THE NATIONAL RESIDENT MATCHING PROGRAM 2024 PROGRAM DIRECTOR SURVEY:

ASSESSING PROGRAM DIRECTOR HOLISTIC REVIEW PERCEPTIONS AND PRACTICES

RESEARCH BRIEF

APRIL 2025

Background

In 2023, the National Resident Matching Program® (NRMP®) started an initiative aimed at refining Program Director Survey content while minimizing respondent burden. During the 2023 administration of both the Program Director and Applicant Surveys, programs directors (PDs) and applicants were asked to identify content areas they felt were most valuable or that were missing from the Program Director Survey. One of the most frequently reported areas of high value and importance missing from the Program Director Survey Report across both respondent groups was holistic review. In December 2023, NRMP convened a group of key stakeholders for a summit meeting aimed at obtaining broad expert input about proposed changes to organizational processes. Attendees were asked to help workshop new items for the Program Director Survey related to a variety of areas, one being holistic review. The items developed in conjunction with these key stakeholders were built into the 2024 Program Director Survey.

In March 2024, the NRMP carried out its biennial Program Director Survey, targeting PDs of all programs participating in the Main Residency Match® (MRM). Conducted every even year (e.g., 2020, 2022), the survey aims to identify the criteria PDs use to (1) select applicants for interviews, and (2) rank applicants in the MRM. The results of this survey provide the graduate medical education (GME) community with insights into the decision-making process of PDs, which is particularly critical for current and future applicants participating in The Match®.

There has been an increased focus on the adoption of holistic review in the residency applicant review and selection process in recent years. This framework emerged in response to the need for more flexible and balanced review and selection processes and disparities in recruitment of underrepresented in medicine (URiM) applicants. Holistic review is an approach that evaluates applicants based on experiences, attributes, and academic metrics to assess alignment with program goals, curriculum and community health needs, moving away from relying primarily on standardized test scores and grades. The transition of USMLE Step 1 and COMLEX Level 1 to pass/fail in 2022 further emphasized the need for this shift to a more thorough review of applicants, and consideration of how each individual applicant may contribute uniquely to both the program and the field of medicine. Although holistic review aims to create more comprehensive and mission-driven selection processes, the lack of standardization of holistic review practices across programs and specialties has made it difficult to assess its impact or define its scope. This variation poses challenges for both applicants and programs, highlighting the need for qualitative exploratory work using the 2024 Program Director Survey as a data source.

The aim of this research brief is to examine what holistic review means to PDs, what program's holistic review practices entail, and to provide insight into how these evolving practices influence the residency selection process. This examination will contribute to applicants better understanding about what elements may be considered in holistic review, which helps them make better informed decisions on selecting programs and will help them better navigate the transition to residency process.

Data Collection

The survey was distributed to PDs who had certified a rank order list for the 2024 MRM. Survey administration took place over an 11-day period between the Rank Order List certification deadline and the beginning of Match Week (i.e., February 29th – March 10th, 2024) to ensure responses were not influenced by Match outcomes. The questionnaire was created and administered using Alchemer, an online survey software platform and survey administration received exempt status from Advarra IRB. Information about the survey going live and the importance of participating was distributed via the NRMP monthly e-newsletter, social media posts and the NRMP website.

Survey Design

The first section of the 2024 NRMP Program Director Survey asked PDs the number of applications received overall and the number of applications that received a holistic review for the 2024 Main Residency Match cycle. The holistic review section of the survey consisted of one quantitative item and two qualitative open-ended response items. All PDs who responded to the survey were asked: 1) In your opinion, does your program engage in holistic review practices when selecting applicants for interviews and/or for inclusion on the program's rank order list? yes/no as well as open-ended questions: 2) define what "holistic review" means to you and 3) to describe what your program's holistic review practices entail. Since the impact of holistic review on PD behaviors is not well understood, it was important in the initial iteration to allow PDs to explain their behaviors in detail, rather than limiting them to predefined quantitative responses. For exact verbiage of holistic review-related items, please see the Appendix. It should be noted that all respondents of the survey were asked all questions pertaining to holistic review, regardless of whether they reported their program engaged in holistic review practices or not, and are included in Table 1, and Figures 2 and 3. Additionally, only PDs who responded to one or both of the two open-ended questions are included in Figures 1, 4, and 5, and all outliers have been removed.

Response Pool

A total of 6,390 PDs were invited to complete the survey, resulting in 1,150 responses (18.0% response rate), with 813 complete and 337 partial responses. Response rates varied slightly by specialty, ranging from 11.0% in Dermatology to 29.1% in Obstetrics and Gynecology. Specialties with 10 or more unique survey responses are included in **Table 1**. The "All Others" category consolidates 23 specialties, including 17 combined programs, which submitted fewer than 10 responses. Of the 1,150 PDs who responded to the survey, 693 (60.3%) provided a response to at least one of the two open-ended holistic review questions. The two open-ended questions were independently reviewed and coded, with codes counted at the question level rather than at the unique respondent level. This means that if a respondent answered both questions and the same code was applied to both responses, the code was counted twice. A visualization of the number of responses by specialty is provided in **Figure 1**. Please note that this figure represents the total number of responses to either question across specialties, not the unique number of respondents within each specialty.

