered care, and other relevant issues.

#### [Protection of Resident and Fellow Training in the Case of Hospital or Training Program Closure D-310.948](#)

Our AMA:

1. will 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. will 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. will 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. will 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. will 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. will continue to work with ACGME to monitor issues related to training programs run by corporate entities and the effect on medical education.

#### [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.

#### [Principles for Graduate Medical Education H-310.929](#)

Our AMA urges the Accreditation Council for Graduate Medical Education (ACGME) to incorporate these principles in its Institutional Requirements, if they are not already present.

1) **PURPOSE OF GRADUATE MEDICAL EDUCATION AND ITS RELATIONSHIP TO PATIENT CARE.** There must be objectives for residency education in each specialty that promote the development of the knowledge, skills, attitudes, and behavior necessary to become a competent practitioner in a recognized medical specialty.

Exemplary patient care is a vital component for any residency/fellowship program. Graduate medical education enhances the quality of patient care in the institution sponsoring an accredited program. Graduate medical education must never compromise the quality of patient care. Institutions sponsoring residency programs and the director of each program must assure the highest quality of care for patients and the attainment of the program's educational objectives for the residents.

(2) **RELATION OF ACCREDITATION TO THE PURPOSE OF RESIDENCY TRAINING.** Accreditation requirements should relate to the stated purpose of a residency program and to the knowledge, skills, attitudes, and behaviors that a resident physician should have on completing residency education.

(3) **EDUCATION IN THE BROAD FIELD OF MEDICINE.** GME should provide a resident physician with broad clinical experiences that address the general competencies and professionalism expected of all physicians, adding depth as well as breadth to the competencies introduced in medical school.

(4) **SCHOLARLY ACTIVITIES FOR RESIDENTS.** Graduate medical education should always occur in a milieu that includes scholarship. Resident physicians should learn to appreciate the importance of scholarly activities and should be knowledgeable about scientific method. However, the accreditation requirements, the structure, and the content of graduate medical education should be directed toward preparing physicians to practice in a medical specialty. Individual educational opportunities beyond the residency program should be provided for resident physicians who have an interest in, and show an aptitude for, academic and research pursuits. The continued development of evidence-based medicine in the graduate medical education curriculum reinforces the integrity of the scientific method in the everyday practice of clinical medicine.

(5) **FACULTY SCHOLARSHIP.** All residency faculty members must engage in scholarly activities and/or scientific inquiry. Suitable examples of this work must not be limited to basic biomedical research. Faculty can comply with this principle through participation in scholarly meetings, journal club, lectures, and similar academic pursuits.

(6) **INSTITUTIONAL RESPONSIBILITY FOR PROGRAMS.** Specialty-specific GME must operate under a system of institutional governance responsible for the development and implementation of policies regarding the following; the initial authorization of programs, the appointment of program directors, compliance with the accreditation requirements of the ACGME, the advancement of resident physicians, the disciplining of resident physicians when this is appropriate, the maintenance of permanent records, and the credentialing of resident physicians who successfully complete the program. If an institution closes or has to reduce the size of a residency program, the institution must inform the residents as soon as possible. Institutions must make every effort to allow residents already in the program to complete their education in the affected program. When this is not possible, institutions must assist residents to enroll in another program in which they can continue their education. Programs must also make arrangements, when necessary, for the disposition of program files so that future confirmation of the completion of residency education is possible. Institutions should allow residents to form house staff organizations, or similar organizations, to address patient care and resident work environment concerns. Institutional committees should include resident members.

(7) **COMPENSATION OF RESIDENT PHYSICIANS.** All residents should be compensated. Residents should receive fringe benefits, including, but not limited to, health, disability, and professional liability insurance and parental leave and should have



access to other benefits offered by the institution. Residents must be informed of employment policies and fringe benefits, and their access to them. Restrictive covenants must not be required of residents or applicants for residency education.

(8) **LENGTH OF TRAINING.** The usual duration of an accredited residency in a specialty should be defined in the “Program Requirements.” The required minimum duration should be the same for all programs in a specialty and should be sufficient to meet the stated objectives of residency education for the specialty and to cover the course content specified in the Program Requirements. The time required for an individual resident physician’s education might be modified depending on the aptitude of the resident physician and the availability of required clinical experiences.

(9) **PROVISION OF FORMAL EDUCATIONAL EXPERIENCES.** Graduate medical education must include a formal educational component in addition to supervised clinical experience. This component should assist resident physicians in acquiring the knowledge and skill base required for practice in the specialty. The assignment of clinical responsibility to resident physicians must permit time for study of the basic sciences and clinical pathophysiology related to the specialty.

(10) **INNOVATION OF GRADUATE MEDICAL EDUCATION.** The requirements for accreditation of residency training should encourage educational innovation and continual improvement. New topic areas such as continuous quality improvement (CQI), outcome management, informatics and information systems, and population-based medicine should be included as appropriate to the specialty.

(11) **THE ENVIRONMENT OF GRADUATE MEDICAL EDUCATION.** Sponsoring organizations and other GME programs must create an environment that is conducive to learning. There must be an appropriate balance between education and service. Resident physicians must be treated as colleagues.

(12) **SUPERVISION OF RESIDENT PHYSICIANS.** Program directors must supervise and evaluate the clinical performance of resident physicians. The policies of the sponsoring institution, as enforced by the program director, and specified in the ACGME Institutional Requirements and related accreditation documents, must ensure that the clinical activities of each resident physician are supervised to a degree that reflects the ability of the resident physician and the level of responsibility for the care of patients that may be safely delegated to the resident. The sponsoring institution’s GME Committee must monitor programs’ supervision of residents and ensure that supervision is consistent with: (A) Provision of safe and effective patient care; (B) Educational needs of residents; (C) Progressive responsibility appropriate to residents’ level of education, competence, and experience; and (D) Other applicable Common and specialty/subspecialty specific Program Requirements. The program director, in cooperation with the institution, is responsible for maintaining work schedules for each resident based on the intensity and variability of assignments in conformity with ACGME Review Committee recommendations, and in compliance with the ACGME clinical and educational work hour standards. Integral to resident supervision is the necessity for frequent evaluation of residents by faculty, with discussion between faculty and resident. It is a cardinal principle that responsibility for the treatment of each patient and the education of resident and fellow physicians lies with the physician/faculty to whom the patient is assigned and who supervises all care rendered to the patient by residents and fellows. Each patient’s attending physician must decide, within guidelines established by the program director, the extent to which responsibility may be delegated to the resident, and the appropriate degree of supervision of the resident’s participation in the care of the patient. The attending physician, or designate, must be available to the resident for consultation at all times.

(13) **EVALUATION OF RESIDENTS AND SPECIALTY BOARD CERTIFICATION.** Residency program directors and faculty are responsible for evaluating and documenting the continuing development and competency of residents, as well as the readiness of residents to enter independent clinical practice upon completion of training. Program directors should also document any deficiency or concern that could interfere with the practice of medicine and which requires remediation, treatment, or removal from training. Inherent within the concept of specialty board certification is the necessity for the residency program to attest and affirm to the competence of the residents completing their training program and being recommended to the specialty board as candidates for examination. This attestation of competency should be accepted by specialty boards as fulfilling the educational and training requirements allowing candidates to sit for the certifying examination of each member board of the ABMS.

(14) **GRADUATE MEDICAL EDUCATION IN THE AMBULATORY SETTING.** Graduate medical education programs must provide educational experiences to residents in the broadest possible range of educational sites, so that residents are trained in the same types of sites in which they may practice after completing GME. It should include experiences in a variety of ambulatory settings, in addition to the traditional inpatient experience. The amount and types of ambulatory training is a function of the given specialty.

(15) **VERIFICATION OF RESIDENT PHYSICIAN EXPERIENCE.** The program director must document a resident physician’s specific experiences and demonstrated knowledge, skills, attitudes, and behavior, and a record must be maintained within the institution.

