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ORIGINAL ARTICLE

Identification and Accommodation of ADHD in Family Medicine Residencies: A CERA Study

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ABSTRACT

Background: An increasing number of medical students applying to residency programs request accommodations for attention deficit hyperactivity disorder (ADHD). Early implementation of accommodations for individuals with ADHD during family medicine (FM) residency could help learners and programs, but the number of programs prepared to invite learners to disclose ADHD and to implement accommodations is unclear.

Objectives: The purpose of this study was to describe practices employed by FM residency programs to identify residents who need accommodations for ADHD. We also chose to examine the frequency with which basic categories of ADHD accommodations are used and whether review of technical standards (ie, resident job description) is associated with timing of accommodations.

Methods: We analyzed responses from the 2022 Council of Academic Family Medicine Educational Research Alliance (CERA) national survey of FM residency program directors, which was distributed via email invitation to all US programs accredited by the Accreditation Council for Graduate Medical Education. A total of 298 program directors (44.3%) responded.

Results: Approximately one in six FM residency programs are proactive in their identification of learners with ADHD, typically recognizing the need for accommodations during the interview process or orientation. Once the need is identified, most programs implement accommodations within 1 month, and many employ multiple types of accommodations.

Conclusions: While a small subset of programs has developed processes to identify and accommodate ADHD proactively, results suggested that the majority of programs approach accommodation processes on an ad hoc basis. In turn, ad hoc identification precludes a proactive approach, given use of poor performance to identify the need for supports.

INTRODUCTION

Competing stimuli fill the lives of family medicine residents. Caring for patients while juggling multiple competing priorities can be crushing to learners with attention issues.[1–3] Learners with attention problems (including hyperfocusing, distractibility, and disorganization)[4] are common in postgraduate education. Meeks and Herzer surveyed US allopathic medical schools and found that 33.7% of students receiving accommodations for a disability had attention deficit hyperactivity disorder (ADHD).[5] ADHD was the most prevalent disability in their sample. Nouri and colleagues surveyed a national sample of practicing physicians and found that of those with a documented disability (3% of the total sample), 10.4% endorsed having an ADHD diagnosis. Physicians with disabilities are more likely than their peers without disabilities to face discrimination and harassment. This maltreatment may deter physicians from disclosing a disability, which may lead to underreporting of ADHD in medicine and even early exit from medicine as a career.[6] Given the stigma around disclosure and accommodation of disabilities, many residents experience adversity before receiving accommodations.[7]

Like other adults with ADHD, many learners with ADHD will display problems with executive function, including attention problems and difficulty with time management. For resident physicians, this could create problems with completing charts on time, organizing and prioritizing tasks while on the

inpatient service, and managing long-term tasks.[8] Because stakeholders in medical education perceive "accountability and conscientiousness" as a subcompetency of professionalism,[9] concerns in these areas may be observed as professionalism lapses. Given that professionalism is the most common reason for remediation in family medicine residency programs,[10] residents with ADHD who do not request accommodation may face remediation for concerns about professionalism.

The Americans with Disabilities Act (ADA) requires employers to provide equal opportunity to qualified individuals. Title III of the act requires reasonable accommodations (ie, job modifications that allow a person with a disability to perform essential functions outlined in the technical standards).[11] Organizations must remove requirements that filter out participants with disabilities.[12,13]. However, asking a candidate whether they have a disability is forbidden, and the learner is responsible for informing programs of a need for accommodation once they have been hired.[7,14] Residents with disabilities who have access to accommodations have fewer depressive symptoms and are more likely to complete residency.[1,2,15,16] Moreover, Meeks and colleagues found medical students with disabilities who received accommodations achieved higher Step 1 scores than their unaccommodated peers with disabilities.[17] Despite this finding, only 25% of students with disabilities in their sample used accommodations on Step 1.[18] Meeks and Jain noted that a lack of clearly defined policies, the absence of a trained point of contact for accommodation requests, and insufficient understanding of ADA requirements were common structural barriers to requesting and accessing accommodations.[19,20] These barriers increase the likelihood that residents with ADHD could face remediation before they access important accommodations. Fears about reporting medications and accommodations to licensing boards may represent an additional barrier.[21]

We noticed a literature gap regarding practices for identifying and advancing ADHD accommodations during residency education. While ADHD is common, we wanted to know how often programs identify and accommodate ADHD, as well as what types of interventions or accommodations are most typically used.

