# Realizing a Diverse and Inclusive Workforce: Equal Access for Residents With Disabilities

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he Accreditation Council for Graduate Medical Education (ACGME) updated the common core requirements for graduate medical education (GME) programs (effective July 1, 2019) to include a new provision, "The program, in partnership with its Sponsoring Institution, must engage in practices that focus on mission-driven, ongoing, systematic recruitment and retention of a diverse and inclusive workforce of residents." The ACGME's call for greater inclusion in GME presents an opportunity to include disability as an aspect of diversity in systemic recruitment and retention efforts. A 2016 prevalence study found that 2.7% of US MD candidates disclosed disabilities, most having nonapparent disabilities (eg, attention deficit/ hyperactivity disorder, learning difficulties, or psychological disabilities).<sup>2</sup> This represents a larger cohort of students with disabilities entering GME than previously imagined<sup>3-5</sup> and suggests potential increases in requests for accommodation. Numerous resources exist to aid undergraduate medical education programs in disability-related recruitment and retention efforts, 6-13 including guidance on technical standards, <sup>14,15</sup> clinical accommodations, <sup>16</sup> and inclusive assessment. 17,18 The GME guidance is less robust.

#### The GME Landscape

The ACGME advises programs that "the Sponsoring Institution must have a policy, not necessarily GME-specific, regarding accommodations for disabilities consistent with all applicable laws and regulations." <sup>19(p14)</sup> Much existing scholarship and resources focus on resident litigation and difficulty in performance or behavior. <sup>20,21</sup> Articles that explore successful inclusion of disabled residents espouse the value of early disclosure and use of accommodation as potential mediators of success. <sup>22,23</sup>

Residents with disabilities are already enrolled in training programs, and the pipeline of students in undergraduate medical education will soon

transition to GME. To meet learner needs and realize the ACGME's new common core requirement, GME programs must create inclusive policies and practices, understand their responsibilities under federal law, and educate themselves regarding reasonable accommodations. Without those key elements, programs may be ill prepared to accommodate residents' disability-related needs (BOX 1). This perspective offers an overview of systemic barriers in GME for residents with disabilities and mechanisms to reframe those barriers as opportunities to build programs that are more inclusive.

#### **Systemic Barriers in GME**

The scenario described in the BOX 1 is not unique. A 2018 report from the Association of American Medical Colleges identified 3 structural barriers to accessibility in GME, which included the absence of clearly defined policies and processes, a knowledgeable and identifiable point person for facilitating accessibility requests, and an understanding of the legal requirements for equal access under the Americans with Disabilities Act as amended (ADA-AA).<sup>24</sup> To those 3 barriers, we add a fourth: unfamiliarity with the benefits of disability inclusion.

#### **Poorly Defined Policies and Processes**

Residents exist in a liminal space between student and employee, resulting in some confusion about who oversees disability-related needs. When programs fail to identify policies for requesting disability accommodations, residents lack clarity about who is responsible, or they incorrectly assume that the program does not make accommodations. The lack of explicit accommodation policies may also discourage qualified applicants.

## Absence of a Knowledgeable and Identifiable Point Person

The lack of a qualified expert in disability inclusion as part of the interactive process to determine

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#### BOX 1 Case Study of Resident Who Chooses Not to Disclose

Tina is enrolled in a top medical school and has performed well in medical school, due in part to having full access to the curriculum via disability accommodations. As she enters the residency match, she is concerned that her disability—dyslexia—will not be warmly received in residency and worries how she will find a program that is a good fit. Her research regarding various residency programs yields almost no information about how, when, or to whom she should request accommodations.

Tina matches into a program and is advised before graduating to disclose her disability to her program director, provide documentation, and request accommodations. As Tina is anxious about disclosing the details of her disability to the person who will evaluate her performance, and thus her career trajectory, she decides not to disclose.

In her intern year, Tina struggles. She forgoes social and other activities to stay on track. In the absence of assistive technology, Tina spends nights and weekends completing patient charts. Sleep-deprived and with a diminished social support network, Tina barely meets her first-year milestones and begins to resent the program for not providing a confidential way to disclose her disability.