Table 1. 2024 Program Director Survey Response Rates by Specialty

Specialty	Surveys Sent	Number Responding	Response Rate
Anesthesiology	288	44	15.3%
Child Neurology	101	20	19.8%
Dermatology	182	20	11.0%
Emergency Medicine	292	81	27.7%
Family Medicine	795	178	22.4%
Internal Medicine	1126	147	13.1%
Internal Medicine/Pediatrics	77	21	27.3%
Neurological Surgery	116	17	14.7%
Neurology	204	37	18.1%
Obstetrics and Gynecology	306	89	29.1%
Orthopedic Surgery	218	41	18.8%
Otolaryngology	138	27	19.6%
Pathology-Anatomic and Clinical	177	38	21.5%
Pediatrics	279	65	23.3%
Physical Medicine and Rehabilitation	131	25	19.1%
Psychiatry	382	73	19.1%
Radiation Oncology	99	14	14.1%
Radiology-Diagnostic	224	46	20.5%
Surgery-General	613	78	12.7%
Transitional Year	217	27	12.4%
Vascular Surgery	79	13	16.5%
All Others	346	49	14.2%
Total	6,390	1,150	18.0%

Note: All 2024 Program Director Survey respondents are included in Table 1.

Figure 1. Item Response Saturation by Specialty.

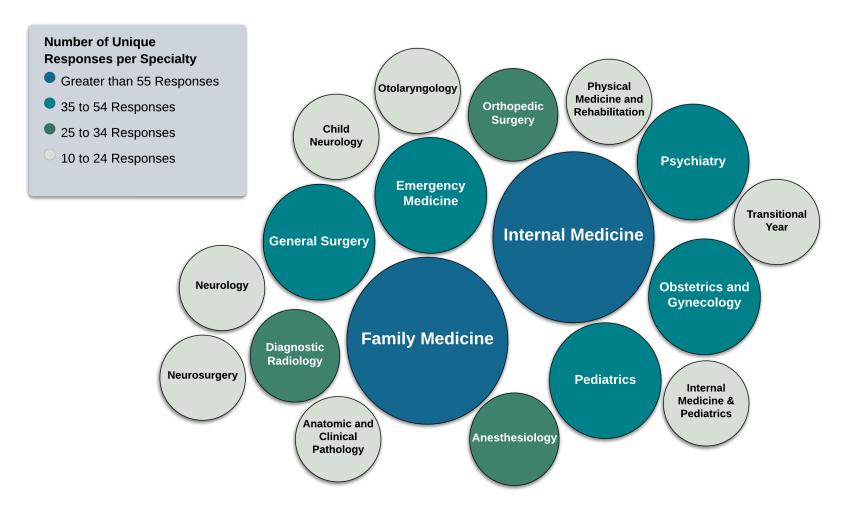


Figure 1. Provides a visualization of the response counts by specialty. It reflects the total number of responses to either question across specialties, rather than the unique number of respondents per specialty. Only PDs who answered one or both open-ended questions about holistic review are included in Figure 1.

Below, **Figure 2** depicts the self-reported classification of respondents by academic or community program type and includes all survey respondents. Among those who responded, 52.0% reported that their programs were academic (housed within an academic medical center), 42.2% were community (affiliated with a medical school but not housed within an academic medical center), and 5.6% were other or not sure.

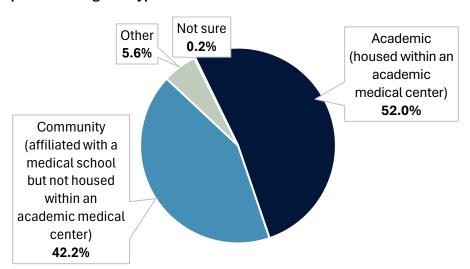
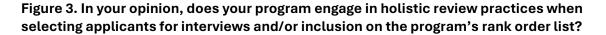
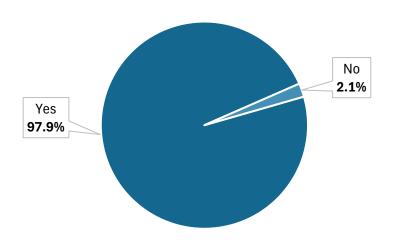


Figure 2. Respondent Program Type Classification.

Results

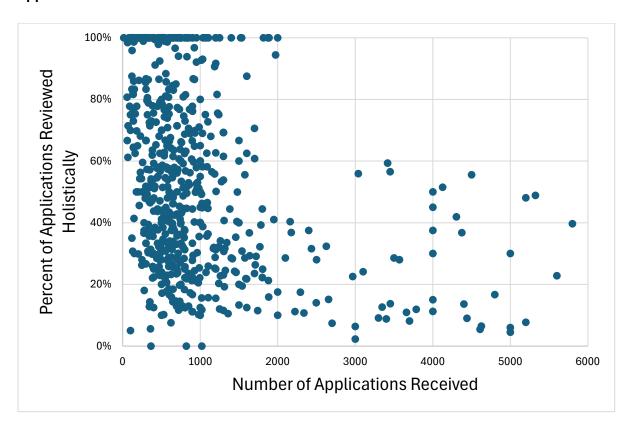
As depicted in **Figure 3**, all PDs who responded to the survey were asked if, in their opinion, their program engages in holistic review practices when selecting applicants for interviews and/or for inclusion on the program's rank order list. The overwhelming majority of PDs (97.9%) indicated that holistic review practices did play a role in interview and ranking behaviors, whereas 2.1% indicated that they did not.