## 2. MITIGATING DEMOGRAPHIC AND SOCIOECONOMIC INEQUITIES IN THE RESIDENCY AND FELLOWSHIP SELECTION PROCESS

*Reference committee hearing: see report of Reference Committee C.*

### HOUSE ACTION: RECOMMENDATIONS ADOPTED AS FOLLOWS

#### REMAINDER OF REPORT FILED

*See Policies D-200.985, D-295.963 and D-310.945*

American Medical Association (AMA) Policy D-295.963 (5) calls on our AMA to:

work with appropriate stakeholders to study reforms to mitigate demographic and socioeconomic inequities in the residency and fellowship selection process, including but not limited to the selection and reporting of honor society membership and the use of standardized tools to rank applicants, with report back to the House of Delegates.

This report is in response to that directive and encompasses a review of the current residency selection process, which has led to increasing pressures for both applicant and program; responses to those pressures, including the use of innovative processes and tools; and the potential downstream consequences of the residency selection process on perpetuating demographic and socioeconomic inequities. Examination of these issues is important as disparities in the medical student population are transmitted into residency and fellowship, as matriculants of U.S. medical schools comprise the largest pool of applicants to those programs.

### BACKGROUND

#### *Current Medical Student and Resident/Fellow Demographics*

Racial, ethnic, socioeconomic, and geographic diversity is lacking in the physician workforce. A 2019 study of allopathic medical school programs revealed that, “Hispanic individuals are underrepresented among medical school applicants and matriculants by nearly 70% relative to the age-adjusted US population; black male applicants and matriculants, nearly 60%; black female applicants, nearly 30%; and black female matriculants, nearly 40%. Similarly, [American Indian and Alaska Native] AIAN individuals are underrepresented by more than 60% among applicants and matriculants.”<sup>1</sup> Likewise, data from the Association of American Medical Colleges (AAMC) for academic years 2018-2019 through 2021-22 show little appreciable change in disparities in socioeconomic status among applicants and matriculants to medical school as determined by parental occupation and highest level of education completed.<sup>2</sup> Examination of family income of medical students also indicates a lack of diversity, with approximately three-quarters of medical school matriculants from the top two household-income quintiles—a distribution that has not changed in three decades.<sup>3</sup>

Furthermore, Shipman et al. reported a 15-year decline in the number of medical students from rural areas, to fewer than five percent of all incoming medical students in 2017. In addition, fewer than 0.5 percent of new medical students in 2017 with rural backgrounds were from underrepresented racial/ethnic minoritized groups in medicine (URM). The authors conclude, “Both URM and non-URM students with rural backgrounds are substantially and increasingly underrepresented in medical school. If the number of rural students entering medical school were to become proportional to the share of rural residents in the US population, the number would have to quadruple.”<sup>4</sup>

Current trends, however, have shown positive outcomes stemming from efforts to diversify the physician workforce in recent years. For allopathic medical schools, the number of Black or African American students increased by 21.0 percent from 2020 to 2021, which is likely due to a 9.5 percent increase in matriculants (first-year students), with Black or African American men making the most significant gains. Likewise, matriculants who identify as Hispanic, Latino, or of Spanish origin increased by 7.1 percent (although American Indian or Alaska Native matriculants declined by 8.5 percent during this time period).<sup>5</sup> While these gains are important, disparities remain.

Existing disparities in the applicant pool may also be exacerbated as URM applicants match disproportionately into certain specialties (e.g., primary care fields) versus more competitive and remunerative specialties (e.g., surgical subspecialties). Overall, these disparities influence the composition of the physician workforce, which may have

repercussions for patient care. For example, studies have demonstrated that health outcomes are improved when there is racial concordance between physician and patient.<sup>6</sup>

### *Residency Selection Process*

After completion of medical school, nearly all medical students enter a residency program to continue their training. The competition for these programs can be intense, especially for some specialties with a limited number of residency positions. While competition between students is nothing new, the pressure felt by a student to match into a residency program in their specialty of choice has increased over recent years. A proxy measure for this perceived pressure is an increase in the number of applications per applicant.

	2017	2021	% change
Applicants using Electronic Residency Application Service (ERAS)	45,395	50,830	+12.0%
Average number of applications per applicant	90	101	+12.3%
Average number of applications received by program (all applicants)	1,206	1,058	-13.3%
Average number of applications received by program (USMGs only)	387	469	+21.2%

Source: [AAMC ERAS Statistics website](#)

The reasons for this increase in the number of applications per applicant are numerous and likely include the perception of an increasing number of students applying to a relatively static number of residency positions, the ever-increasing medical education debt in relation to potential future earning potential, and lifestyle priorities of younger generations. The increasing number of applications likely has been exacerbated since the onset of the COVID-19 pandemic, when residency interviews transitioned to a fully virtual format, thereby allowing students to apply to, accept, and conduct interviews at a larger number of programs.

This trend causes significant pressure on program directors, as the administrative burden to review such a large volume of applications per residency position can understandably lead to the use of objective metrics such as GPA, standardized test scores, or honor society membership to narrow a large pool of applications to a more manageable size for detailed review. Program directors can use these and other objective metrics that are reported on the ERAS application as searchable “filters” to help determine which candidates to consider.

The National Resident Matching Program (NRMP) program director survey provides insight into how program directors review applications and choose to offer interview positions. The 2021 survey<sup>7</sup> showed the percentage of program directors (all specialties) who cite a specific factor when considering whether to offer an interview to an applicant and, for those who cite these factors, their average importance on a scale of 1 (not important at all) to 5 (very important). These factors can be broken out into those that reflect academic performance and those that reflect personal characteristics. The following tables highlight the top five factors identified for each category; see Appendix C for graphics illustrating the full data. (Note: The survey response rate was 24.3 percent.)

### *Factors Reflecting Education and Academic Performance*

	Percent Citing as a Factor	Average Weight
United States Medical Licensing Examination® (USMLE®) Step 1 Score	86.2	3.7
Medical Student Performance Evaluation (MSPE/Dean’s Letter)	85.9	4.0
USMLE Step 2 CK Score	78.8	3.8
Grades in required clerkships	74.6	3.9
Any failed attempt at USMLE	74.1	4.4

### *Factors Reflecting Personal Characteristics*

	Percent Citing as a Factor	Average Weight
Letters of recommendation in specialty	85.1	4.2
Personal statement (overall)	83.8	3.9
Diversity characteristics	80.9	4.1
Perceived commitment to specialty	79.5	4.3
Having overcome significant obstacles	75.5	4.1

While providing insight into what program directors consider important, this survey only tangentially looks at the process of filtering the objective metrics that are available through the ERAS application. Other data available in the same survey show that of those programs that use USMLE Step 1 scores in determining which applicants to interview, 60 percent use a set target score while 41 percent require only a passing score. These numbers are 68 percent and 25 percent, respectively, for those programs that screen using USMLE Step 2 CK. Comparable data for graduates of osteopathic medical school programs who take the Comprehensive Osteopathic Medical Licensing Examination of the United States (COMLEX-USA) Level 1 are 51 percent and 31 percent, respectively, with COMLEX-USA Level 2-CE scores 57 percent and 23 percent, respectively. (Note: These data on USMLE and COMLEX were gathered before conversion of USMLE Step 1 and COMLEX Level 1 reporting to pass/fail, which may have impact on program interpretation of Step 1/Level 1 and Step 2/Level 2 scores.)

It should be noted that while considering academic performance as a factor in choosing whom to interview, the weight provided to those factors is relatively low compared to some other factors, with the exception of “any USMLE failure.” Still, a significant number of programs acknowledge filtering applicants based upon academic performance on standardized exams.

