

## Title of Article

The Summer Match: A Qualitative Study Exploring a Two-Stage Residency Match Option

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## **Author Contributions**

All authors contributed to the study design, data collection or analysis, and manuscript preparation. MD completed all interviews and deidentified data for analysis.

## **Presentations**

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10

11 **The Summer Match: A Qualitative Study Exploring a Two-**  
12 **Stage Residency Match Option**

13 **Abstract**

14 **Background**

15 The number of residency applications submitted by medical students rises annually, resulting in  
16 increased work and costs for residency programs and applicants, particularly in Emergency  
17 Medicine. We propose a solution to this problem: an optional, two-stage Match with a ‘Summer  
18 Match’ stage, in which applicants can submit a limited number of applications early. This would  
19 be conducted similarly to the early decision process for college admissions. The study objectives  
20 were to explore stakeholder opinions on the feasibility of a Summer Match and to identify the  
21 ideal logistical parameters to operationalize this proposal.

## 22 Methods

23 We used exploratory qualitative methodology following a constructivist paradigm to develop an  
24 understanding of the potential impact of a Summer Match. We interviewed 34 key stakeholders  
25 in the U.S. residency application process identified through purposive sampling including  
26 educational administrators (program directors, designated institutional officials, medical school  
27 deans) and trainees (students, residents). We coded and thematically analyzed interview data in  
28 two stages using an inductive approach.

## 29 Results

30 We identified six themes from the participant interviews that broadly reflected issues of the  
31 residency application process, value, and equity. These themes included: Disrupting the Status  
32 Quo, Logistical Concerns, Match Strategy, Differential Benefits, Unintended Consequences, and  
33 Return on Investment. Most study participants supported the Summer Match concept, with  
34 medical students and residents most in favor. We developed a theoretical Summer Match  
35 Protocol based on these findings.

## 36 Conclusions

37 A Summer Match may reduce the burdens of increasing residency applications and associated  
38 costs. Pilot testing is necessary to confirm this hypothesis and determine the impact of the  
39 proposed Summer Match Protocol. Unintended consequences must be considered carefully  
40 during implementation.

## 41 Introduction

42 The National Resident Matching Program (NRMP) Main Residency Match (Match) has  
43 expanded in scope in recent years, as the number of applications submitted, and interviews  
44 completed per student, rose dramatically across all specialties<sup>1-5</sup>. In 2010, U. S. senior medical  
45 students submitted an average of 37.2 applications each, while by 2020 that number increased  
46 linearly to 54.9 (an 87% increase)<sup>4,5</sup>. In emergency medicine (EM), the increase since 2010 is  
47 even more dramatic, at 97%<sup>4,5</sup>. The continued rise in applications burdens both residency

48 programs and applicants, and importantly, without any clear benefit to applicants in their Match  
49 outcome<sup>6</sup>. In this environment, there is a growing financial imperative for both applicants and  
50 programs to refine the residency application process, with clear policy implications for the  
51 NRMP and partner organizations.

52 Several Match reforms have been proposed, although none have reached pilot testing or  
53 implementation. The most commonly proposed change is limitations on students at either the  
54 application<sup>7</sup> or interview stage<sup>8</sup>. Others include applicant preference signaling<sup>9,10</sup> or ending the  
55 Match altogether<sup>11,12</sup>. Match reform using an optional, two-stage process, referred to as the Early  
56 Result Acceptance Program (ERAP), was proposed by Hammoud et al in 2020<sup>13</sup>. The first stage  
57 would permit students to submit a maximum of five applications and limit programs to offer no  
58 more than 50% of their entry-level positions. Students who did not obtain a position in the first  
59 stage would enter the Main Residency Match. They propose that either interviews would have to  
60 be conducted early or the main Match application season would have to be shortened, resulting  
61 in the same total application season length, but with two matches instead of one. ERAP is one of  
62 several potential Match reforms under investigation by educational leaders in obstetrics and  
63 gynecology, with funding by the American Medical Association Reimagining Residency  
64 Program. The logistics and acceptability of these proposals have not yet been explored.

65 In this study, we investigated stakeholder perspectives regarding a two-stage match process  
66 similar to ERAP and the early decision programs used by some U. S. colleges and universities.  
67 In our model, applicants would have the option to participate in a 'Summer Match' prior to the  
68 opening of the traditional Match. Unlike ERAP, we sought to investigate key parameters for this  
69 protocol rather than propose them a priori. The objectives of this study were to: (1) explore  
70 various stakeholder perspectives regarding the feasibility, value, and consequences of an optional  
71 Summer Match, and (2) identify the ideal logistical parameters under which this approach could  
72 be operationalized.

## 73 **Methods**

### 74 **Study Design and Setting**

75 We employed exploratory qualitative research methodology following a constructivist paradigm.  
76 To best understand the perceived value and possible logistics of a Summer Match, we sought a  
77 diverse sample of participants and perspectives from stakeholders in the residency application  
78 process at university-based, county-sponsored, and community hospital-based training programs.  
79 We drew participants from all geographic areas of the US and limited our scope to individuals  
80 with a faculty appointment at a medical school accredited by the Liaison Committee on Medical  
81 Education.