Even PDs that indicated using holistic review practices in their application review and selection process did not necessarily review every application holistically. **Figure 4** illustrates the distribution of the percentage of total applications self-reported by PDs that received a holistic review by the total number of reported applications received by each program among the programs who participated in one or both open-ended holistic review survey questions, with outliers removed. The number of applications that programs received ranged from 13 to 5800 (median=677). The majority of applications received by programs that reported 100% holistic review were 2000. The average number of applications reviewed holistically varied. On average, programs that received up to 500 applications reviewed 64.8% of them holistically. For programs receiving 501–1,000, 1,001–2,000, and more than 2,000 applications, the percentages reviewed holistically decreased to 53.3%, 48.3%, and 25.1%, respectively.

Figure 4. Number of residency applications received by each program vs. percent of total applications that received a holistic review



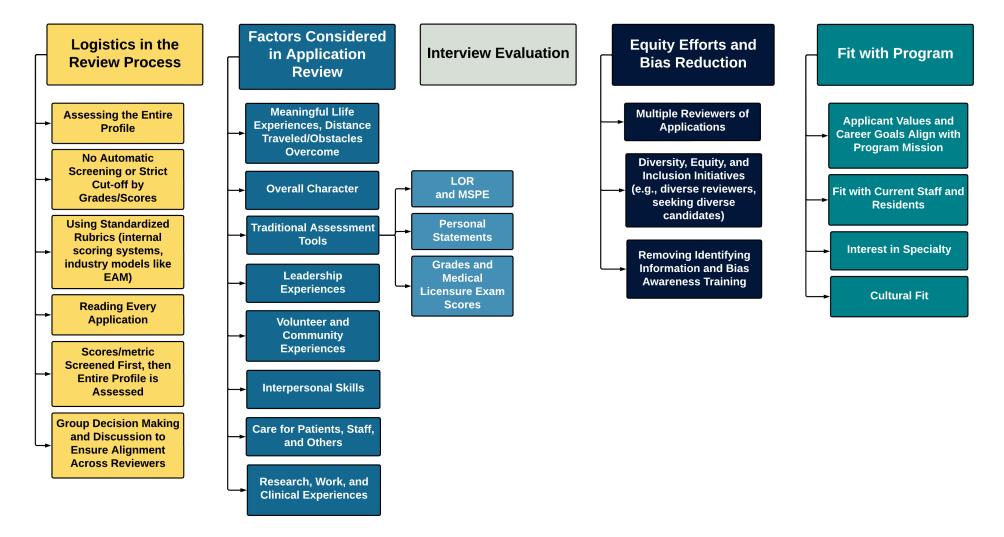
Qualitative Analyses

Among the 1,150 PDs who responded to the 2024 Program Director Survey, 693 (60.3%) responded to at least one of the two open-ended holistic review questions. As each response to the two open-ended questions pertaining to holistic review were coded separately, a total of 1,366 responses were coded. Four NRMP Research Team members compiled and analyzed responses, created a codebook, and independently coded responses using ATLAS.ti. They then consolidated codes and resolved discrepancies.

Additionally, to assess potential variation in responses across specialties, a specialty matrix was constructed. The frequency of each theme was calculated as a proportion of the total number of survey responses within each specialty, allowing for direct comparisons of theme frequencies across specialties. A significance threshold of 0.10 and a minimum frequency of 0.10 were established to determine significant differences between specialties. Using these criteria, only one specialty met the threshold for any theme, thus specialty-specific frequencies were not reported.

Five overarching themes emerged from the open-ended responses and were analyzed to recognize the intricacies of PD responses to better understand the usage and impact of holistic application review. As appropriate, these five themes were broken down into sub themes. A visualization of themes is presented as a thematic map in **Figure 5**. The five overarching themes include 1) logistics in the review process, 2) factors considered in application review, 3) interview evaluation, 4) fit with program, and 5) equity efforts and bias reduction. The themes and sub themes are described individually below. Selected responses for each theme/sub theme are presented in **Table 2**.

Figure 5. Thematic Map



Description of themes/Sub themes

Logistics in the review process

The review process explored the logistics of how PDs approached applicant evaluations, with several elements connected to holistic review practices.

Assessing the entire profile

By far the most frequent response, PDs both defined and practiced holistic evaluation by assessing the entire applicant profile. Some PDs evaluated all parts of the application materials, with some using language to describe the "360-degree review" of the applicant that considered both academic and non-academic characteristics (i.e., applicant values, diversity and attributes). This underscored the importance of a comprehensive application review, particularly the parts of the applicant that were not captured through traditional academic metrics.

No automatic screening or strict cut-off by grades/scores

One way that PDs described engaging in holistic review was by eliminating or modifying their screening and cut-off practices. This often reflected a shift away from relying solely on medical licensure exam scores and medical school grades to select applicants for interview invitation or rank order list inclusion. While many PDs clarified that grades and licensure exam scores remained important factors in the application, they were no longer used as automatic elimination tools. This approach allowed candidates to receive a more comprehensive evaluation beyond traditional metrics of academic performance. Some PDs also noted that the only screening practices they utilized were screening out applicants with board failures.