One positive sign is that a significant number of program directors use an applicant’s diversity characteristics as an influence on their decision regarding whether to interview that applicant. This practice is in alignment with the intent of the Common Program Requirements of the Accreditation Council for Graduate Medical Education, which state that residency programs and their sponsoring institutions “must engage in practices that focus on mission-driven, ongoing, systematic recruitment and retention of a diverse and inclusive workforce of residents, fellows, faculty members, senior administrative staff members and other relevant members of the academic community.”<sup>8</sup>

Overall, in the 2021 Residency Match, the average number of residency positions for all programs was nine, for which the average number of applications received by a program was 1,013. Of these applications, 506 (49.9 percent) were rejected based upon a standardized screening process and 423 (41.8 percent) received an in-depth holistic review.<sup>7</sup>

Although these data do not provide information on what the standardized screening process entailed, one survey of internal medicine program directors (who can receive up to 3,000 applicants per program) found that USMLE Step 2 CK score, USMLE Step 1 score, and attendance at a specific medical school were the top three filters used for initial application review.<sup>9</sup>

While evidence is limited, there is concern that the use of test scores for this type of initial screening review may introduce and exacerbate racial and socioeconomic biases into the selection process. Numerous studies have demonstrated the link between standardized tests—common in K-12 as well as higher education, along with the medical education continuum—and perpetuation of racial and socioeconomic bias. It is not the examinations themselves, however, that are the issue (for example, the Medical College Admission Test, or MCAT, for which the psychometric literature shows no evidence of bias) but rather the larger and more insidious patterns of systemic racism, which limit economic success and educational opportunity for minoritized populations. Finally, and most importantly, research shows that the ability to pass a test is not especially relevant to one’s ability to provide quality medical care. Emotional intelligence, empathy, and communication are more valuable to the successful practice of medicine than sheer raw intelligence. Indeed, as Lucey and Sagui note, “the MCAT exam is designed to measure applicants’ academic preparation for medical school . . . not . . . to measure or predict their performance related to other, essential competencies, such as interpersonal skills and communication, professionalism, and ethical behavior, or to take the place of other attributes that nonexam aspects of the admissions process evaluate.”<sup>10</sup>

## MEDICAL HONOR SOCIETIES AND THEIR ROLE IN RESIDENCY SELECTION

### *Background*

Similar to concerns about overreliance on standardized testing for advancement in higher education and medical education, the use of medical honor society membership to screen applicants has become a subject of increasing scrutiny in recent years. The next section considers three medical honor societies, their role in the residency selection process, and their respective work to increase attention to diversity and equity.

### Alpha Omega Alpha

Formed in 1902, Alpha Omega Alpha (ΑΩΑ) has as its mission recognizing high educational achievement, honoring gifted teaching, encouraging the development of leaders in academia and the community, supporting the ideals of humanism, and promoting service to others. With over 200,000 members, ΑΩΑ has chapters in the majority of Liaison Committee on Medical Education (LCME)-accredited medical schools in the US, including all historically Black colleges and universities (HBCUs).

According to the ΑΩΑ website, “Membership in ΑΩΑ may be attained as a medical student, resident, fellow, faculty member, alumni, clinician, or distinguished leader in medicine. Each school may elect up to 20% of the graduating class of students, up to 25 residents/fellows, up to 10 faculty, and three to five alumni, who, based on merit, demonstrate the characteristics of excellent physicians in alignment with ΑΩΑ’s mission and values.”<sup>11</sup> Each chapter makes decisions on proposed members in alignment with that institution’s mission statement. As to diversity of membership, individual chapters may collect those data, but at the national level, the ΑΩΑ collects only member name, school, year of induction, and contact information (along with specialty if provided by the member).

### Gold Humanism Honor Society

The [Gold Foundation](#) was founded in 1988 to preserve and elevate the tradition of humanism in health care. To focus and enhance the foundation’s efforts, the [Gold Humanism Honor Society](#) (GHHS) was founded in 2002; this international program now comprises [180 chapters](#) and has close to 45,000 members. As stated in a February 7, 2022, memorandum from the Gold Foundation to the AMA (see Appendix A), the GHHS “identifies medical student exemplars of humanism using a validated, peer-nomination system.” No information is available regarding the diversity of its membership.

### Sigma Sigma Phi

Founded in 1921, [Sigma Sigma Phi](#) (SSP) is an honorary service organization for osteopathic medical students who are selected by peers. Selection into SSP includes a blinded process that considers a minimum grade requirement and good standing by the medical school and then predominately the contributions made by the candidate to serve the community and humanity. Membership is open to all who apply and meet the minimum standards and is limited to no more than 25 percent of the total population of the student body. Students must have completed at least one semester of classroom work and show a high degree of scholarship and service to the college and/or profession. The [SSP website](#) lists 47 chapters as of February 2022. No information is available regarding the diversity of its membership.

### *Role of honor societies in the residency selection process*

Medical honor societies are intended to recognize excellence in academic achievement and other markers of future success as physicians, including scholarship, aptitude for research, humanism, and professionalism. As with other variables previously mentioned, induction into these organizations may be used by program directors and other program personnel to evaluate applicants during the residency selection process; evidence suggests, however, that this factor is not as important as others.

In the 2021 NRMP data set, student membership in ΑΩΑ was 13<sup>th</sup> on the list of important factors of an applicant, cited by 50.6 percent of program directors. Comparable data showed GHHS membership at 14<sup>th</sup> (50.5 percent) and SSP membership at 22<sup>nd</sup> (21 percent).

### *Concern about perpetuating disparities*

Despite the perceived value of recognizing excellence, medical honor societies have come under criticism in recent years as potentially exclusionary if not antithetical to efforts to increase equity, diversity, and belonging (EDB) in medical education and practice. One of the first institutions to address this concern was the Icahn School of Medicine at Mount Sinai, which in 2018 put a moratorium on student nominations to ΑΩΑ “because it determined the selection process discriminates against students of color.”<sup>12</sup> Additionally, in May 2020, the University of California – San Francisco School of Medicine announced that it was suspending its ΑΩΑ affiliation, beginning with the class of 2021, stating, in part, that the selection process and membership limitations may subvert efforts toward increased equity,



through a misplaced emphasis on grades, assessments, and performance and demonstrated bias against non-white students.<sup>13</sup>

Evidence to support these concerns exists. One study, published in *JAMA*, found that, “the odds of AΩA membership for white students were nearly 6 times greater than those for black students and nearly 2 times greater than for Asian students” which “may undermine the pipeline of minorities entering the academic health care workforce.”<sup>14</sup> Other research shows that these trends extend beyond race/ethnicity to socioeconomic status, as students from backgrounds with lower income than their peers were less likely to be AΩA members.<sup>15</sup> This phenomenon has been described as an “amplification cascade,” in which “small differences in assessed performance lead to larger differences in grades and selection for awards,” such that medical students from populations underrepresented in medicine (UIM) “received approximately half as many honors grades as not-UIM students and were three times less likely to be selected for honor society membership.”<sup>16</sup>

#### *Addressing disparities in medical honor society selection*

##### AΩA

The upper limit for the percentage of medical student electees from a given chapter rose from 16 percent to 20 percent in October 2020, when the organization changed its constitution. This change was intended to help reduce the focus on grades as one of the highest determinants of achievement and instead highlight character attributes such as “trustworthiness, character, caring, knowledge, scholarship, proficiency in the doctor-patient relationship, leadership, compassion, empathy, altruism, and servant leadership,” as described on the AΩA website. The move reflects changes at many medical schools to eliminate or reduce grading and use a more holistic approach to selection and advancement.

In 2020, AΩA declared a renewed focus on EDB to mitigate both conscious and unconscious bias in medical education, including assessments of medical students, resident physicians, and faculty in the nominations, selection, and election processes for the AΩA.<sup>17</sup> These principles are reflected in a statement on the [AΩA website](#), which notes that the organization “advocates for diversity in all of its forms – identity, cultural, geographic, experiential, race, ethnicity, gender, age, economic and social status, physical abilities, aptitude, and religious beliefs, political beliefs, and other ideologies.” In addition, an [AΩA award](#) recognizes medical schools that “demonstrate exemplary leadership, innovation, and engagement in fostering an inclusive culture that transforms the ideals of inclusion, diversity, and equity into successful programs.” This work has also included efforts to increase the diversity of the AΩA board. Potential future reforms include the annual reporting of member demographic data; standardized, transparent criteria for selecting members that mitigate the potential for bias; and increased diversity within organizational leadership. Individual chapters also have a role to play, through such actions as implementing holistic review of potential members and annually reviewing newly elected cohorts to ensure that they match the institution’s overall demographics.<sup>18</sup>

##### GHHS

In the memo noted above, the Gold Foundation states, “In the past 23 months, the foundation and the GHHS have pivoted to respond vigorously to the challenges of COVID-19 and have redoubled our efforts to address [diversity, equity, and inclusion] in response to the racial reckoning following George Floyd’s murder to support healthcare in which human interests, values, and dignity predominate.” One of the organization’s actions in this regard is the 2020-2021 GHHS national initiative, “Humanism and Healing: Structural Racism and its Impact on Medicine,” which was followed by a virtual conference of the same name hosted by GHHS. In addition, the Gold Foundation is engaged in a continuous improvement project to determine best practices in diversity and inclusivity through work with the AAMC and individual GHHS chapters. To further the collective understanding of this issue, the Foundation and GHHS are also conducting research on the socio-demographic makeup of GHHS members to determine where differences exist to mitigate future issues. The results of this analysis are forthcoming.

