

Exploring Residency Match Violations in Family Practice

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Background and Objectives: *This study's objective was to learn what student applicants to family practice residency programs in 2002 understood about National Resident Matching Program guideline violations, whether they experienced violations, and how they were affected by perceived violations. **Methods:** We used qualitative analysis of in-depth interviews with 15 key informant students. **Results:** Only six of the 15 students believed that they had experienced a violation. Only two students had experienced an actual Match guideline violation, and two more experienced potential violations. There was substantial confusion about what constituted a violation. The sources of confusion involved failure to attend Match orientation, lack of clarity in published information, confusing messages from programs, rumors and word-of-mouth, and students' own personal moral values. Equal Employment Opportunity Commission violations were interpreted by some as Match violations. Some students judged programs based on threats to the integrity of the Match, whether or not they experienced actual violations. **Conclusions:** Real and potential Match violations did occur, but there is also considerable confusion about what constitutes a violation. There are opportunities to investigate violations, train students to recognize and deal with violations, and clarify actual violation definitions and for programs to avoid the real and perceived violations that affect their recruiting.*

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The National Resident Matching Program (NRMP) is a private, not-for-profit corporation founded in 1952 as a venue for matching residency applicants' and programs' preferences for each other in a consistent way and with a uniform timetable.^{1,2} It is "the computerized market through which the vast majority of new physicians in the United States find their first jobs, as residents."³ The NRMP process is designed to minimize pressures on applicants and programs to make decisions before all options are known. After completing interviews, each party submits a list of potential matches in order of preference (rank order list).

The formation of the NRMP was the result of nearly 3 decades of iterative gamesmanship to achieve the best match outcomes for individual students or hospitals.

Efforts to achieve outcomes recognized as being fair by both sides led to the creation of a centralized, algorithm-driven process. This process and the algorithm have undergone some evolution but have functioned in basically the same way for half a century.⁵ Since an algorithm redesign in 1998, that process has favored the applicant's preferences over those of programs.⁴

Applicants and residency programs (or hospitals) sign an agreement to adhere to NRMP policies, avoid violations, and honor matches. The NRMP currently pins the integrity of the process on a single cardinal rule: "Neither [party] must ask the other prior to the Match to make a commitment as to how each will be ranked."¹ The NRMP Web site also has statements on professionalism, appropriate communication, and examples of violations. "Integrity of the Match" brochures have been mailed to NRMP participants since 2001. These resources state that participants "may express a high degree of interest in each other and try to influence decisions in their favor but must not make statements implying commitment." Either party may volunteer rank plans, but neither party may request this

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information. Other types of violations typically fall into three categories: agreements made by participants prior to the NRMP Match, violations during Match week (typically inquiries made about unfilled programs or unmatched candidates), and failure to honor Match results.

The NRMP receives fewer than 50 violation reports annually, which likely underrepresents actual violations given that 60% of family practice program directors report experiencing violations.^{6,7} We could only locate one study of students' experiences with NRMP Match violations, which found 2.3 violations per 100 programs interviewed.⁸

Given the NRMP's efforts to educate participants and reduce violations, we wanted to learn what candidates understood about violations, whether they experienced violations, and their reactions to perceived violations. Recently, there has been a significant decline in US medical school graduates interested in family practice and increased reliance on international medical graduates. Similar trends have been shown to precipitate violations in other specialties.⁹ Believing that these trends would increase competition between family practice residency programs for competitive candidates, we elected to study such Match violations experiences by applicants to family practice residency programs.

Methods

We used a snowball sampling method to recruit key informants.¹⁰ One of the authors was an applicant during the Match year under study and made contact with peer leaders who in turn suggested other potential participants. A concurrent invitation sent to family medicine interest group leaders at each US medical school yielded only one additional study participant. Of the resulting sample of 15 students, all had received either special recognition from family medicine organizations or held leadership positions in family medicine and other national medical student organizations. After students had submitted their rank order lists, all study participants were contacted and offered the NRMP Web address to review violation criteria. Informed consent was obtained. A semi-structured phone interview protocol was developed that consisted of a series of open-ended and demographic questions. All interviews were conducted by one interviewer, tape recorded, and professionally transcribed. All identifying information was removed. The Georgetown University Internal Review Board approved the study.

Each research team member read all of the interview transcripts and developed preliminary classifications and evaluations of themes. These independent efforts were then discussed by the entire research team to address differences in interpretation and to identify salient patterns within the data. An iterative analysis and interpretation process was used that evolved over time as the team became more familiar with the data.¹¹

Results

Eight key informants were men, and seven were women. Nine different medical schools were represented (one Southern, three Northeastern, three Midwestern, two West Coast). The average age of the participants was 28 years. The participants had a total of 129 residency interviews. On average, they interviewed at nine programs and ranked six. Only two of the students interviewed in specialties other than family practice. Six students believed that they had experienced a violation, eight did not, and one was unsure.

Violations

Two students were asked if they planned to rank programs "high" by a program director or other faculty, which constitutes a violation. A third student was urged to consider joining a residency program early, outside of the Match, to begin work toward a degree. A fourth student did not register with the NRMP but accepted a position outside the Match in a dual residency program. It is not known whether that student's residency position had been listed with the NRMP, but beginning in 2004, this behavior would be a violation. The participants thus experienced two definite and two probable violations in 129 residency interviews.