In this study, we aimed to assess the timing of learner self-disclosure or program identification of learners with ADHD. Also, we wanted to understand the timing and type of accommodations most commonly implemented. Finally, we wanted to understand whether programs' review of technical standards affect the timing of accommodations. Technical standards are connected to ADA and include descriptions of essential job functions as well as skills and abilities required to perform essential functions.

METHODS

This study analyzed responses from the Council of Academic Family Medicine Educational Research Alliance (CERA) national survey of family medicine program directors (PD) in 2022. The methodology for the CERA study has previously been described in detail.[22] In addition to information about program type and demographics (ie, residency director gender and years in position, type of program, geographic region, community size), the survey questions collected program information about the timing of learner self-identification or program identification of the need for accommodations, the timing for implementation of accommodations, and the types of accommodations for ADHD (Table 1). The CERA Steering Committee assessed the questions prior to distribution. The American Academy of Family Physicians Institutional Review Board reviewed and approved the study. The survey was active from April 13 to May 16, 2022.

The survey was distributed via email invitation to all US family medicine PDs of programs accredited by the Accreditation Council for Graduate Medical Education. PDs received reminders while the survey was active. A total of 712 invitations were distributed. Forty PD participants did not meet inclusion criteria to complete the survey because their programs did not have three classes of residents. These responses were removed from the sample. The final sample size was 672 with 298 PD (44.3%) responses.

RESULTS

Data from 298 respondents were included in the analysis. Five respondents did not answer the project-relevant questions, and data from those respondents were eliminated. Of the types of residency programs represented, only one program was associated with the military; we excluded data from that respondent. We included residency programs that had three or more resident classes at the time of the survey.

Most respondents (58.4%) were from community-based, university-affiliated programs, and most of the residency programs (58.1%) had 25% or fewer non-US medical school graduates (Table 2). Most PDs had been in their position 10 years or less (78.5%). Nearly two-thirds of programs (65.4%) reported having had a learner with ADHD in the past 3 years. Of the respondents, 63.3% had implemented some form of accommodation for a resident with ADHD. Of the programs that reported implementing accommodations, 18.6% had not received a learner request for accommodations. Of the programs that did not report implementing accommodations, 97.2% had not received a learner request for accommodations.

To examine when the need for accommodations is typically identified, we collapsed the six possible responses to the question regarding timing of identification of need for accommodations into three categories: early/proactive (during interview process; during orientation); reactive (after a critical event; after milestones evaluation); and no identification (I am not aware of learners who have needed accommodations). Respondents who chose "other" for the timing of identification question were categorized as missing.

We first examined whether residency programs were equally distributed across the three categories of timing of identification. Results from a χ^2 goodness of fit test

TABLE 1. CERA Survey Questions About ADHD for Program Directors

For learners with ADHD, when does recognition of the need for accommodation usually occur?
a. During the interview process
b. During orientation
c. After a critical event
d. After milestones evaluation
e. Other
f. I am not aware of any learners who have needed accommodations.
If the need for accommodations for medical learners with ADHD is identified, when does implementation of accommodations usually occur?
a. Immediately
b. Within 1 week
c. Within 1 month
d. Within 3 months
e. Longer than 3 months
f. I am not aware of any learners who have needed accommodations.
When was the last time you reviewed the technical standards (mental and physical skills needed to carry out the duties as a physician) of your program?
a. Never
b. Within the past year
c. 1–5 years ago
d. More than 5 years ago
e. I don't know what technical standards are.
What accommodations have you provided for learners with ADHD? (Please select all that apply.)
a. Environmental accommodations (eg, quieter workspace)
b. Interpersonal accommodations (eg, mentoring, job coaching, precepting changes)
c. Assistive accommodations (eg, timers, apps, calendars)
d. Accommodations were not granted.
e. Accommodations are informal and constructed on the fly.
f. I have not had a learner request ADHD accommodations.
If a candidate disclosed a diagnosis of ADHD during the interview process, how much would it impact your ranking of that candidate?
a. I would rank them lower.
b. I would rank them higher.
c. I would rank them without regard to their diagnosis.
d. I would not rank them because of their ADHD diagnosis.