##### SSP

Related to diversity of applicants or honorees, SSP staff indicate that such data are not tracked at the national level, but that meetings with chapter presidents and review of the lists of graduating seniors indicate an appropriate level of diversity. Staff added, “At this point we see no problems with the selection process. This has not been an issue or a problem with our organization, but if this is brought up and becomes a concern, we are ready to do whatever needs to be done to address this situation.”

That said, it is important to provide context and note that DO schools report even lower levels of diversity than allopathic schools. Data from the AAMC and the American Association of Colleges of Osteopathic Medicine Application Services (AACOMAS) show a medical school matriculation rate of 16.9 percent for URM individuals entering allopathic programs<sup>19</sup> versus 12.1 percent for osteopathic programs.<sup>20</sup> In short, the “appropriate” level of diversity may be proportionate to the overall level of diversity in a given field, but that does not mitigate the core issue of inequity.

## ATTEMPTS TO OPTIMIZE THE RESIDENCY SELECTION PROCESS

### *Standardized Tools*

In 2018, the AAMC piloted a standardized video interview (SVI) for emergency medicine programs, with the intent of providing a useful supplementary tool for selecting applicants to interview. Its intent was to measure knowledge of professional behaviors along with interpersonal skills and communication. The SVI, however, was discontinued after three cycles due to lack of interest among both applicants and program directors. A letter from key stakeholders in emergency medicine to the AAMC delineated three reasons for the program’s dissolution: “lack of evidence to support the SVI as an assessment tool, uncertainty around the cost of the program, and student perceptions.”<sup>21</sup>

In addition to helping program directors decide which applicants to interview, it was hoped that use of the SVI would reduce bias in the selection process, as the interviews were scored by trained reviewers not associated with the programs, and the performance of those reviewers was subject to quality control. During the pilot phase, however, this standardized approach was subverted, in that the videos were shared with programs in addition to the scores.

Other standardized approaches to ranking applicants include CASPer (Computer-based Assessment for Sampling Personal characteristics (<https://takealtus.com/casper/>), an online, open-response situational judgment test. CASPer is used by some medical schools in the application process and has seen limited but increasing use in the residency selection process as well. For the 2022-23 application cycle, ophthalmology<sup>22</sup> is piloting the use of the Altus Suite for Graduate Medical Education,<sup>23</sup> comprising supplemental applications that include CASPer and two other tests:

- Snapshot, a one-way video interview designed to assess communication skills, self-reflection, and motivation for the profession, and
- Duet, designed to assess alignment of values between an applicant and a program.

One article notes the use of CASPer in some general surgery residency programs led to a greater number of interview offers to applicants from minoritized populations.<sup>24</sup> With growing interest in ensuring professionalism, communication skills, and emotional intelligence among the physician workforce, the use of this and similar tools may grow. Currently, these are either used too infrequently or by so few programs that evidence is lacking to support or refute their use, especially in the context of equity.

Another tool, described in a 2017 study, “validates a process for selecting and weighting components of the ERAS application and interview day to create a customizable, institution-specific tool for ranking candidates to postgraduate medical education programs.”<sup>25</sup> The authors do not discuss whether this tool might have any impact on equity or diversity of applicants.

### *Holistic Review*

Holistic review of applicants to medical school has been defined as “a flexible, individualized way of assessing an applicant’s capabilities by which balanced consideration is given to experiences, attributes, and academic metrics... and, when considered in combination, how the individual might contribute value as a medical student and future physician.”<sup>26</sup> The authors of a 2021 *NEJM* Perspective note that holistic review “has been shown to enhance diversity without affecting the average grade-point average or exam scores for the entering class.”<sup>27</sup> Extending this process, holistic review has been encouraged to mitigate biases in the residency selection process and shift focus to factors associated with success in residency

While holistic review is viewed favorably by most, its practical use continues to face significant barriers. Widespread adoption is hampered by the growing number of residency applications, which exacerbates the administrative burden of reviewing a large volume of applications per open residency slot and can lead to the use of objective metrics to filter applications. One experiment seeks to use augmented intelligence and “big data” as tools for holistic screening

of applicants to improve the process at the medical school admissions level. Research at New York University Grossman School of Medicine used clustering and other statistical techniques to develop profiles or “signatures” that charted the academic success and trajectory of four different types of applicants: “risers,” “improvers,” “solids,” and “statics.” Using this approach “can more sensitively uncover success potential since it takes into account the inherent heterogeneity within the student population.”<sup>28</sup>

### *Supplemental ERAS Application and Preference Signaling*

A recent effort by the AAMC, the Supplemental ERAS Application, seeks to empower applicants to share more information about themselves using a fair process and driving holistic review in the context of a high volume of applications. A list of FAQs on the AAMC website (see <https://students-residents.aamc.org/applying-residencies-eras/supplemental-eras-application-faq>) indicates that the application is “intended to help programs better identify applicants who are genuinely interested in their program, and whose interests and experience align well with the program’s setting, mission, and goals.” The supplemental application comprises three sections: past experiences about the applicant’s most meaningful work, volunteer or research experiences; geographic information (by region and by urban/rural setting); and preference signals for specific programs. It shows promise as a vehicle to communicate information more relevant to residency selection in these early pilots, but its impact on equity is still unknown. Use of the supplemental application is growing, from the three fields of dermatology, general surgery, and internal medicine in 2021 to 16 specialties planning to use it for the 2023 ERAS season, representing more than 2,900 programs.

### *Interview capping*

In response to the COVID-19 pandemic, ophthalmology, which participates in the San Francisco Match and thus has a different match timeline compared to most other specialties, has placed caps on the number of programs to which a student can apply.<sup>29</sup> This cap is currently at 15 programs for the 2022-23 application cycle.

### *AMA ChangeMedEd Initiative*

The AMA funds a number of collaborative projects to address the transition from medical school to residency. During its ChangeMedEd® 2021 conference, for example, the AMA funded three submissions out of an initial pool of 135 applicants from institutions or collaborations related to improving EDB in medical education. One program looks to view medical student evaluation and assessment through an equity lens to make needed changes that support increased diversity. The other two aim to help future physicians representing first-generation college attendees and students from socioeconomically disadvantaged backgrounds make the transition from community college to medical school in an expeditious and cost-effective way and to provide mentorship and physician role models to young people considering a career in medicine.<sup>30</sup>

## RELEVANT AMA POLICY

The AMA has a number of policies related to increased diversity in medical education and (ultimately) practice, as shown in Appendix B. In particular, edits to D-200.985, “Strategies for Enhancing Diversity in the Physician Workforce,” are noted in this report’s recommendations, to extend policy in favor of holistic review from solely medical school admissions to encompass residency/fellowship program application as well.