Using standardized rubrics (internal scoring systems, industry models like EAM)

The use of standardized rubrics, often in the form of internal scoring systems, was mentioned in many responses. Some PDs also utilized the AAMC's Experiences-Attributes-Metrics (EAM) model in addition to internal rubrics or scoring systems. Additionally, some PDs mentioned that they used rubric and scoring systems in general whereas others provided details about what the rubric entailed. Many PDs felt that the standardized review allowed them to weigh non-academic parts of the application. Among those who detailed out their rubrics, they indicated that they were developed by committees and focused on metrics such as interpersonal skills, volunteer experiences, program mission alignment, and volunteerism. This created what PDs considered to be a more objective approach to application review and it streamlined the ranking process, especially for programs reviewing a large volume of applications.

Reading every application

Reading and reviewing every application submitted was brought up as an element of holistic review practices for some programs. Some PDs mentioned that all applications are read without screening filters and that they believed this provided a fair assessment of each applicant.

Score/metrics are screened first, then the entire profile is assessed

Many PDs reported utilizing minimum requirement screenings when reviewing applications, and if an applicant met these minimum criteria, the application would be reviewed in its entirety. The metrics used to screen applicants varied among programs, with most PDs reporting using minimums for medical school grades, licensure exam scores, medical school course failures, and gaps in training. Some programs had additional screening criteria, though they were less common, such as visa status, geographic preferences, or program signals.

Group decision making and discussion to ensure alignment across reviewers

Group decision making and discussions to ensure alignment were emphasized by several PDs as one of the logistics in their holistic review, enabling multiple perspectives and experiences to be implemented in the process. Group members consisted of individuals that interacted with the applicants directly during the interview process, including faculty, residents, PDs and APDs. Some PDs reported that group decision making was involved in developing rubrics for, deciding who to invite to interview, and ultimately decisions about where on the rank order list to include individual applicants.

Factors considered in application review

The review process examined the specific factors considered by PDs in their holistic approach to evaluating applications

Life experiences, distance traveled/obstacles overcome

Many PDs valued the ability to overcome obstacles among applicants, sometimes referring to this quality as "grit" or "distance traveled." PDs also emphasized the importance of meaningful life experiences in their holistic review screening criteria. While most PDs did not elaborate on the specifics of these experiences, they acknowledged the impact of meaningful life experiences in shaping residents beyond what is reflected in traditional academic metrics.

Overall character

Some PDs shared that assessing an applicant's overall character was a criterion of the holistic review process. While it was not always clear how character was ascertained, PDs shared that it was associated with life experiences, personal traits, and overcoming adversity with specific examples about altruism, ethics and uniqueness. This underscores the emphasis placed on evaluating intangible qualities that contribute to an applicant's potential fit within a program.

Traditional assessment tools

Letters of recommendation & MSPE

Letters of recommendation and the Medical Student Performance Evaluation (MSPE, or Dean's letter) were indicated by PDs as a review metric. Specifically, identities of the authors and overall evaluations played a vital role in the review process. While the reasons

for evaluating letters of recommendation are not always explicitly stated, some PDs mentioned that they used the letters to supplement the typical focus on medical school grades and license exam scores in the review process.

Personal statements

Many PDs shared that they utilized personal statements to evaluate applicants' values, diversity, and attributes. PDs indicated that personal statements served as tool to understand the candidate more and learn about their life experiences, including how their values align with the residency program.

Grades & medical licensure exam scores

Medical school grades and medical licensure exam scores were mentioned by many PDs as factors they are continuing to look at in holistic review processes. Some respondents utilized them as an initial screening tool, while others note they are part of a longer list of factors they review. While grades and licensure exam scores were considered during the holistic review process, PDs also reported that they are attempting to give those aspects of the application less weight compared to other aspects of the application. Many PDs expressed trying to see applicants as "more than just grades and test scores" and described reviewing applicant information with a larger focus on other aspects of the application. Respondents also reported reflecting this point of view in their rubrics by incorporating multiple dimensions of an applicant beyond traditional metrics.

Leadership experiences

Several PDs expressed the importance of leadership as a crucial characteristic for applicants. They indicated that they specifically sought out applicants with leadership attributes, skills, experiences, roles held, and potential during the holistic review process.

Volunteer and community experiences

PDs emphasized the significance of applicants demonstrating volunteerism and community involvement in their applications for a holistic review evaluation. Some PDs saw it as a demonstration of meaningful connection with community, which may translate to dedication to future patients, and was frequently associated with advocacy. Other PDs saw volunteering as evidence of meaningful long-term commitment, a quality valued in some residency programs.

Interpersonal skills

Interpersonal skills, such as an applicant's ability to communicate effectively, how they interact with others, and their ability to work as part of a team, were factors PDs looked for during holistic review. PDs mentioned communication skills as a key metric to assess, with some including it as a specific section in their rubric, viewing these skills as indicative of professionalism and potential for leadership. Many respondents also shared that these were qualities and skills they looked for during interview experiences or other face-to-face interactions.

