

AAIM Perspectives

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The Importance of Adding Discernment to the Acting Internship – A Necessary Shift in Culture Toward Competency-Based Metrics



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INTRODUCTION

The acting internship (AI), also known as the subinternship, is widely viewed by faculty,^{1,2} as well as residents,^{3,4} as one of the most important clinical experiences in preparing senior medical students for internship. However, the AI rotation has several limitations among institutions that hamper its potential to serve as a gateway course for the transition into the graduate medical education (GME) setting and as a discerning data point for residency program directors in selecting applicants. These limitations include but are not limited to high prevalence of grade inflation, lack of standardization among institutions regarding rotation structure, curriculum, and grading structure, as well as timing of the rotation during the fourth year of medical school. This paper will provide additional background on these limitations of the AI rotation, with particular focus on

the issue of grade inflation, followed by recommendations to mitigate these limitations.

CURRENT MAJOR LIMITATIONS OF THE AI ROTATION

Literature regarding grading structures and performance in the AI is lacking, but published data suggest that AI grades are artificially inflated. A survey from 2004 showed that the majority of internal medicine clerkship directors felt that AI grade inflation existed at their institution, with over half of students achieving an “honors” grade.⁵ This inflation is not unique to the internal medicine AI; orthopedic surgery and radiation oncology both report grade inflation in their specialties.^{6,7} A study by Westerman et al⁸ reviewed medical student performance evaluations from 136 Liaison Committee on Medical Education-accredited schools and found considerable variability in grading patterns with a skew toward increasing percentages of the highest grades, up to 97% honors in some cases. Based on these published data, along with the prevailing view of most medical educators, a grade of honors is thought to be the norm, with any other grade viewed as a potential red flag on residency applications. Furthermore, medical students may have

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difficulty successfully matching to their desired residency without achieving an honors grade, which makes incorporating more discernment into this grading structure a high-stakes decision. On the other hand, high prevalence of honors grades could be attributed to natural selection; students typically perform acting internships in the specialties they plan to pursue, selecting the specialty that best suits their strengths and abilities. Therefore, one could argue that these grades may be truly representative of students' abilities. However, lack of a standardized core structure of AI rotations across institutions results in wide heterogeneity, which, in turn, affects the validity of these grades.⁹ Furthermore, there are no guarantees that these grades reflect a competency-based evaluation of abilities. Herein lies the problem: institutional differences among AI rotations, fourth-year requirements, and even clerkship structures likely influence different norms and expectations of AI students, making the grade distinction relatively arbitrary in the absence of standardized metrics or assessments.

Data are also lacking regarding the importance of AI grades with regards to interview invitations and, ultimately, rank list position. Further, the weighting of AI grades likely varies by internal medicine programs. A 2018 National Resident Matching Program survey showed that 51% of internal medicine residency program directors use an "audition elective/rotation within your department" as a factor when selecting applicants to interview, and slightly less (49%) use it when ranking applicants.¹⁰ More recent 2021 data from the National Resident Matching Program reveals that the "audition elective/rotation" is used less often by internal medicine program directors to select candidates to interview (36.5%) and rank (33.3%);¹¹ however, it is unclear if COVID-19 pandemic-associated changes may have contributed to some of this change. Regardless, it appears this rotation or grade has become less useful to program directors. While there is a survey question regarding utility of away rotations, there was

no specific question regarding AI rotations at the home institution, therefore, program directors may have included AIs collectively within this "audition electives" question. These indirect data points and lack of additional disclosed national program data add to the argument that the AI might be more of a requirement for graduation than one of true discernment or utility for program directors in residency application decisions.

In the current age of competency-based medical education, the AI rotation should be one of the most important courses of medical school. It can and should serve as a critical (and possibly final) opportunity to discern student knowledge, skills, and attitudes to gauge preparedness not only for graduation but also for intern year. However, without national grading structure and distribution data for AI rotations, it is difficult to make significant conclusions. Regardless, more objective data and competency-based performance metrics are necessary for residency programs to accurately assess student abilities and develop individualized learning plans to continue their growth. Nationally, calls for standardized educational handovers from medical schools to residency program directors are growing increasingly louder across disciplines.¹²⁻¹⁷ The AI rotation is an essential aspect of the handover, especially with the increasing adoption of the Core Entrustable Professional Activities (EPAs) for Entering Residency among under-

graduate medical education (UME) institutions and its associated individualized entrustment decisions.¹⁸ As others have suggested, at a minimum, the AI curriculum should be competency based and involve a developmental progression from clerkships, with increasing clinical roles and responsibilities.¹⁹ For the AI rotation to become more competency-based and robust across institutions, it must garner the respect and support it deserves in UME.

PERSPECTIVES VIEWPOINTS

- The acting internship (AI) rotation is widely viewed as one of the most important clinical experiences of medical school; however, it has several limitations.
- AI rotation limitations include, but are not limited to, a high prevalence of grade inflation and lack of standardization among institutions regarding rotation structure, curriculum, and grading structure.
- We highlight several recommendations to mitigate current limitations, including developing national consensus-based AI curricula and competency assessments, and use of department chair's standardized letters of evaluation to improve transparency of AI rotation clinical and grading structure.
- Additionally, establishing funding for AI directors to facilitate changes is a must to help elevate the importance and potential of the AI rotation in fostering advanced clinical skills in preparation for intern year.