In her second year, Tina is put on probation for poor performance and discloses her disability. The program director is disappointed that Tina did not ask for accommodations earlier. The emotional toll of trying to keep up results in Tina taking a 6-month leave of absence, with potential financial and career consequences. When Tina returns to the program, she requests and is approved for accommodations.

accommodations also poses a barrier. Legal requirements call for such a process, necessitating a good-faith exploration of options between the resident and the institution.

### Insufficient Understanding of Program Requirements Under the ADA-AA

Program leadership may not have a clear understanding of institutional obligations under employment provisions of the ADA-AA (Title I). The law outlines employer obligations to ensure equal access for qualified employees with disabilities, including provision of reasonable accommodations and responsibility to fund them.<sup>25</sup>

### Lack of Knowledge Regarding the Benefits of Disability Inclusion

Program directors may not fully appreciate the benefits of disability inclusion and may falsely believe that residents with disabilities require dedicated administrative time or add high costs to the program.

#### **Mechanisms for Full Inclusion**

**Increase Transparency in Policies and Process** 

Straightforward accommodation policies and statements that emphasize the value of disability as part of diversity help to destignatize disability. These measures also aid in recruitment and retention of diverse applicants (TABLE; BOX 2). Programs should provide accommodation policies in communications to prospective and matched residents, on program websites, and in resident handbooks. Programs and institutions must also develop their understanding of financial responsibilities for employee accommodations. Transparency about the accommodation process will likely

TABLE
Exemplar Language for Graduate Medical Education Programs

Topic	Recommended Language
Statement of commitment to diversity	As part of our commitment to diversity, [name of program] seeks to attract and educate trainees who will make the population of health care professionals representative of the national population. We are, therefore, committed to the full and meaningful inclusion of qualified trainees with disabilities.
Program information for applicants	[Name of program] welcomes qualified applicants with disabilities who meet the essential functions of the training program, with or without reasonable accommodations. If you are an applicant with a disability who needs accommodations during your interview, please contact [insert appropriate office and contact information for office].
Program information for matched residents	[Name of program] aims to create a fully accessible environment for trainees. Trainees with disabilities who require accommodations to meet the essential functions of the residency should contact [insert appropriate office and contact information for office] to begin the process. [Name of program] values disability as a form of diversity in our program and engages in a robust interactive process to determine reasonable workplace accommodations.
Program information for current residents	[Name of program] is committed to equal access in our training programs. Trainees with newly acquired or previously undiagnosed disabilities may require accommodations to fully access training and education. We encourage trainees with disabilities to seek necessary accommodations. Trainees can begin this process by contacting [insert appropriate office and contact information for office]. [Name of program] values disability as a form of diversity in our program and engages in a robust interactive process to determine reasonable workplace accommodations.

#### BOX 2 Case of a Resident Who Discloses a Disability Successfully

Dan is excited to enter residency. He is very open about his disability, a chronic health condition, and had a great undergraduate medical education experience. He purposely reviewed the websites of all programs of interest, looking for information about disability and accommodations.

One program had a clear and confidential process for requesting accommodations, and the website contained a welcoming statement, "[The program] has proudly trained and currently employs physicians with disabilities." Dan followed the process, which included a confidential interview with human resources, before entering into a collaborative discussion with the program directors. Human resources staff was knowledgeable about accommodations and worked with the program to quickly approve and implement Dan's requests. Dan felt respected and protected as his documentation of disability remained with the human resources office.

Dan thrived in residency, connecting well with patients and colleagues. He utilized his accommodations, including assistive technology (which was ordered and paid for by human resources) and release from clinic twice a month for infusions. He went on to match in a highly competitive fellowship.