Care for patients, staff, and others

Many PDs emphasized the importance of applicants demonstrating care for patients, staff, and others in holistic review. PDs noted empathy, emotional intelligence, a desire to serve patients, and altruism as important characteristics and values for potential residents. PDs looked for these characteristics and overt mentions of their care for others in letters of recommendation and MSPEs, or awards and accomplishments that demonstrated this quality. Some described specifically looking for applicants who expressed their desire to work with underrepresented populations and/or commitment to caring for diverse patient populations.

Research, work, and clinical experiences

Research, work, and clinical experiences were mentioned frequently by PDs as part of the holistic review process. Some noted these experiences can be an indicator of an applicant's direct exposure to patients or populations, ability to solve problems, and ability to fulfill long term commitments. These experiences also helped balance other potentially weaker aspects of the application and were important when reviewing international medical graduate applicants, with PDs seeking information about previous training and U.S. based clinical experiences.

Interview evaluation

The interview process was pivotal to many program's holistic review practices. Specifically, PDs reported assessing interview performance, focusing on behavior-based questions, demeanor during the interview, and answers to standardized questions. Additionally, PDs noted the time spent on interviews compared to other application materials when deciding which applicants to advance in the selection process. Some PDs noted using a formal scoring system for interview performance, while others used the interview to get to know the applicant better, discuss the details of their application, and assess how they may fit in with the program. As one PD put it, "would you break bread with [the applicant]?"

Equity efforts and bias reduction

PDs employed various approaches to incorporate equity efforts and reduce bias within their holistic review practices.

<u>Multiple reviewers of applications</u>

Many PDs reported using multiple reviewers and/or interviewers as part of their holistic review processes. PDs reported that the makeup of multiple reviewers/interviewers included faculty, residents, PDs, APDs, and program administrators with varied identities and professional backgrounds. Multiple reviewers and interviewers were involved to ensure consistency in how applicants were assessed and to minimize the potential for individual bias. Some respondents indicated that rubrics were an essential component of the process when utilizing multiple reviewers for a single application, as it served as a consistent reference tool that all reviewers followed.

Diversity, equity, and inclusion initiatives (e.g., diverse reviewers, seeking diverse candidates)

Though it was mentioned often, there was wide variance amongst PDs about the definition and implementation of diversity, equity and inclusion (DEI) initiatives, with respondents providing multiple characterizations of what this entails in their programs in relation to holistic review practices. Most PDs reviewed applicant characteristics, with some giving extra consideration to URiM applicants by evaluating their full profile even if they didn't meet initial screening criteria, or by establishing a "DEI committee" to assess these applicants. PDs also reported being interested in applicants' relevant diversity and equity experiences or background and/or overall interest in health disparities. Several mentioned seeking candidates with unique backgrounds, characteristics, and interests that would enhance their community and/or program and emphasize applicants' experiences both in and beyond school or work.

Removing identifying information and bias awareness training

In efforts to reduce bias during the holistic review processes, some programs removed identifying information from applications. PDs described removing identifying information that could bias a reviewer's perception of an applicant, such as licensure exam scores, use of program signals, medical school attended, hometown, age, picture, demographic information, or honor society membership status. Additionally, PDs reported having reviewers/interviewers attend bias awareness trainings, with a small number of PDs distributing implicit bias tests to reviewers.

Fit with program

Assessing fit with the program involved evaluating how well applicants aligned with the specialty and residency program they were pursuing.

<u>Applicant values and career goals align with program mission</u>

The alignment of applicants' values and career goals with the residency program's mission is a crucial aspect of the holistic review screening process as highlighted by PDs. Many PDs considered their program's mission when reviewing applications or conducting interviews to assess whether they thought an applicant would be a strong fit. A specific career area mentioned included serving specific patient populations that aligned with the program mission (i.e., rural patient population). Some PDs noted that applicant-program alignment in values and career goals were strong indicators of applicants who would be most successful in their program or specialty.

Fit with current staff and residents

When evaluating applicant interest in their programs, PDs emphasized the significance of compatibility with the existing staff and residents. The interactions observed during the interview process, either formally or informally, were noted as a method for assessing this compatibility. Whether it was based on the applicant's personality displayed during an interview, interactions with the resident team, or impressions during rotations, PDs valued perceived "fit" with the current team. For some PDs, fit with the current staff even outweighed academic characteristics such as

medical school grades or licensure exam scores, asserting that applicants are likely all very capable, but some were simply a better match for the existing faculty.

Interest in specialty

In the evaluation of holistic review, PDs emphasized the significance of candidates' interest in the program's specific specialty. Many expressed a preference for candidates who demonstrated a clear inclination towards the program's specialty, whether at a community (i.e., population health practices) level or within the specialty itself (i.e., demonstrated interest in the specific specialty they are applying to). Some PDs asserted that applicants who were more committed to the specialty were more likely to succeed in residency and be a better fit for the program.

Cultural fit

Cultural fit with their program is an element many PDs look for in applicants, though this meant different things to different programs. Definitions of "cultural fit" amongst respondents included concordance with patient identity groups, languages spoken, desires to work with underserved populations, and connections to specific patient populations or geographic regions. It was especially important for rural programs to find applicants who had an interest in, connection to, or background in a rural area, as it was perceived to indicate an increased likelihood of residents staying in the area after residency.