Abbreviation: ADHD, attention deficit hyperactivity disorder

TABLE 2. Timing of Identification of Need for ADHD Accommodations as a Function of Type of Residency Program (N=255)

	Timing of identification of need, n (% within program type) [2]			
Type of program	**Early/ proactive**	**Reactive**	**No identification**	**Total**
University-based	8 (22.2)$_a$	14 (38.9)$_a$	14 (38.9)$_a$	36 (100)
Community-based, university-affiliated	22 (15.1)$_{a,b}$	76 (52.1)$_b$	48 (32.9)$_a$	146 (100)
Community-based, nonaffiliated	14 (19.2)$_{a,b}$	22 (30.1)$_b$	37 (50.7)$_a$	73 (100)
Total[1]	44^a	112$_b$	99$_b$	255

Note. Early/proactive, during interview process or during orientation; reactive, after a critical event or after milestones evaluation; No identification, I am not aware of learners who have needed accommodations; respondents who chose "other" for the timing of identification question were categorized as missing.
[1]Among timing categories (collapsed over program type), directors were more likely to report no identification or reactive identification than early/proactive identification of need for ADHD accommodations, χ^2goodness of fit(2, N=256)=99.84, P<.001. Cells with matching subscripts do not differ significantly from each other at the .05 level.
[2]Timing of identification of need for accommodations depended on program type, χ^2test of independence(4, N=255)=10.61, P=.03. Within each type of program, cells with matching subscripts ($_{a,\ b}$) do not differ significantly from each other at the .05 level.
Abbreviation: ADHD, attention deficit hyperactivity disorder

indicated that proactive identification was less common among residency programs than no identification and reactive identification (χ^2[2, N=256]=99.84, P<.001). More than one-third of PDs were unaware of learners who needed accommodations, and programs that had identified learners who needed accommodations were more likely to do so in response to a critical event or a milestone evaluation (Table 2).

Table 2 also presents frequencies for timing of identification of ADHD as a function of type of residency program. Results from a χ^2 test of independence showed that timing of identification of need for accommodations depended on program type (χ^2[4, N=255]=10.61, P=.03). Specifically, university-based programs were equally likely to have early, reactive, or no identification of need. Community-based, university-affiliated programs were significantly more likely to have reactive identification than early or no identification. Community-based, nonaffiliated programs were significantly more likely to have no identification of need than proactive or reactive identification.

We next examined how quickly programs implemented accommodations after identifying a need for them. We collapsed the timing of implementation of accommodations variable into two categories: responsive (within 1 month) or extended/protracted (after more than 1 month). Among programs that had identified learners who needed accommodations (N=143), 84.6% implemented accommodations within 1 month, goodness of fit (χ^2[1, N=143]=68.54, P<.001). Table 3 includes frequency data for the timing of implementation categories. A χ^2 test of independence revealed that the timing of implementation of accommodations did not differ among different types of residency programs (χ^2[2, N=143]=5.42, P=.07).

We examined whether timing of identification of need for accommodations (proactive or reactive) was associated with the timing of implementation of accommodations (responsive or extended). A χ^2 test of independence revealed a significant relationship between the two variables (χ^2[1, N=143]=6.77, P=.009). Regardless of whether programs were proactive or reactive in identifying the need for accommodations, they tended to implement the accommodations within 1 month rather than later than 1 month. Programs that identified the need for accommodations early/proactively were more likely to provide accommodations quickly. For programs that identified the need for accommodations reactively, accommodations occurred later in training. Table 3 presents frequencies for the timing of implementation of accommodations as a function of timing of identification of need for accommodations.

We assessed whether programmatic review of technical standards was associated with identification of the need for accommodations. A χ^2 test of independence showed no significant relationship between recency of review of technical standards and the timing of identification of the need for ADHD accommodations (proactive, retroactive, no identification; χ^2[8, N=254]=15.16, P=.06).

We also examined whether programmatic review of technical standards was associated with implementation of accommodations. Among programs that had identified learners with ADHD, 43.2% had reviewed technical standards within the previous year, but recency of review of technical standards was not associated with timing of implementation of accommodations (χ^2[4, N=142]=5.36, P=.25).