Sources of Misunderstanding

The dominant theme leading to students incorrectly perceiving that a violation had occurred was a fundamental lack of knowledge of NRMP policies and violation definitions. Almost all of the students either declared or demonstrated a lack of understanding derived from one or more issues.

Match Orientation and Information. Three students said that their school did not have a formal orientation about the NRMP process, and seven of the other students were away from campus when such orientations were held. Even among those who did attend orientation meetings, most did not have clear understanding of violations. Seven students recalled receiving formal e-mails about violations, either from their deans' offices or the NRMP, and at least four went to the NRMP Web site to learn more. However, even these students were often confused, incorrectly citing the following behaviors as violations of NRMP policies.

They weren't supposed to say whether they're ranking you in a certain position, and if any program does say that, that's a violation and you should report them.

The most common Match violation that occurred with me was programs asking if I was applying for another specialty.

I guess the other violation that occurred fairly often was asking where else I was applying.

Confusing Messages From Programs. Some felt that the programs themselves did not have a clear understanding of NRMP policies or were very careful to avoid even the perception of a violation.

One or two of the program directors seem to go out of their way to make sure that they were not having a Match violation or just to avoid the whole game process of it.

I actually wrote my first choice and told them that they were going to be my first choice. They responded, 'You don't need to tell us that.'

Inaccurate Information From Peers. Most students developed some understanding of Match violations and policies from peers. According to the students, peers commonly believed that it was a violation for participants to volunteer how they planned to rank each other. As a result, seven of the students thought it was a violation for a program to volunteer any ranking information, while two more thought volunteering a specific rank number was a violation.

Someone told me that after your interview, you're not to be contacted. It seemed like it was fairly straightforward, but it is rife with rumors.

Equal Employment Opportunity Commission Violations. Three students interpreted potential Equal Employment Opportunity Commission (EEOC) violations as NRMP violations. Two women recalled questions about marriage and family plans, and both felt these to be violations. Another candidate felt that a program director was particularly probing about his wife and family, perhaps trying to "play a hometown angle." He felt this was not only an NRMP violation, but it lowered his respect and eventually the program's ranking on his list. He said interviews with several programs included questions about his personal life, including family and his marriage, that made him feel uncomfortable, adding:

I'm sure there's probably some blatant discrimination going on because I was asked if I had children a couple of times. I was never asked if I was planning on having children, which I'm sure happens to women.

Personal Moral Values

For some, Match confusion resulted in reliance on a personal moral "compass" for judgements as to what constituted a Match violation. This contributed to negative impressions of programs even when no Match violation had occurred.

The most egregious thing that happened was a program contacting me and saying, 'We're going to rank you in our top 10'—it kind of turned me off about the program. I felt they weren't respecting the integrity of the process as much as I would want them to.

I interpreted a program's revealing that I would be ranked in the top 10 as a Match violation. It made me question the program. I really view trust and integrity and following the rules in these types of situations as being really important.

Discussion

While these findings may not generalize to other family practice residency applicants, they do reveal that violations occur and are consistent with the previous study of students' experiences.⁸ This purposeful sample of potentially desirable candidates reveals themes about the internal and external influences that shape student understanding of violations and about the potential consequences for programs that may be instructive for parties to the NRMP process. These themes certainly invite more research.

Lessons for Schools

Informing students entering the NRMP process may need to begin prior to the fourth year of medical school to avoid conflicts with away rotations. Students may benefit from examples, or even role-playing, that differentiate NRMP violations from EEOC violations or other uncomfortable situations. Schools may also invite students' questions during the interview season about specific situations and how to deal with them. There may be a role for other organizations involved in undergraduate medical education to explore options for improving student understanding of NRMP violations.

Lessons for the NRMP

Explanations and examples of violations on the NRMP Web site were not clear to students. In fact, for some students, they may have contributed to misinterpretations of violations. In 2002, the NRMP formalized consequences for confirmed Match violations including identification of violators in the NRMP Registration, Ranking, and Results System, the reporting of violators to the Accreditation Council for Graduate Medical Education and the respective Residency Review Committee, and the ineligibility of a participant for future matches. The NRMP has delayed but is still considering a requirement that all sponsoring institutions participating in the Match register and attempt to fill all positions in the NRMP Match.¹² As the NRMP moves to strengthen compliance and uniformity in Match participation, violation definitions should be clarified for all participants. An analysis of the collective violation reports to the NRMP could be done with-

out threatening confidentiality and would likely improve the process.

Lessons for Programs

When confused about violation definitions, students whose desirability might give them more negotiating power generally applied a moral compass to the process that was stricter than the actual NRMP policies. Partly due to misinformation and partly related to the application of a moral compass, 40% of the students believed they had experienced a violation, and more than half thought that programs could not speak to how a candidate would be ranked. Further study might improve how programs communicate interest to candidates without committing real or perceived violations.

Conclusions

Students reported real violations of the NRMP policies. However, nearly half of the students perceived violations that did not fit NRMP definitions. These misperceptions can be attributed to students' inability to attend orientations, lack of clarity in information offered to students, peer communication, confusion about EEOC violations, or a default option of students' applying personal moral judgments. We identified needed research regarding NRMP and EEOC violations, how we teach participants to understand differences in actual and perceived violations, and how to help students and programs effectively communicate during the process.

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