### 82 **Sampling Strategy and Data Collection**

83 We recruited participants in two distinct stakeholder groups: educational administrators  
84 (residency program directors (PD), designated institutional officials (DIO), medical school  
85 deans) and trainees (medical students, resident physicians). Our sampling was both purposive<sup>14</sup>  
86 and convenience, as we recruited from a broad range of specialties and training environments  
87 using contacts professionally known to the authors. We contacted educational administrators by  
88 direct email and trainees via email distribution lists available to the study investigators. We also  
89 used Twitter<sup>®</sup> (Twitter, San Francisco, CA) to access a broader range of learners.

90 We utilized semi-structured interviews in which we encouraged participants to “Think Aloud” in  
91 all of their responses to generate rich data<sup>15</sup>. We generated two similar interview guides (one for  
92 learners and one for administrators) to contain two types of questions: value and  
93 operationalization. For operationalization questions, we used the major components of the  
94 current residency application process as a conceptual framework. To address opinions on value  
95 we used questions designed to elicit both negative and positive opinions. We included a  
96 description outlining the Summer Match idea and the problem it addresses at the start of each  
97 interview to provide context for participants. We made some minor changes to the guides within  
98 the first six interviews. A full description of this process and the interview guides are available in  
99 the supplemental appendix.

100 We completed individual interviews averaging 30 minutes each between July 24<sup>th</sup> and October  
101 25<sup>th</sup>, 2019 and completed data analysis in 2020. We provided participants with project goals,  
102 informed consent, and preparatory materials at least 24 hours prior to their interviews. We  
103 continued sampling efforts in parallel with ongoing interviews until no new information was  
104 elicited in interviews and we felt that we had reached saturation.

105 We recorded all interviews using Zoom<sup>®</sup> in audio-only mode (Zoom Video Communications,  
106 Inc, San Jose, CA) and transcribed the interviews using a professional transcription service,  
107 Rev.com<sup>®</sup> (Rev.com, Austin, TX). We de-identified and labeled transcripts with study identifiers  
108 prior to analysis.

## 109 Analysis

110 We used Dedoose<sup>®</sup> Version 8.3.20 (Dedoose, SocioCultural Research Associates, LLC, Los  
111 Angeles, CA) to facilitate coding and thematic analysis<sup>16,17</sup>. Using an inductive approach, all  
112 authors coded a subset of transcripts that included all stakeholder groups to generate the initial  
113 codebook. The lead author then coded all transcripts using this codebook. We followed the  
114 subcategorization method outlined by Kuckartz<sup>17</sup> to increase the detail of coding, resulting in a  
115 revised codebook that was then applied to all transcripts by the lead author. We completed a  
116 thematic analysis by independently reviewing the codes and excerpts<sup>14,16,17</sup>. We met weekly to  
117 iteratively discuss the codes, identify patterns in the data, and agree upon themes. Once we had  
118 completed this process, we explicitly searched for outliers and dissenting minorities among our  
119 dataset to ensure we represented the spectrum of opinions. We highlighted these dissenting  
120 opinions in the results, when present<sup>18</sup>.

## 121 Study Team, Ethical Concerns, and Reflexivity

122 Only one author (M.D.) was aware of the individuals involved in the study to protect participant  
123 privacy. We kept faculty authors blinded to the identity and responses of participating trainees to  
124 decrease any risk of negative consequences to those participants. We deidentified all recordings  
125 prior to transcription and analysis, and we stored all data on approved, secure servers.

126 Participation was voluntary and no incentive was provided.

127 The study team includes an emergency medicine bound third-year medical student (M.D.) who  
128 has not yet participated in the residency application process, as the lead investigator. Four  
129 investigators (M.G., J.B., L.H., L.R.) are previous or current residency emergency medicine  
130 program directors who participated in the residency application process, both as students and  
131 faculty members. The final investigator (S.S.S) is a non-clinician who has never participated in  
132 the residency application process but has both practical and research experience with medical  
133 school admissions. All of the study investigators have experience with qualitative research  
134 methods, and all are affiliated with departments of emergency medicine at their respective sites.  
135 We acknowledge the potential impact of experiences and opinions of our study investigators on  
136 data analysis in this constructivist paradigm. Accordingly, we intentionally ensured  
137 representation of trainees, and non-EM program directors, DIOs and deans, and carried out a  
138 negative case analysis to challenge our assumptions. Furthermore, our study team included  
139 members with non-favorable opinions regarding a possible Summer Match, whose opinions and  
140 perspectives also informed this analysis. We frequently met as a large group to conduct the  
141 analysis and these perspectives were brought into these discussions for elaboration and  
142 refinement and to promote openness and transparency.

143 This project was approved by the Stanford School of Medicine Institutional Review Board,  
144 protocol number IRB-50841.