## CONCLUSION

A 2020 article describes the opportunity for reform in the program application, interview, and matching process occasioned by the pandemic and the potential for positive impact related to EDB: “This transformation to virtual interviews may allow us to reconsider how our present systems perpetuate sociocultural biases.” The article also notes, “In the current social climate, it is incumbent on program leaders to consider their own processes to minimize bias—both at a personal level for their interviewers, but also at a systemic level within the systems we use.”<sup>31</sup>

A related article from the same authors, in a three-part series on recruiting, interviewing, and ranking residency program applicants, calls on program leadership to “deliberately incorporate procedures that ensure equity.”<sup>32</sup> When considering equity, virtual interviews have both pros and cons. On the plus side, students with less means, who were not as able as their more affluent peers to travel to multiple interviews, had greater access via virtual interviews. On

the other hand, candidates and programs may not attain a true sense of each other, making ranking difficult and likely defaulting to familiarity and certainty, as opposed to choosing the best “fit.” This may perpetuate existing bias. A secondary concern is the potential for a digital divide, with some candidates lacking the technology and/or expertise with visual rhetoric to ensure a professionally enhancing video image; this may also exacerbate existing inequities.

In their 2020 article, Lucey et al. classify equity in medical assessment and advancement as a “wicked problem”—in other words, one that is multilayered, complex, complicated, and rife with inherent conflict and dynamic tensions.<sup>33</sup> Addressing this problem will require continued innovation and sustained attention.

## SUMMARY AND RECOMMENDATIONS

The current pressures related to the residency selection process contributed to the use of readily accessible comparative metrics (e.g., membership in one or more medical honor societies) when determining which applicants to interview. Overreliance on these “objective” measures can unintentionally perpetuate inequities and inhibit diversity in medical education. The current pressures related to the residency selection process contributed to the use of readily accessible comparative metrics (e.g., membership in one or more medical honor societies) when determining which applicants to interview. However, measures once viewed as objective can unintentionally perpetuate inequities and inhibit diversity in medical education. Numerous projects are underway to optimize the residency selection process, including several sponsored by our AMA. Moving forward, the profession must develop a resident selection process that is mutually beneficial for applicants as well as program directors and institutions, while ensuring a commitment to a diverse, equitable, and inclusive workforce.

The Council on Medical Education therefore recommends that the following recommendations be adopted and the remainder of this report be filed:

1. That our AMA encourage medical schools, medical honor societies, and residency/fellowship programs to work toward ethical, equitable, and transparent recruiting processes, which are made available to all applicants.
2. That AMA Policy D-200.985, “Strategies for Enhancing Diversity in the Physician Workforce,” be amended by addition and deletion, to read as follows:

Our AMA will recommend that medical school admissions committees and residency/fellowship programs use holistic assessments of ~~admission~~ applicants that take into account the diversity of preparation and the variety of talents that applicants bring to their education with the goal of improving health care for all communities.

3. That our AMA advocate for residency and fellowship programs to avoid using objective criteria available in the Electronic Residency Application Service (ERAS) application process as the sole determinant for deciding which applicants to offer interviews.
4. That our AMA advocate to remove membership in medical honor societies as a mandated field of entry on the Electronic Residency Application Service (ERAS)—thereby limiting its use as an automated screening mechanism—and encourage applicants to share this information within other aspects of the ERAS application.
5. That our AMA advocate for and support innovation in the undergraduate medical education to graduate medical education transition, especially focusing on the efforts of the Accelerating Change in Medical Education initiative, to include pilot efforts to optimize the residency/fellowship application and matching process and encourage the study of the impact of using filters in the Electronic Residency Application Service (ERAS) by program directors on the diversity of entrants into residency.
6. That our AMA encourage caution among medical schools and residency/fellowship programs when utilizing novel online assessments for sampling personal characteristics for the purpose of admissions or selection and monitor use and validity of these tools.
7. That AMA Policy D-295.963(5), “Continued Support for Diversity in Medical Education,” be rescinded, as having been fulfilled through this report:

Our AMA will: ... ~~work with appropriate stakeholders to study reforms to mitigate demographic and socioeconomic inequities in the residency and fellowship selection process, including but not limited to the selection and reporting of honor society membership and the use of standardized tools to rank applicants, with report back to the House of Delegates.~~

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#### APPENDIX A - Memorandum from the Arnold P. Gold Foundation to the AMA, February 7, 2022

This briefing by The Arnold P. Gold Foundation (Gold Foundation) is in response to the request from the American Medical Association (AMA) for information on honor societies in American medical schools as they relate to equity and diversity in medical education and practice.

The Gold Foundation was founded in 1988 to preserve and elevate the tradition of humanism in healthcare (see <https://www.gold-foundation.org/>). As a means to focus and enhance the foundation's efforts, we created the Gold Humanism Honor Society (GHHS) in 2002 (<https://www.gold-foundation.org/programs/ghhs/>), and it now is an international program with 180 chapters and close to 45,000 members.

As an expression of the Gold Foundation itself, and as described below, the GHHS identifies medical student exemplars of humanism using a validated, peer-nomination system ([McCormack et al., 2007](#)). In the past 23 months, the foundation and the GHHS have pivoted to respond vigorously to the challenges of COVID-19 and have redoubled our efforts to address DEI in response to the racial reckoning following George Floyd's murder to support healthcare in which human interests, values, and dignity predominate.

We appreciate that AMA is also working on ensuring diversity and equity in medical education and practice, and we are pleased to share these updates on our work with the AMA House of Delegates. Should you have any questions regarding this response, please let us know.

#### *Response to AMA regarding the GHHS in American Medical Education and Practice*

The Gold Foundation established the Gold Humanism Honor Society (GHHS) twenty years ago as a signature program to recognize exemplary medical students, residents, and faculty who practice patient-centered care by modeling the qualities of integrity, excellence, compassion, respect, and empathy.

What began in 2002 at only a few medical schools now includes 180 chapters, with more than 3,000 students inducted each year and a total membership that numbers close to 45,000. The GHHS is an active society promoting humanism within medical schools and hospitals. Chapters participate in annual programs such as Thank a Resident Day and Solidarity Week for Compassionate Patient Care, and also undertake individual chapter-initiated projects on their campuses and within their communities. GHHS members are expected to be leaders of humanism on their campus and throughout their careers.

The GHHS leadership structure includes a national Advisory Council of 23 members comprising both the career stages and the broad functions represented in healthcare and academic medicine. The Advisory Council provides guidance and support to the society with committees and working groups, and the GHHS Advisory Council Chair and the Chair-Elect sit on the Gold Foundation Board of Trustees. Medical schools wishing to start a GHHS chapter apply and are thoroughly vetted. As noted, student selection into a GHHS chapter is based on peer nomination using a validated tool ([McCormack et al., 2007](#)). The initial group of peer-nominated students is then typically evaluated by a selection committee that considers academic eligibility, program director evaluations, an additional essay, interview, or other indication of the nominee's demonstrated humanism. While GHHS allows for some flexibility, all selection processes are vetted and approved when a medical school applies for a chapter and then reviewed periodically thereafter.

The Gold Foundation has long understood that equity, diversity, and inclusion are part of the very fabric of humanism. This was further spurred by the pandemics of COVID-19 and racism, which have highlighted inequalities and disparities, and compelled a closer look at flaws within our healthcare system. Within this broad context, the Gold Foundation reviewed all its programming through the lens of diversity, equity, inclusion, and anti-racism and has placed explicit emphasis on these issues within our work and strategic plan. (Click to read [Gold Foundation statement on diversity, equity, inclusion and anti-racism](#))

The GHHS has specifically addressed this topic throughout the past two years in a number of ways, including:

1. Engaging a researcher to assess the demographics of GHHS
2. Establishing a National Initiative in 2020-21 for chapters on the impact of structural racism in medicine, which concluded with a large international conference in May 2021 to share what had been learned, as well as steps that schools and systems could take to begin addressing racism in medicine
3. Engaging in a continuous improvement project to determine best practices in diversity and inclusivity through work with the AAMC and individual GHHS chapters.

#### *Research on GHHS Demographics*

While racial/ethnic disparities in Alpha Omega Alpha (ΑΩΑ) membership have been documented ([Boatright et al., 2017](#)) and formally responded to by the ΑΩΑ ([Byyny et al., 2020](#)), less is known about how the demographic composition of GHHS reflects the diversity of medical schools nationally. One study of GHHS published in *Academic Medicine* in 2019 demonstrated no difference in the likelihood of Black or African-American medical students being inducted into GHHS compared to white medical students ([Wijesekera, et al., 2019](#)).