RECOMMENDATIONS FOR FUTURE DIRECTIONS

A first step in the right direction would be establishing a national consensus among medical education leaders that AI rotations should be a requirement for graduation from medical school and they should be financially supported by the school. AI rotations have been shown

to foster development of numerous skills and clinical experiences necessary to function effectively during the intern year.^{3,4,20} Despite the inherent importance of the AI rotation, institutional support for AI rotation leadership remains significantly less than that of clerkship directors, with 29% of AI directors reporting no full-time equivalent support while another 27% report <10% full-time equivalent support.²¹ To foster AI curriculum development and innovation, adequate support for a dedicated AI director role must be established.

It is surprising and concerning that a 2015 program director survey revealed that 10% of schools did not require any AI rotation for graduation.²² Furthermore, according to a recent internal medicine clerkship director survey, only 8.4% of surveyed medical schools require an internal medicine AI beyond the core clerkship, a decline from earlier surveys.⁹ How can a medical student successfully demonstrate ability to perform core EPAs within internal medicine, especially the more advanced EPAs, without the increased patient care responsibilities and autonomy offered by the AI rotation in the specialty they are pursuing for residency? It is therefore not surprising that a multi-institutional survey revealed that one-third of medical students did not answer pages related to patient care during medical school and only 26% were allowed to carry increased patient loads during fourth year.²³ In another large national survey of graduating US medical students, 43% of students who graduated never entered admission orders into the electronic health records, and 35% never entered post-admission orders.²⁴ While likely confounded by data showing that only 52% of medical schools required overnight call or night float during the Internal Medicine AI,⁹ it must change for students to gain advanced clinical skills and practice performing more advanced core EPAs prior to internship.

Ideally, one or more AI rotations should be required by medical schools to foster student skill development and competency attainment as well as to monitor this progression in preparation for intern year. While many students complete this rotation early in their fourth year, there is significant growth and advanced skill development that occurs during the rotation and throughout fourth year. Continual assessment during fourth year, including boot camps near the end of the year, would further aid in monitoring a student's longitudinal development. Regardless, the AI rotation is arguably the most rigorous clinical rotation of fourth year and should be viewed as the final gateway to graduation, discerning student ability to perform core EPAs with indirect supervision as a gauge of preparedness for internship.

The AI rotation's structure and curricular content will vary according to each medical school as well as clinical discipline. However, our global

recommendation is for national organizations of residency program directors to work with their AI director counterparts and develop consensus-based recommendations on competencies AIs should achieve during the rotation and what assessment tools are needed to validate such competency attainments. Creating frameworks of competencies and assessments by key medical education stakeholders on both sides of the UME-GME continuum should help ease the transition of students into internship. Some disciplines have already begun this process.^{25,26} While the AI rotation's structure will also depend on the health care systems affiliated with each medical school, implementing the standardized letter of evaluation should help provide program directors with details about each institution's AI rotation structure.²⁷⁻³⁰

Grading scales tend to vary among institutions from a tiered grading scale to a pass-fail structure or a hybrid of the two. Regardless of the grading structure, culture change at many institutions and nationally must occur to allow for more discernment within the AI rotation, in which an honors grade truly represents outstanding performance and ability. In this structure, achieving a grade other than honors should not be viewed as a negative. This grading structure must be readily transparent to avoid negatively impacting the residency Match, especially if applicants apply to programs that factor AI performance into interview invitation or rank list decisions. Explaining the AI grading structure and distribution within the medical student performance evaluation and the departmental standardized letter of evaluation, in line with the Association of American Medical Colleges recommendations of clerkships, would combat this potential deleterious effect of the grading structure change. Additionally, with application inflation and the United States Medical License Examination Step 1 moving to pass-fail, the importance on clerkship and AI grades may increase significantly with regards to residency interview and ultimately, program rank list decisions. In the ideal situation, grades should be consistent with students' true ability regardless of implications for the residency Match. Otherwise, we should advocate for transitioning to a pass-fail system with criterion or competency-based achievements.

Ultimately, as core EPAs become more widely implemented among UME and students are assessed for suitability for graduation based on summative entrustment decisions of core EPAs, a change in AI grading structure and assessment is necessary. A competency-based medical education with competency attainment thresholds for graduation should be the ideal model for the AI rotation. Establishing a remediation plan is key to successfully implementing competency-based assessments within the AI, especially if the grading structure becomes more competency based. It could also foster a time-independent AI rotation that would

allow struggling students more time to grow and develop their skills prior to graduation; however, implementing such a structure is limited by class size and learner capacity issues in clinical settings.

A graduated competency model has been successfully piloted within the UME-GME transition for medical students pursuing pediatrics residency at their home institution (Education in Pediatrics Across the Continuum).²⁴ This competency-based, time-variable model successfully navigated the challenge of students graduating and starting residency at different times, demonstrating feasibility within the same institution. Minimum passing supervisory scales based on core EPA workplace-based assessments were established, leading to entrustment decisions and ultimately, graduation upon attainment.³¹ While this is a successful example of how to implement a competency-based, time-variable model, challenges remain to implementing this across different institutions and nationally.

CONCLUSION

Current limitations of the AI rotation can be mitigated with the recommendations outlined. Developing national consensus-based curricula and competency assessments for each discipline with UME and GME input will be an important enabling step in this effort. Longitudinal assessments throughout the senior year of medical school outside of the AI rotation will also help monitor student progress as well as better inform the post-Match educational handover. Use of departmental standardized letters of evaluation can also help improve the transparency of each AI rotation's structure and grading structure. These mitigation steps can help further elevate the importance and ultimate potential of the AI rotation in UME for fostering advanced clinical skills needed for intern year.

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