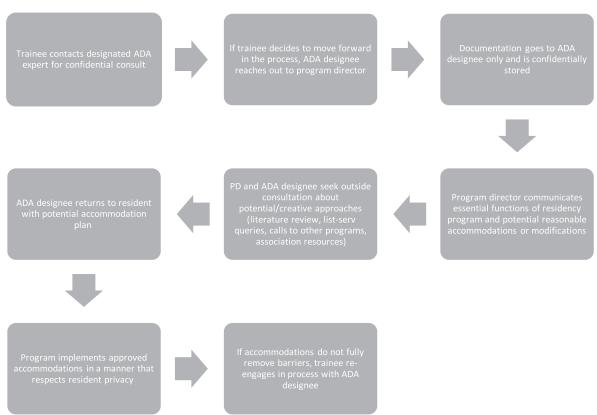
facilitate earlier disclosure by residents, a potential mediator of success, regardless of whether the resident enters the program with a disability or develops one during training.<sup>22</sup>

## Include a Confidential and Specialized Disability Expert in the Process

Programs should work with GME offices to establish a process for disability disclosure that includes a confidential point of contact with expert knowledge of disability law and clinical accommodations (FIGURE) who can assist with determining reasonable accommodations (BOX 3). This should be someone other than a colleague, supervisor, or anyone else who would evaluate the resident's performance.

#### **Understand Program and Institutional Obligations**

Programs should maintain a clear understanding of their legal responsibilities, including those for reasonable accommodations. The ADA-AA defines disability broadly; thus, programs should anticipate implementing accommodations for residents with all categories of disabilities. Examples of reasonable accommodations include sign language interpreters,



#### **FIGURE**

Exemplar Process for Accommodation Requests in Graduate Medical Education Abbreviations: ADA, Americans with Disabilities Act; PD, program director.

### BOX 3 Case of a Resident Who Is Uncertain About What Accommodations Are Needed

In medical school, Maria successfully worked with real-time captioning in lecture settings and was able to communicate well with small ward teams in slower-paced clinic and hospital settings. She matched with a residency program in a larger hospital.

During internship, she found it difficult to follow the rapid pace of discussions amid increased noise on the wards, and noon education sessions were also harder to follow. She met with her program director to discuss these concerns and the potential need for accommodations. Maria and her program director were uncertain about what would work and were concerned about cost. They contacted her institution's disability expert, who met with each.

After exploring multiple options offered by the disability expert, Maria and her program director determined that a small wireless microphone and an oral interpreter were most effective. Given the centralized budgeting of accommodations for this institution, the program director did not need to order equipment or hire the oral interpreter; the equipment was facilitated by the disability office, and the oral interpreter was scheduled in consultation with the program coordinator. In her second year, Maria was an effective and highly valued resident.

modified work schedules, and protected time for health-related appointments.<sup>25</sup> While accommodations that pose undue administrative or financial hardship are not required, case law<sup>26</sup> clarifies that the overall financial resources of the institution determine hardship. Most accommodations are not prohibitive: one study<sup>27</sup> showed that approximately 33% of accommodations had zero cost while 50% were less than \$5,000 across the entire period of residency. To date, no studies, to our knowledge, have addressed time and administrative costs of residents with disabilities. However, program directors regularly allot time to all residents for performance review, career guidance, and personal mentoring, and they meet with residents when remediation or disciplinary action is required. The proactive development of an inclusive training environment and clear policies may reduce administrative time and academic distress caused by a failure to accommodate. Furthermore, although rare, litigation may result in significant time and resource costs when the rights of learners with disabilities have not been appropriately addressed.

### Enhance Knowledge of the Benefits of Inclusion to Patients and Residents

Programs should seek to understand the benefits of disability inclusion. Physicians with disabilities inform health care practices for patients with disabilities and may reduce disparate population health outcomes.<sup>28–30</sup> Physicians and learners have suggested their lived experiences with disability lead to

greater empathy for patients and enrich the educational learning environment.<sup>6,10</sup> Research shows that physicians with disabilities are more likely to provide care for underserved and disability-concordant populations.<sup>31</sup> Furthermore, investing in disability-related inclusion has the potential to improve conditions for all residents, regardless of disability status.<sup>22</sup>