Recognizing the importance of more deeply understanding the demographic composition of our members, the Gold Foundation decided in 2020 to reach out to an academic researcher to examine this issue. With the assistance of a Gold Foundation Board of Trustees advisory committee, [Dr. Dowin Boatright](#), MD, MBA, MHS, Assistant Professor of Emergency Medicine and Officer for Diversity and Inclusion at Yale School of Medicine, was identified and agreed to include GHHS in his work.

Dr. Boatright and his research team are examining the association between GHHS membership and several aspects of student identity including race/ethnicity, sex, sexual orientation, and socioeconomic status (SES) in a national cohort of medical students.

Although the results are preliminary and currently unpublished, per Dr. Boatright, *so far, they are finding no disparities by sex, sexual orientation, or SES. Additionally, they are finding no difference in the likelihood of membership between Black, Hispanic, and Native American students and white students, but they are seeing some differences between white and Asian students favoring white students. The cause of this disparity is unknown and warrants further examination* (D. Boatright, personal communication, January 19, 2022). Dr. Boatright expects to finalize his analysis and publish later this year, and the Gold Foundation has committed to supporting open access publication of this research.

The Gold Foundation is committed to continuing to transparently assess, understand, and address inequities. To that end, Dr. Boatright notes:

*“Disparities in honor society membership are important to acknowledge and address. Nevertheless, it is unclear if removing honor societies from the ERAS application will solve the underlying problem contributing to these disparities nor ameliorate the downstream implication of these disparities on the physician workforce as medical students could always self-report honor society membership on the ERAS application.*

*Instead, it is likely more important for honor societies, like GHHS, to continuously examine honor society membership for systematic disparities and investigate evidence-based interventions to ensure equity in membership. Moreover, honor societies should be transparent in their findings and make data concerning disparities public. Additionally, as GHHS is committed to doing, the national honor societies should work with local chapters to promote equity and inclusion in membership selection.”* (D. Boatright, personal communication, January 19, 2022)

#### *GHHS Programmatic Focus on Diversity, Equity, Inclusion and Anti-Racism*

GHHS chapters have undertaken many projects dedicated to serving populations most in need. Recent projects include: Engagement in Justice in Middle Tennessee and the Nation (Vanderbilt), Chicago Street Medicine (University of Chicago, Illinois), The Invisible Minority: Healthcare Disparities in Appalachia (West Virginia University), How We Heal: Applying Structural Competency to Care for Immigrant Communities (UC Riverside), and many others.

The events of 2020 compelled GHHS leadership to create a focused National Initiative for 2020-2021 titled “Humanism and Healing: Structural Racism and its Impact on Medicine.” Chapters were encouraged to use their leadership roles to start or extend conversations about racism and its impact on healthcare in their local communities and beyond, to create space for grieving, processing, and bearing witness around this topic, or to take action in one of many powerful ways that humanism can begin to heal. Chapter projects included such activities as:

- Creation of an anti-racism library collection (Cooper Medical School)
- Video Vignettes of Bias and Racism workshop (Central Michigan University)
- Panel discussion titled “A Calculated Risk: Engaging with Black Patients in Discussion About the Covid-19 Vaccine” (Emory University)
- Panel discussion titled “Fad-vocacy Armchair Empathy: Maintaining Social Justice Momentum” (joint project with Howard University and University of Michigan)
- Panel discussion titled “The Dismissal of Black Suffering” (University of California Irvine)
- Panel discussion titled “Medical Students Partner and Learn from Women Who are Incarcerated” (GHHS member Michelle Harper, MD, and the Ohio State University)

The National Initiative concluded with a large virtual conference on May 6-8, 2021. The conference, hosted by GHHS, included presentations from GHHS members (including panel discussions, workshops, and poster sessions) as well as many other Gold Foundation partners. Keynote presentations included:

- “The Ultimate ‘Anti-Racism Statement’ that Medicine Can Make is to Diversify Our Ranks” (Quinn Capers, MD, Associate Dean for Faculty Diversity and Vice Chair for Diversity and Inclusion, Department of Internal Medicine, UT Southwestern)
- “Partnership with HBCUs: Challenging Systemic Racism in Health Education, A Nursing Story” (Dr. Gina S. Brown, Dean, College of Nursing and Allied Health Sciences at Howard University; Dr. Eileen Sullivan-Marx, Dean of the New York University Rory Meyers College of Nursing; Dr. George Thibault (Ignitor), Immediate Past President of the Josiah Macy Junior Foundation)
- “COVID-19 and the Racial Reckoning” (Dr. Richard I. Levin, President and CEO of the Gold Foundation; Dr. Wayne Riley, President of SUNY Downstate Health Sciences University)

Many insightful and thought-provoking sessions encouraging participants to work toward increased health equity and racial equality were part of the conference, including a panel discussion on advocacy and grassroots change, a film screening of *Black Men in White Coats*, a panel on vaccine deliberation, and many more. The 2021-23 GHHS International Initiative expands on this work, titled “Healing the Heart of Healthcare: Reimagining How We Listen, Connect and Collaborate.” GHHS members are leaders in humanism and will, with Gold Foundation support, continue to work toward greater diversity, equity, and inclusion within healthcare for years to come.

*Continuous Improvement Project to Determine Best Practices in Diversity and Inclusivity*

The Gold Foundation is continually working with GHHS chapters to provide guidance and determine best practices for ensuring that membership is inclusive and diverse. Currently, the GHHS leadership is nearing the conclusion of a biennial check-in with chapters. The 2021 check-in added questions to gather information regarding how each chapter is working to ensure and improve diversity and inclusion within its selection process, including members of the selection committee. The Gold Foundation is concurrently working with the AAMC to consider URM medical student representation within chapters as it compares with each chapter's medical school at large. These efforts will be used to create best practice strategies for GHHS chapters to ensure inclusivity and diversity.

*Summary*

The Gold Foundation established the Gold Humanism Honor Society (GHHS) twenty years ago as a signature program to recognize exemplary medical students, residents, and faculty who practice patient-centered care by modeling the qualities of integrity, excellence, compassion, respect, and empathy. What began in 2002 at only a few medical schools now includes 180 chapters, with more than 3,000 students inducted each year, and a membership that numbers close to 45,000. The Gold Foundation is committed to ensuring that the society is diverse and inclusive.

- Research on GHHS demographic makeup is underway by a Yale research team led by Dr. Dowin Boatright. Publication is expected shortly.
- The 2020-2021 GHHS National Initiative, "Humanism and Healing: Structural Racism and its Impact on Medicine," was followed by a virtual conference of the same name hosted by GHHS.
- The Gold Foundation is engaged in a continuous improvement project to determine best practices in diversity and inclusivity through work with the AAMC and individual GHHS chapters.