To better understand the types of accommodations typically implemented for ADHD, we presented participants with a list of accommodations, and respondents could indicate which types of accommodations they had provided for learners. As shown in Table 4, in responding to this list of possible accommodations, 47.4% of respondents indicated that they had not had learners with ADHD in their programs who had requested any kind of accommodation. Interpersonal accommodations (eg, mentoring, job coaching, precepting changes) were the most common (42.2% of the sample), while environmental and assistive accommodations were less common. Only 14.5% of respondents indicated that their programs implemented accommodations in an informal, on the fly manner.[23] No respondents indicated that accommodations for learners with ADHD were not granted.

We examined whether timing of implementation of accommodations (proactive or reactive) was associated with the use of specific types of accommodations. Our χ^2 tests of independence showed no relationship between timing of implementation and use of specific types of accommodations (P>.05).

When asked about ranking residents in the FM match, 89% of respondents indicated that they would rank individuals without regard for a disclosed ADHD diagnosis. Eight percent (8%) indicated that they would rank an individual with ADHD lower. Two percent (2%) indicated that they would not rank an individual with known ADHD. No program directors indicated that they would rank a resident diagnosed with ADHD higher.

DISCUSSION

Results of the current study suggest that ADHD is prevalent in FM residency, with more than 60% of responding PDs indicating the presence of a learner with ADHD in their program during their tenure. Although programs provided some form of accommodations when learners requested them, programs varied in their approaches to encourage learners with ADHD to disclose their needs. Some programs appeared to follow the best practices recommended by Meeks and colleagues to identify and accommodate learners with ADHD early,[17,18] but most programs that identified learners' needs for accommodations did so reactively (ie, in response to a critical event or milestone evaluation). Our results indicated a continued significant stigma with ADHD diagnosis; although 89% of program directors responded that they would rank individuals without regard to ADHD diagnosis, 6% indicated that they would rank individuals with ADHD lower, and 2% indicated that they would not rank an individual with ADHD.

TABLE 3. Timing of Implementation of Accommodations as a Function of Timing of Identification of Need for ADHD Accommodations (N=143)

	Timing of implementation of accommodations, n (% within timing of identification of need) [2]		
Timing of identification of need	**Responsive (1 month or less)**	**Extended/protracted (more than 1 month)**	**Total**
Early/proactive	38 (97.4)$_a$	1 (2.6)$_b$	39 (100)
Reactive	83 (79.8)$_a$	21 (20.2)$_b$	104 (100)
Total[1]	121	22	143

Note. Early/proactive, during interview process or during orientation; Reactive, after a critical event or after milestones evaluation; respondents who chose "other" for the timing of identification question were categorized as missing.

[1]Among programs that had identified learners who needed accommodations, 84.6% (n=121) implemented accommodations within 1 month, χ^2goodness of fit (1, N=143)=68.54, P<.001.

[2]The difference in timing of implementation of accommodations depended on the timing of identification of need, χ^2test of independence (1, N=143)=6.77, P=.009. Regardless of when programs typically identified the need for accommodations, they tended to engage in responsive rather than protracted implementation of accommodations. However, this difference was larger for programs that identified the need for the accommodations early/proactively than for programs that tended to identify the need for accommodations reactively. Within each category of timing of identification of need, cells with different subscripts ($_{a,\ b}$) differ significantly from each other at the .05 level.

TABLE 4. Types of Accommodations Granted (" What accommodations have you provided for learners with ADHD?" [select all that apply])

Type of accommodation	**n (%)**
Environmental accommodations (eg, quieter workspace)	74 (25.6)
Interpersonal accommodations (eg, mentoring, job coaching, precepting changes)	122 (42.2)
Assistive accommodations (eg, timers, apps, calendars)	64 (22.1)
Accommodations are informal and constructed on the fly.	42 (14.5)
Accommodations were not granted.	0
I have not had a learner request ADHD accommodations.	137 (47.4)

Abbreviation: ADHD, attention deficit hyperactivity disorder

The timing of identifying a need for accommodations (proactive identification, reactive identification, no identification) depended on residency program type; but within each program type were programs represented that were unaware of learners with ADHD and programs that identified the need for accommodations reactively. Although the timing of identifying the need for accommodations varied among programs, once the need was identified, programs tended to implement accommodations quickly (within 1 month). The most frequently implemented accommodations were interpersonal in nature (eg, job coaching, changes in precepting), although other work/situational accommodations (eg, quiet workspace near the rounding room) also were common. Review of technical standards could make issues surrounding accommodations more salient, but recent review of technical standards was not related to practices associated with early identification of need for accommodations for ADHD.[11]