Table 2. Selected Quotes per theme/sub theme

Theme/subtheme	Selected Responses
	Logistics in the Review Process
assessing the entire profile	"360-degree view of an applicant." Participant #5 "Assessing all information available about an applicant." Participant #54 "We review the whole application. We have identified the characteristics that make an ideal resident in our program and look for those characteristics in the review process." Participant #672
no automatic screening or strict cut- off by grades/scores	"Applications are randomly assigned to faculty members who evaluate based on overall qualifications. We do not have a "cut-off" or automatic rejection." Participant #394 "We review aspects of the entire application. We do not have cut offs and compile the entire application when "grading" it." Participant #664 "We do not use test score or grade cut-offs apart from a pass/fail assessment." Participant #224
using standardized rubrics (internal scoring systems, industry models like EAM)	"Full review of application and scoring each applicant on a standard rubric; same is done with interview to include standardized questions to mitigate interpersonal bias." Participant #87 "We followed the EAM [Experiences, Attributes, Metrics] metrics for a holistic review from the AAMC." Participant #624 "A systematic approach to evaluating the entirety of an applicant's file including metrics, attributes and experiences." Participant #32
reading every application	"Every single application is read. This means, every applicant who meets criteria to work in the United States is reviewed by our review committee" Participant #616 "Each application reviewed in detail." Participant #364 "The PD and APD review every single application. This process takes many hours, but it is the most fair." Participant #459
score/metrics are screened first, then the entire profile is assessed	"Faculty and residents working together to review applicants that have met predefined filtering criteria, followed by a secondary review." Participant #30

Theme/subtheme	Selected Responses
	"Each application that is not eliminated by our initial screen is reviewed, scored using all application materials without weighting of one factor over others" Participant #111
	"With over 7000 applications, it is impossible to do holistic review on everyone - so we apply a pre-established criteria to those applications which will then undergo holistic review. It is the best we can do given the numbers." <i>Participant #691</i>
group decision making and discussion to ensure alignment across reviewers	"Our recruitment committee convened and created a scoring process with a possible of 25 points." <i>Participant #391</i>
	"During the interview, applicants meet both current faculty and residents in formal and informal settings. All faculty and residents who interacted with applicants meet together to discuss and agree upon rank order." Participant #156
	"Reviewing all components of applications that meet our standardized screening criteria and discussing as a selection committee highlights in the application that indicates how well the individual might fit into our program and what qualities we would like to see more of in our residency program." Participant #494
	Factors Considered in Application Review
meaningful life experiences, distance traveled/obstacles overcome	"Points are given for scholarly activity as well as life experiences. For example, someone could get extra points for being AOA and someone could get additional points for overcoming homelessness or attending medical school in a war-torn country." Participant #465
	"Review of meaningful experiences, personal history, and evidence of grit in addition to academic performances." <i>Participant #452</i>
	"Integrating "distance traveled" with current capacity to thrive in a challenging and difficult job (not just residency but beyond) which requires life experience, humility, life-long learning, and a level of baseline knowledge." Participant #239
overall character	"Predefined qualities that are sought after in a resident - determination, intellectual curiosity, life experience, etc. These are qualities that will add to the fabric of our program and department." Participant #118
	"Looked at the overall journey of candidates and we tried to engage on the candidates as people and get a sense of their humanism." Participant #258
	"Carefully reading the entire application if not excessively long and trying to see the applicant between the lines as an individual with

Theme/subtheme	Selected Responses
	special traits that could add something to the program and its trainees." Participant #70
traditional assessment tools	
letters of recommendation (LOR) & MSPE	"Read whole application; read all letters, speak with selected recommenders" Participant #92 "Skim MSPE for red flags (class fails, professionalism complaints), read personal statement, read LOR, and the look at the experiences." Participant #171 "Placing more weight on letters of recommendation and MSPE
	comments regarding work ethic and patient interactions." <i>Participant</i> #296
personal statements	"For me, it also entails going FIRST to the personal statement before looking at other objective data." Participant #121 "We look at the other aspects of the student's application to determine how they overcame that issue and if it was addressed openly in their personal statement/interview or kept hidden by the applicant." Participant #617 "We read the statements and give credit for overcoming hardship, adversity, poverty, etc. and offer more leeway to students that struggled but succeeded on their educational path." Participant #649
grades & medical licensure exam scores	"Consideration of grades and other evidence of academic performance as well as the applicants' backgrounds." Participant #109 "Consideration of awards that reflect concern for others, like the Gold, personal statement, less focus on grades as some schools have practices that put their students at a disadvantage." Participant #584 "We tend to look at everything about an applicant including grade[s] and test scores but also the persons character, professionalism and integrity We are looking at the whole package, not just grades or test scores." Participant #678
leadership experiences	"Illustration of leadership qualities and personal growth." Participant #110 "We are looking at evidence for leadership, work ethic, teamwork, cultural competence, resilience, etc. If the applicant shows a lot of evidence of leadership, then they will get a higher score in that