APPENDIX B - Relevant AMA Policy

*D-200.985, "Strategies for Enhancing Diversity in the Physician Workforce"*

1. Our AMA, independently and in collaboration with other groups such as the Association of American Medical Colleges (AAMC), will actively work and advocate for funding at the federal and state levels and in the private sector to support the following: (a) Pipeline programs to prepare and motivate members of underrepresented groups to enter medical school; (b) Diversity or minority affairs offices at medical schools; (c) Financial aid programs for students from groups that are underrepresented in medicine; and (d) Financial support programs to recruit and develop faculty members from underrepresented groups.
  2. Our AMA will work to obtain full restoration and protection of federal Title VII funding, and similar state funding programs, for the Centers of Excellence Program, Health Careers Opportunity Program, Area Health Education Centers, and other programs that support physician training, recruitment, and retention in geographically-underserved areas.
  3. Our AMA will take a leadership role in efforts to enhance diversity in the physician workforce, including engaging in broad-based efforts that involve partners within and beyond the medical profession and medical education community.
  4. Our AMA will encourage the Liaison Committee on Medical Education to assure that medical schools demonstrate compliance with its requirements for a diverse student body and faculty.
  5. Our AMA will develop an internal education program for its members on the issues and possibilities involved in creating a diverse physician population.
  6. Our AMA will provide on-line educational materials for its membership that address diversity issues in patient care including, but not limited to, culture, religion, race and ethnicity.
  7. Our AMA will create and support programs that introduce elementary through high school students, especially those from groups that are underrepresented in medicine (URM), to healthcare careers.
  8. Our AMA will create and support pipeline programs and encourage support services for URM college students that will support them as they move through college, medical school and residency programs.
  9. Our AMA will recommend that medical school admissions committees use holistic assessments of admission applicants that take into account the diversity of preparation and the variety of talents that applicants bring to their education.
  10. Our AMA will advocate for the tracking and reporting to interested stakeholders of demographic information pertaining to URM status collected from Electronic Residency Application Service (ERAS) applications through the National Resident Matching Program (NRMP).
  11. Our AMA will continue the research, advocacy, collaborative partnerships and other work that was initiated by the Commission to End Health Care Disparities.
  12. Our AMA opposes legislation that would undermine institutions' ability to properly employ affirmative action to promote a diverse student population.
  13. Our AMA will work with the AAMC and other stakeholders to create a question for the AAMC electronic medical school application to identify previous pipeline program (also known as pathway program) participation and create a plan to analyze the data in order to determine the effectiveness of pipeline programs.
- (CME Rep. 1, I-06; Reaffirmation I-10; Reaffirmation A-13; Modified: CCB/CLRPD Rep. 2, A-14; Reaffirmation: A-16; Appended: Res. 313, A-17; Appended: Res. 314, A-17; Modified: CME Rep. 01, A-18; Appended: Res. 207, I-18; Reaffirmation: A-19; Appended: Res. 304, A-19; Appended: Res. 319, A-19; Modified: CME Rep. 5, A-21)

*D-295.963, "Continued Support for Diversity in Medical Education"*

Our AMA will: (1) publicly state and reaffirm its stance on diversity in medical education; (2) request that the Liaison Committee on Medical Education regularly share statistics related to compliance with accreditation standards IS-16 and MS-8 with medical schools and with other stakeholder groups; (3) work with appropriate stakeholders to commission and enact the recommendations of a forward-looking, cross-continuum, external study of 21st century medical education focused on reimagining the future of health equity and racial justice in medical education, improving the diversity of the health workforce, and ameliorating inequitable outcomes among minoritized and marginalized patient populations; (4) advocate for funding to support the creation and sustainability of Historically Black College and University (HBCU), Hispanic-Serving Institution (HSI), and Tribal College and University (TCU) affiliated medical schools and residency programs, with the goal of achieving a physician workforce that is proportional to the racial, ethnic, and gender composition of the United States population; and (5) work with appropriate stakeholders to study reforms to mitigate demographic and socioeconomic inequities in the residency and fellowship selection process, including but not limited to the selection and reporting of honor society membership and the use of standardized tools to rank applicants, with report back to the House of Delegates.

(Res. 325, A-03; Appended: CME Rep. 6, A-11; Modified: CME Rep. 3, A-13; Appended: CME Rep. 5, A-21)

*H-350.960, "Underrepresented Student Access to US Medical Schools"*

Our AMA: (1) recommends that medical schools should consider in their planning: elements of diversity including but not limited to gender, racial, cultural and economic, reflective of the diversity of their patient population; and (2) supports the development of new and the enhancement of existing programs that will identify and prepare underrepresented students from the high-school level onward and to enroll, retain and graduate increased numbers of underrepresented students.

(Res. 908, I-08; Reaffirmed in lieu of Res. 311, A-15)

*D-295.963, "Continued Support for Diversity in Medical Education"*

1. Our American Medical Association will publicly state and reaffirm its stance on diversity in medical education.
2. Our AMA will request that the Liaison Committee on Medical Education regularly share statistics related to compliance with accreditation standards IS-16 and MS-8 with medical schools and with other stakeholder groups.

(Res. 325, A-03; Appended: CME Rep. 6, A-11; Modified: CME Rep. 3, A-13)

*H-295.888, "Progress in Medical Education: the Medical School Admission Process"*

1. Our AMA encourages: (A) research on ways to reliably evaluate the personal qualities (such as empathy, integrity, commitment to service) of applicants to medical school and support broad dissemination of the results. Medical schools should be encouraged to give significant weight to these qualities in the admissions process; (B) premedical coursework in the humanities, behavioral sciences, and social sciences, as a way to ensure a broadly-educated applicant pool; and (C) dissemination of models that allow medical schools to meet their goals related to diversity in the context of existing legal requirements, for example through outreach to elementary schools, high schools, and colleges.

2. Our AMA: (A) will continue to work with the Association of American Medical Colleges (AAMC) and other relevant organizations to encourage improved assessment of personal qualities in the recruitment process for medical school applicants including types of information to be solicited in applications to medical school; (B) will work with the AAMC and other relevant organizations to explore the range of measures used to assess personal qualities among applicants, including those used by related fields; (C) encourages the development of innovative methodologies to assess personal qualities among medical school applicants; (D) will work with medical schools and other relevant stakeholder groups to review the ways in which medical schools communicate the importance of personal qualities among applicants, including how and when specified personal qualities will be assessed in the admissions process; (E) encourages continued research on the personal qualities most pertinent to success as a medical student and as a physician to assist admissions committees to adequately assess applicants; and (F) encourages continued research on the factors that impact negatively on humanistic and empathetic traits of medical students during medical school.

(CME Rep. 8, I-99; Reaffirmed: CME Rep. 2, A-09; Appended: CME Rep. 3, A-11)

*H-65.952, "Racism as a Public Health Threat"*

1. Our AMA acknowledges that, although the primary drivers of racial health inequity are systemic and structural racism, racism and unconscious bias within medical research and health care delivery have caused and continue to cause harm to marginalized communities and society as a whole.

2. Our AMA recognizes racism, in its systemic, cultural, interpersonal, and other forms, as a serious threat to public health, to the advancement of health equity, and a barrier to appropriate medical care.

3. Our AMA will identify a set of current, best practices for healthcare institutions, physician practices, and academic medical centers to recognize, address, and mitigate the effects of racism on patients, providers, international medical graduates, and populations.

4. Our AMA encourages the development, implementation, and evaluation of undergraduate, graduate, and continuing medical education programs and curricula that engender greater understanding of: (a) the causes, influences, and effects of systemic, cultural, institutional, and interpersonal racism; and (b) how to prevent and ameliorate the health effects of racism.

5. Our AMA: (a) supports the development of policy to combat racism and its effects; and (b) encourages governmental agencies and nongovernmental organizations to increase funding for research into the epidemiology of risks and damages related to racism and how to prevent or repair them.

6. Our AMA will work to prevent and combat the influences of racism and bias in innovative health technologies.

(Res. 5, I-20)



## APPENDIX C – NRMP Program Director Survey Results

Source: Results of the 2021 NRMP Program Director Survey. National Resident Matching Program, August 2021.  
<https://www.nrmp.org/wp-content/uploads/2021/11/2021-PD-Survey-Report-for-WWW.pdf>.