Best practice suggests that early identification and accommodation for persons with ADHD is most effective.[15,17,18] However, most programs represented in the current study appear to identify a resident's need for accommodations only after the individual performs poorly in one or more areas of the residency. Reactive identification could result from a program's failure to encourage learners to request accommodations before they are needed. However, proactive identification procedures cannot be effective if learners are reluctant to reveal their diagnoses or request accommodations. For example, although only 39% of programs indicated a lack of awareness of anyone in the program with a need for accommodations, 47% did not have a learner request accommodation. This finding suggests that some individuals with ADHD are not requesting accommodations. Although residents with ADHD may recognize the potential benefit of accommodations, concerns about stigma or retaliation may prevent them from requesting support.[24] Additionally, some learners with ADHD might feel comfortable disclosing their diagnoses but do not request accommodations because they have a history of adequate or even exceptional performance without accommodations. Some of these learners will begin to struggle after their usual coping strategies prove ineffective for managing the increased demands for focus and organization during residency.[7] Although some learners with ADHD develop strategies that allow them to succeed during residency without formal accommodations, we suspect that accommodations could further improve their performance.[2,7,9,16,25,26]

Proactive approaches require learners to feel comfortable sharing information about their needs. To decrease fear of stigma, programs should explicitly articulate their commitment to inclusivity and explicitly endorse the view that accommodations are valuable tools for creating accessible and equitable learning environments. This approach could be implemented during orientation and during individual

meetings with residents when program directors and advisers normalize struggles during residency and discuss specific pathways for getting help and support. In addition to fostering a welcoming environment for all learners, programs should provide learners with multiple disclosure opportunities. By using the best practices for inviting disability disclosure as presented by Meeks and colleagues, residency programs could optimize proactive approaches to supporting learners with ADHD.[19]

Although results from the current study did not indicate any correlation between recency of review of technical standards and identification of and accommodations for ADHD, our results showed that less than half of surveyed programs had reviewed their technical standards in the past year. Review of technical standards should be a regular part of residency administration because this process helps programs clearly identify relevant job requirements that may or may not be reasonably accommodated. An active review process reduces the likelihood of unintended discrimination. More generally, the process of reviewing technical standards continues to be a vital infrastructure for maintaining clear guidelines for how residents should be able to execute their responsibilities, with or without accommodation. Increasing knowledge and dissemination of reasonable and effective accommodations for ADHD in residency could encourage PDs to invite learners to disclose their needs. Many programs are inviting disclosure early and providing successful accommodations. To be clear, both programs and learners have responsibilities to move toward more proactive processes. For programs, inviting learners to disclose early enough to forestall problems will require transparency and acceptance of disability. For learners, clear communication about needs before problems occur can seem risky but can reduce the likelihood of a contentious process after significant work-related incidents.

Our study had several limitations. Given the survey-based nature of our data, the information represents self-reported, cross-sectional data at a single point in time. Our sample may overrepresent those programs that already have been proactive about inviting the disclosure of ADHD and have been thoughtful about providing accommodations. Additionally, given the requirements of the ADA, PDs may hesitate to report actions they perceive are not following the requirements. Finally, we had insufficient data to draw conclusions about residency programs in the military, which may vary substantially from civilian practice.

Because the extant literature has suggested that early accommodations could prevent problems and increase the likelihood of retention and graduation,[1] we recommend that more programs review technical standards, identify how best practices for adult learners with ADHD apply to the specific demands of residency, and use a proactive approach to inviting disclosure. Future research could fruitfully identify specific strategies from residency programs that have been able to implement these accommodations successfully, increasing inclusivity for residents with ADHD.

CONCLUSIONS

FM residency programs encounter residents with ADHD frequently; nearly two-thirds of program directors who responded to this survey (65.4%) reported one or more learners with ADHD in the past 3 years. We learned that a minority of family medicine programs respond proactively, and many more implement accommodations rapidly once the need for them is clear. In addition, many programs seem to have tools they find useful for supporting and accommodating learners with ADHD. Although our findings showed that programs implement accommodations after a need is identified, residency programs everywhere would benefit from a better developed tool kit for accommodations for ADHD.

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