#### **Conclusions**

Residency programs should prepare for an increasing number of residents with disabilities who have accessed undergraduate medical education accommodations, are knowledgeable about the law, and may request GME accommodations. In line with ACGME's focus on the inclusion of a more diverse resident population, programs should seek to develop transparent processes, identify a knowledgeable disability expert, solidify their understanding of the ADA-AA, and understand the benefits of inclusion to patients and residents. Ensuring that programs are accessible to residents with disabilities is imperative to maintaining the pipeline of physicians with disabilities, from premedical education to practice. By improving the climate for residents with disabilities, GME programs can successfully realize the promise of diversity among physicians with disabili-

#### References

- Accreditation Council for Graduate Medical Education. ACGME Common Program Requirements (residency). https://www.acgme.org/Portals/0/PFAssets/ ProgramRequirements/CPRResidency2019.pdf. Accessed July 24, 2019.
- Meeks LM, Herzer KR. Prevalence of self-disclosed disability among medical students in US allopathic medical schools. *JAMA*. 2016;316(21):2271–2272. doi:10.1001/jama.2016.10544.
- 3. Eickmeyer SM, Do KD, Kirschner KL, Curry RH. North American medical schools' experience with and approaches to the needs of students with physical and sensory disabilities. *Acad Med.* 2012;87(5):567–573. doi:10.1097/ACM.0b013e31824dd129.
- 4. Wu SS, Tsang P, Wainapel SF. Physical disability among American medical students. *Am J Phys Med Rehabil*. 1996;75(3):183–187.
- Moutsiakis D, Polisoto T. Reassessing physical disability among graduating US medical students. *Am J Phys Med Rehabil*. 2010;89(11):923–930. doi:10.1097/ PHM.0b013e3181ec939d.
- Association of American Medical Colleges; Meeks LM, Jain NR. Accessibility, inclusion, and action in medical education: lived experiences of learners and physicians

- with disabilities. https://sds.ucsf.edu/sites/g/files/tkssra2986/f/aamc-ucsf-disability-special-report-accessible.pdf. Published March 2018. Accessed July 24, 2019.
- 7. Herzer KR. Moving from disability to possibility. *JAMA*. 2016;316(17):1767–1768. doi:10.1001/jama. 2016.9956.
- 8. Meeks LM, Herzer K, Jain NR. Removing barriers and facilitating access: increasing the number of physicians with disabilities. *Acad Med.* 2018;93(4):540–543. doi:10.1097/ACM.0000000000002112.
- 9. Meeks LM, Engelman A, Booth A, Argenyi M. Deaf and hard-of-hearing learners in emergency medicine. *West J Emerg Med.* 2018;19(6):1014–1018. doi:10. 5811/westjem.2018.8.38550.
- 10. Schwarz CM, Zetkulic M. You belong in the room: addressing the underrepresentation of physicians with physical disabilities. *Acad Med.* 2019;94(1):17–19. doi:10.1097/ACM.0000000000002435.
- Moreland CJ, Latimore D, Sen A, Arato N, Zazove P. Deafness among physicians and trainees: a national survey. *Acad Med.* 2013;88(2):224–232. doi:10.1097/ ACM.0b013e31827c0d60.
- Association of American Medical Colleges. AAMC webinars on disability. https://www.aamc.org/members/ gsa/pdopportunities/427068/archivedwebinars.html. Accessed July 24, 2019.
- 13. Meeks LM, Jain NR, eds. *The Guide to Assisting Students With Disabilities: Equal Access in Health Science and Professional Education*. New York, NY: Springer Publishing Company; 2015.
- Kezar LB, Kirschner KL, Clinchot DM, Laird-Metke E, Zazove P, Curry RH. Leading practices and future directions for technical standards in medical education. *Acad Med.* 2019;94(4):520–527. doi:10.1097/ACM. 00000000000002517.
- 15. McKee M, Case B, Fausone M, Zazove P, Ouellette A, Fetters MD. Medical schools' willingness to accommodate medical students with sensory and physical disabilities: ethical foundations of a functional challenge to "organic" technical standards. *AMA J Ethics*. 2016;18(10):993–1002. doi:10.1001/journalofethics.2016.18.10.medu1-1610.
- 16. Serrantino J, Meeks LM, Jain NR, Clifford GC, Brown JT. Accommodations in didactic, lab, and clinical settings. In: Meeks LM, Jain NR, eds. *The Guide to Assisting Students with Disabilities: Equal Access in Health Science and Professional Education*. New York, NY: Springer Publishing Company; 2015:59–88. doi:10.1891/9780826123794.0004.
- 17. Meeks LM, Jain NR. Accommodating standardized patient exams: the OSCEs. *Disabil Compliance High Educ*. 2016;22(4):1–7. https://doi.org/10.1002/dhe. 30239.