Figure PD\_I1

### Education and Academic Performance Characteristics Considered in Deciding Whom to Interview (%)

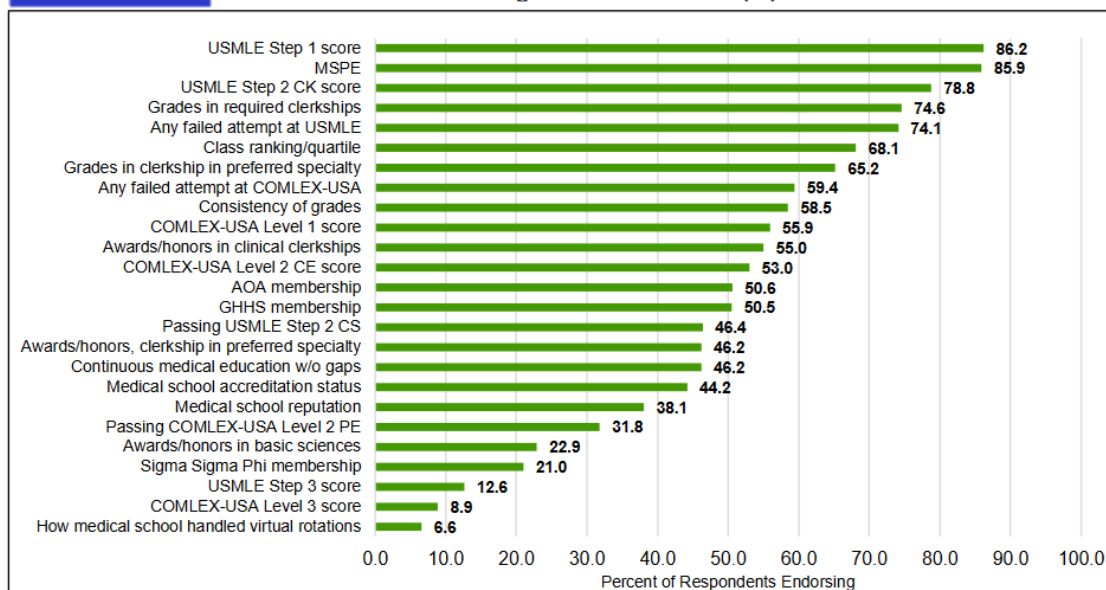
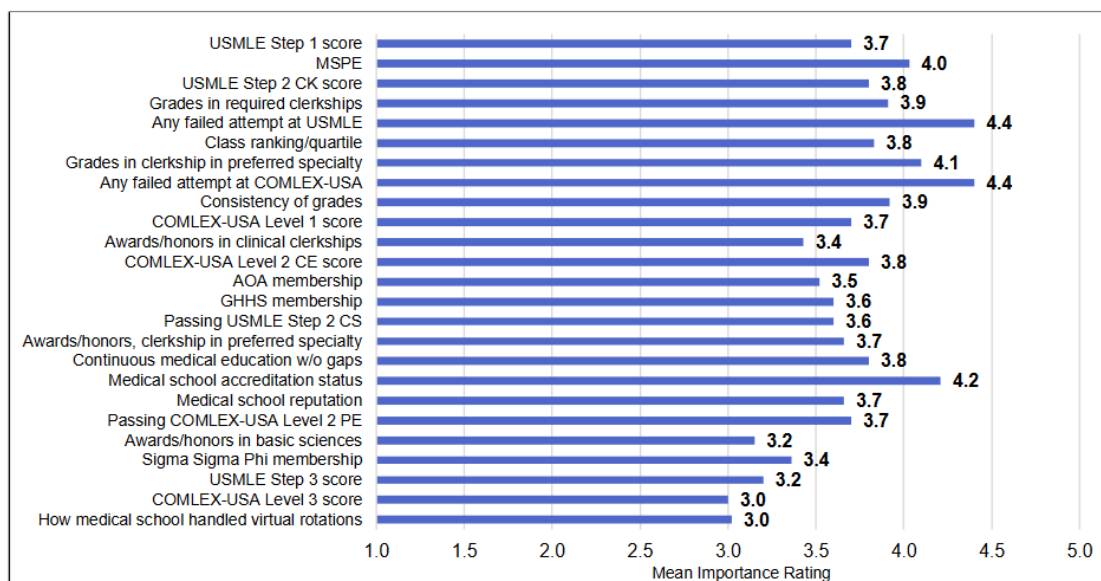


Figure PD\_I2

### Mean Importance of Education and Academic Performance Characteristics Considered in Deciding Whom to Interview<sup>1</sup>



<sup>1</sup> Rated on a scale of 1 (not at all important) to 5 (very important)

Figure PD\_I3

### Personal Characteristics and Other Knowledge of Applicants Considered in Deciding Whom to Interview (%)

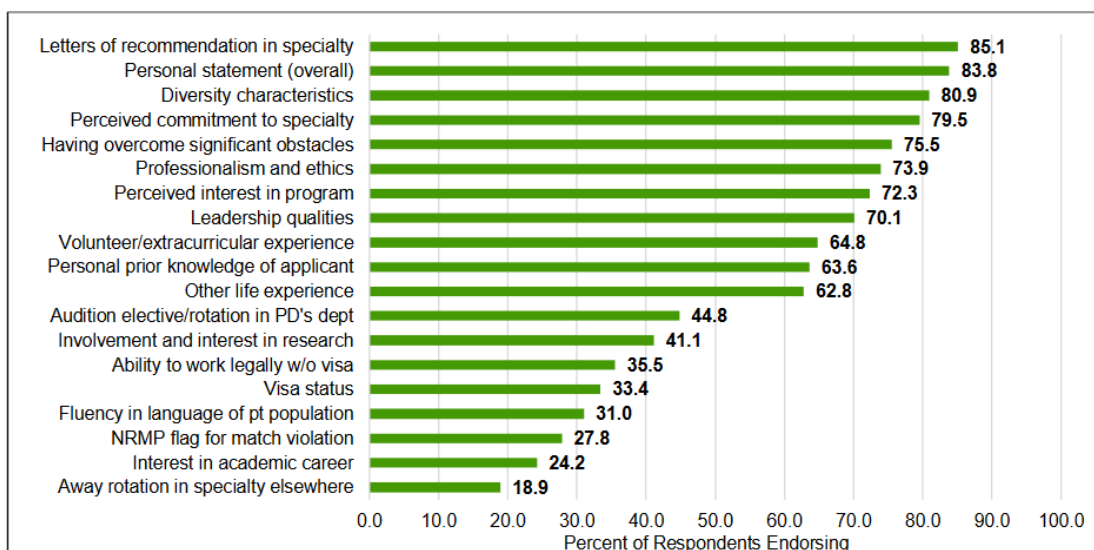
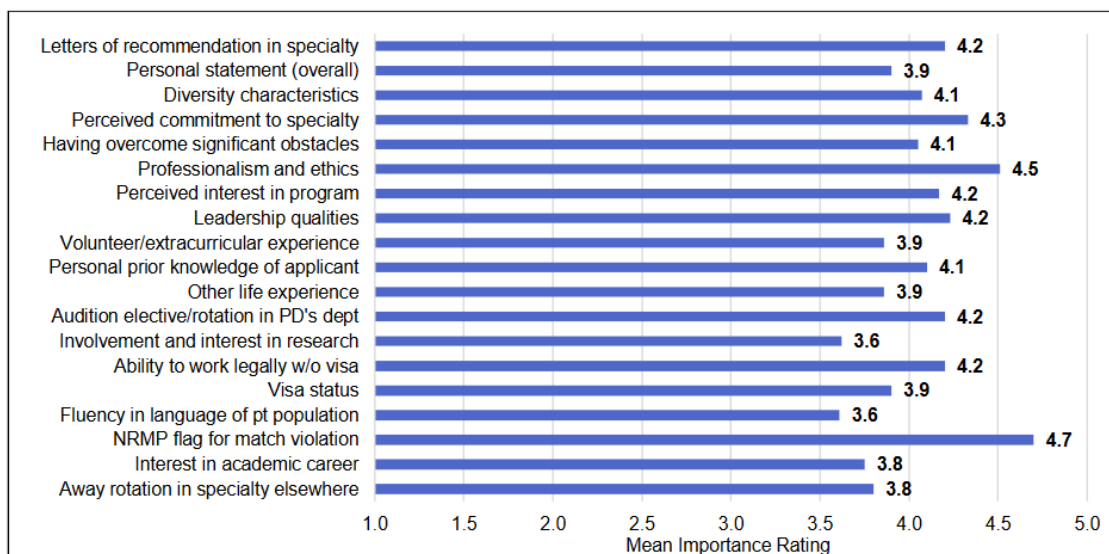


Figure PD\_I4

### Mean Importance of Personal Characteristics and Other Knowledge of Applicants Considered in Deciding Whom to Interview<sup>1</sup>



<sup>1</sup> Rated on a scale of 1 (not at all important) to 5 (very important)