Theme/subtheme	Selected Responses
	category, than if they had no leadership experience at all." <i>Participant</i> #222
	" We look to see what specific aspects of the applicant's application distinguishes them as a future leader in the field. Specifically, we look at personal qualities, accomplishments in and out of the classroom and clinical setting, as well as challenges they have overcome." Participant #225
volunteer and community experiences	"Commitment to community and volunteer activity and extracurricular activities." Participant #601
	"Reviewing all aspects of student's performance and abilities and not weighting them differently, valuing community service and leadership and work experience as much as research and grades." <i>Participant</i> #483
	"Giving weight to the all aspects of the application - the experiences, volunteer or community outreach, professionalism and leadership, obstacles overcome by applicant, what qualities they bring to a residency." Participant #197
	"Interest in our program through signals, interpersonal interactions, rotations here." <i>Participant #352</i>
interpersonal skills	"Ranking is determined based on a point system from several reviewers and takes into account a number of professional, communication and interpersonal attributes perceived by interviewers." Participant #448
	"The capacity to listen, to reflect, to engage in meaningful conversation about patients and their families and their work on teams." Participant #565
	" Ability to take care of patients with all background[s], including race, economic status, [and] educational level." Participant #36
care for patients/staff/others	"Willingness to look beyond self to help others in need, and altruistic qualities." <i>Participant #163</i>
	"Their understanding that becoming a physician is not a job, but rather a commitment to a professional life of service to patients and the profession." Participant #458

Theme/subtheme	Selected Responses
research/work/clinical experiences	"If a resident lacks in one area, how does he/she compensate in another (research, teaching or other volunteer activities)?" Participant #232 " All experiences (teaching, volunteer, research, work, extracurricular activities, hobbies, etc.), publications, when education occurred, performance during interview day, and where have lived." Participant #323 "Evidence of meaningful extracurricular and research activities, personal history/meaningful events, connection to the area where our program resides, clinical aptitude (grades/clerkship summaries) and professionalism/interpersonal skills." Participant #437
	Interview Evaluation
	"Interviewing to eval for fit" Participant #235
Interview evaluation	"Interview score by each of 3 faculty incorporating a behavioral question and exploration/discussion of meaningful experiences with ability to demonstrate reflective process." Participant #151 "Debriefing of candidates on the interview day that includes each interviewer's review of the application, their interaction with the candidate, and overall impressions. The main interviewers meet again to make the rank list and all written feedback of the interview day is revisited." Participant #554
	Equity Efforts and Bias Reduction
multiple reviewers of applications	"PD reads all applications, selects those that meet qualifications for program. APD and PD review those meeting program expectations for interview. Interview committee reviews applications and completes evaluation score sheet with multiple topic areas." Participant #101 "The core faculty are assigned applications to review and then categorize them by fit and desire to interview. The PD and APD then review the comments/assessments from the faculty and review applications to decide final invitation list for interviews." Participant #17 "2) Having different staff review different parts of the application with set criteria for review 3) Having clear, defined criteria to review each application before offering an interview 4) Multiple people set to interview the candidate including PD, multiple faculty, non-physician faculty, Manager of GME" Participant #689
diversity, equity and inclusion initiatives	"We have a group of faculty from racial/ethnic groups underrepresented in medicine review all URiM applications (they have

Thems/subthems	Colonted Decreases
Theme/subtheme	Selected Responses
(i.e., diverse reviewers, seeking diverse applicants)	access to the entire application) and make recommendations on whom to invite. In addition, we have a global health and advocacy tracks, each of whom has reviewers independently review the entire application of applicants indicating an interest in those tracks." <i>Participant #438</i> "Rather than looking at one particular aspect of the application like USMLE scores, evaluate the application on the basis of culture,
	humanism, humility, DEI and community involvement and interest." Participant #400 "Life experiences outside of medicine, diversity of culture and background, and specifically rural connections / background / goals." Participant #174
	"Blinded review of the entire applicant package, names and
	demographics removed as part of the review." Participant #65
remove identifiers to reduce bias and bias awareness training for reviewers	"Blinded to race, ethnicity, gender and step scores, review of every single applicant by a diverse selection committee including residents and attendings. Hybrid interviews with half of interviewers being blinded to the entire application with standardized interview questions and the other half of interviewers being blinded only to race ethnicity gender and step scores." <i>Participant #60</i>
	"We reviewed applicants after blinding to age, ethnic background, race, gender, country of origin, religion, and school as well as appearance to try and truly determine applicant suitability by the applicant academic and performance data alone." Participant #579
	Fit with Program
	"We review the entire application by multiple reviewers, evaluating applicants fit for our programs mission which goes beyond board scores and grades in medical school." Participant #669 "Mission-aligned selection processes that take into consideration
applicant values and career goals align with program mission	applicants' experiences, attributes, and academic metrics as well as the value an applicant would contribute to learning, practice, and teaching. We consider the "whole" applicant based on our predefined mission-based goals." <i>Participant #349</i>
	"We each evaluate the application in multiple domains, with a focus on fit with the program's mission to train community psychiatrists or psychiatrist[s] dedicated to working with underserved populations. We also have a research track, so consider applicants who have a track record in a research area which we could support." <i>Participant #102</i>