- 18. Meeks LM, Jain NR. Accommodating students on anatomy and other lab practical exams. *Disabil Compliance High Educ*. 2017;23(3):1–7.
- Accreditation Council for Graduate Medical Education. ACGME institutional requirements, IV.H.4: accommodation for disabilities. https://www.acgme. org/Portals/0/PFAssets/InstitutionalRequirements/ 000InstitutionalRequirements2018.pdf?ver=2018-02-19-132236-600. Published February 4, 2018. Effective July 1, 2018. Accessed July 24, 2019.
- 20. Lefebvre C, Williamson K, Moffett P, Cummings A, Gianopulos B, Winters E, et al. Legal considerations in the remediation and dismissal of graduate medical trainees. *J Grad Med Educ*. 2018;10(3):253–257. doi:10.4300/JGME-D-17-00813.1.
- 21. Thomas CR. Deciding to refer residents for psychiatric evaluation. *J Grad Med Educ*. 2017;9(2):151–153. doi:10.4300/JGME-D-17-00027.1.
- 22. Takakuwa KM, Ernst AA, Weiss SJ. Residents with disabilities: a national survey of directors of emergency medicine residency programs. *South Med J.* 2002;95(4):436–440.
- 23. Fitzsimons MG, Brookman JC, Arnholz SH, Baker KH. Attention-deficit/hyperactivity disorder and successful completion of anesthesia residency: a case report. *Acad Med.* 2016;91(2):210–214. doi:10.1097/ACM. 000000000000000854.
- 24. Americans with Disabilities Act of 1990, 42 USC §12101 et seq (2011). https://www.hivlawandpolicy.org/resources/americans-disabilities-act-1990-42-usc-%C2%A7-12101-et-seq. Accessed July 24, 2019.
- 25. United States Department of Justice Civil Rights Division. Information and technical assistance on the Americans With Disabilities Act: Employment (Title I). https://www.ada.gov/ada\_title\_I.htm. Accessed July 24, 2019.
- Searls v. Johns Hopkins Hospital, 158 FSupp3d 427 (D Md 2016). https://www.leagle.com/decision/ infdco20160121d03. Accessed July 24, 2019.
- Churgay CA, Smith MA, Woodard L, Wallace LS. A survey of family medicine department chairs about faculty with disabilities. *Fam Med*. 2015;47(10):776–781.
- 28. Iezzoni LI. Why increasing numbers of physicians with disability could improve care for patients with disability. *AMA J Ethics*. 2016;18(10):1041–1049. doi:10.1001/journalofethics.2016.18.10.msoc2-1610.
- 29. DeLisa JA, Lindenthal JJ. Learning from physicians with disabilities and their patients. *AMA J Ethics*. 2016;18(10):1003–1009. doi:10.1001/journalofethics. 2016.18.10.stas1-1610.
- Shakespeare T, Iezzoni LI, Groce NE. Disability and the training of health professionals. *Lancet*. 2009;374(9704):1815–1816. doi:10.1016/s0140-6736(09)62050-x.

31. McKee MM, Smith S, Barnett S, Pearson TA. Commentary: what are the benefits of training deaf and hard-of-hearing doctors? *Acad Med*. 2013;88(2):158–161. doi:10.1097/ACM. 0b013e31827c0aef.



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