Theme/subtheme	Selected Responses
	"We put most emphasis on the applicant's personality, ability to fit into the resident culture and hospital culture" <i>Participant #167</i>
fit with current staff/residents	"How well they did during the interview and how well they interacted with the resident team. Impression during rotation at our facility during a sub-I carries a lot of weight." <i>Participant #256</i>
	"We try and look at each candidate application in search really only of fit once they've reached our interview process because at that point, we feel all applicants are likely very capable so are just looking for fit with our current residents and faculty." Participant #679
	"A thorough review of the applicant and perception of commitment to specialty" Participant #33
interest in specialty	"Scores, geography, commitment to FM [Family Medicine], volunteer activities, leadership, interest in our program (signals or emails or meeting at conference) and distance traveled. For interview day, standardized questions related to cultural competency, teamwork, adaptability, passion for FM [Family Medicine], integrity, and patient focus." Participant #603
	"It is a consideration of all of the information in an applicant's information package to determine interest and dedication to the specialty, capacity to excel in the specialty, and fit in the training program." Participant #245
cultural fit	"We focus on all the other aspects of an applicant and try to get someone who is a good human and someone who will be happy at our rural location. We've found if they are happy here and have a "sense of home" and they want to be here and know how to work hard, we can teach anyone the medicine and produce a very competent and qualified medical professional." Participant #338
	"We also look at their ability to speak 3 of the languages primarily spoken by our patients, and give preference to bilingual, bicultural applicants. We also prefer that the residents we train practice locally after training, so geographical preference is very important." <i>Participant</i> #389
	"When considering applicants, we look at their grades, culture, language, interest in peds, common traits with our current and previous residents, likely contribution to our program, how they will interact with our current residents and their ability to meet the needs of our patients." Participant #688

Note: Quotations in Table 2 have been edited for grammar and spelling to ensure clarity.

Summary of Findings

Two open-ended response items from the 2024 Program Director Survey illuminated how PDs defined holistic review, what practices they implemented, and how holistic review impacted their residency selection process. Across responses from 693 PDs, five key themes emerged. While traditional assessment tools, such as letters of recommendation, personal statements and academic performance (i.e., medical school grades and medical licensure exam scores), remained important, PDs emphasized a shift of priority away from heavily weighting academic metrics. Instead, they prioritized more nuanced factors such as meaningful life experiences, overall character, leadership experiences and volunteer, research, and work experiences. Additionally, PDs shared insights into their holistic review practices, including specific rubric criteria they found most effective for evaluating applicants. Many mentioned using standardized rubrics for consistency and relying on applicant scores and metrics primarily as an initial screening tool.

Moreover, PDs stressed that their holistic review processes included assessing the entire applicant profile including application information, references, and interview performance. These practices allowed PDs to assess multiple dimensions of an applicant including personal and professional skills. Interpersonal skills and demonstrated care for others, both in their working environments and patient populations, were components PDs looked for in their holistic review. Fit with the program was another significant factor, encompassing alignment with the program's mission, compatibility with current staff and residents, and genuine interest in the specialty. PDs also highlighted efforts to promote equity and reduce bias in the review process. These efforts included employing multiple reviewers, seeking candidates from diverse backgrounds, and utilizing tools to minimize bias. Lastly, PDs noted that interview performance provided an additional layer of evaluation, offering deeper insight into the applicant's overall fit and qualifications.

In the graduate medical education world, the concept of holistic review has not been consistently defined. To provide greater insight into holistic review practices, the NRMP sought feedback directly from PDs through our biennial survey. While the findings were not entirely surprising, they did not yield a straightforward understanding of holistic review practices, as responses varied significantly. While not enough to warrant a theme or subtheme, there were a small number of "I don't know" answers, further underscoring that holistic review is still an ambiguous concept for many, with vastly different understandings of what it entails across programs. Conversely, when examining responses at the specialty level using a specialty matrix, we found few significant differences within our themes and sub themes. However, a notable exception was observed in the specialty of Neurosurgery within the sub theme of "multiple reviewers of applications," suggesting that holistic review practices may largely be consistent across specialties.

The intent of this exploratory work was to further the shared understanding of holistic review from PDs perspectives, including insights into some of the practices programs utilized. Future directions can consider how different specialties vary in their holistic review approach and ask more specific questions about holistic review practices, such as rating the importance of each overarching theme and fleshing out criteria used in standardized rubrics. As outlined in the findings above, understandings of holistic review and how it is implemented vary greatly. This work contributes to gaining a more nuanced understanding of its use in practice and offers applicants, PDs and other

stakeholders the opportunity to better understand the strategies PDs employ throughout the application review and ranking process.	

References

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Appendix: Selected Holistic Review Items

1. Please provide the following numbers about your residency applications and interviews in the 2024 Main Residency Match: Applications that received an holistic review [text box entry, numeric only]

The	following questions are about holistic review practices.
2.	In your opinion, does your program engage in holistic review practices when selecting applicants for interviews and/or for inclusion on the program's rank order list?
	□ Yes
	□ No
3.	Please define what "holistic review" means to you
	[Free text entry with 500-character limit.]
4.	Please describe what your program's holistic review practices entail.
	[Free text entry with 500-character limit.]