## 145 **Results**

146 We interviewed 34 participants (22 educational administrators, 12 trainees) from 18 institutions  
147 and 9 medical specialties. Our final participants were all US allopathic graduates or trainees,  
148 55% female, from urban (74%) or suburban (26%) institutions throughout the country (Table 1).  
149 We identified 6 major themes from our stakeholder interviews: Disrupting the Status Quo,  
150 Logistical Concerns, Match Strategy, Differential Benefits, Unintended Consequences, and  
151 Return on Investment (Table 2). These themes broadly reflected issues of relevance, equity,  
152 timing, and process. Most study participants supported the Summer Match concept, with medical  
153 students and residents most in favor. We developed a Summer Match Proposal (Figure 1) from  
154 findings in our stakeholder interviews, which includes recommended logistical parameters for  
155 timeline, process, and application limits.



## 156 Disrupting the Status Quo

157 A fear of disrupting the status quo of the Match emerged repeatedly throughout the interviews.  
158 Many participants were apprehensive about changing the current residency application process,  
159 yet they shared a general consensus that the continued rise in residency application numbers is  
160 unsustainable. Participants mostly considered our questions about a Summer Match within the  
161 context of the existing process, without any suggestions for foundational changes to the Match.

162 For instance, participants were apprehensive about substantive changes to the Medical Student  
163 Performance Evaluation (MSPE) in a Summer Match, because “to create a MSPE before  
164 students have done any of their advanced rotations... would not provide the information that  
165 programs should have in their application considerations.” This was despite considerable  
166 concerns among participants regarding the value of the MSPE: “I'm not under the delusion that  
167 program directors actually read all the [MSPEs] that I spend my summers writing. But there's a  
168 lot of information there and I think at their peril they may ignore those.” (Dean for Student  
169 Affairs)

170 Additionally, several participants acknowledged that the pressure and costs that stem from away  
171 rotations are detrimental: “It's increasingly bizarre to me why [away rotations] are required. It  
172 puts an incredible burden on students to try to set those up [and] do them in a timely way.”  
173 (Student Advising Dean). Despite this, participants were concerned that a Summer Match would  
174 prevent students from completing important away rotations, and “in the absence of a totally  
175 reliable MSPE, and... transcripts not being helpful because they're all going to pass/fail, the  
176 specific performance on an away rotation is crucial.” (PD)

## 177 Logistical Concerns

178 Most participants felt that a Summer Match must impose limits on both the number of  
179 applications a student could submit and the number of positions a program could offer. Limiting  
180 students to “a very small number [of applications] would incentivize students to only enter the  
181 initial match if they have very strong feelings about a few programs.” (Medical Student)

182 Discussions of program limits in a Summer Match led to opposing viewpoints. “Why wouldn't  
183 you make [available positions] 100%? ... because I would love to not have to go through

184 recruiting if I could get an amazing group of people early.” (PD) For those who favored limiting  
185 the number of program positions offered, most feared that without limits one would “create a  
186 frenzy to get in early.” (Dean for Medical Education) One student warned, “[You] wouldn't want  
187 to create a situation where people feel like they can only get into the program if they do the early  
188 match, because then you will be reaching the point where everybody will apply early.” (Medical  
189 Student)

190 Participants identified the timeline for a Summer Match as a key implementation variable. Three  
191 dominant options were proposed: (1) Summer Match in the summer, sequenced before the  
192 current Match, to “get started and completed in time for students to then meet the general match  
193 opening... because it wouldn't be fair to a student to come into the general pool later than  
194 others.” (Student Advising Dean); (2) Summer Match overlapping the opening of the Match in  
195 the fall, with successful students withdrawing from the Match; and (3) Summer Match in the fall  
196 with a delayed start to the Match later in the year, because “the current ERAS [Electronic  
197 Residency Application System] process ...could be shifted later.” “Move... the interview season  
198 into January, February, March and [the Summer Match] would occur in the fall.” (PD).

### 199 Match Strategy

200 Many participants believed there would be less available information about students in a  
201 Summer Match. This would inherently change expectations for a ‘complete’ application. As a  
202 result, students and programs would need to develop new strategies to optimize their results in a  
203 Summer Match. As one PD described, “we rely very heavily on Standardized Letters of  
204 Evaluation for determining who's a good candidate for our program... [and] we're not going to  
205 be able to have [these letters] for students.” (PD)

206 However, several participants believed that a Summer Match would provide a new, important  
207 piece of information to programs: participation would strongly signal applicant interest.  
208 Application limits “would completely change the landscape of residency applications. It would  
209 force applicants to be more intentional about where they want to be and where they want to  
210 apply.” (PD)

211 In contrast, some participants cautioned that students would “rush themselves into some situation  
212 where they commit to a program that they don't really know anything about, and the program  
213 doesn't really know anything about them. [It] can be a bad fit, and then they end up having a  
214 miserable time.” (Medical Student) This warning was reiterated several times because students  
215 “gain a lot more perspective as they go and see different institutions. Students don't know what's  
216 going to be a good fit until they actually go and see something that resonates.” (PD)

### 217 Differential Benefits

218 Participants had divergent opinions on who might benefit from a Summer Match. Some believed  
219 everyone would benefit from a reduction in the application and interview burdens of the Match.  
220 More participants thought that a Summer Match “would really benefit people who have a clear  
221 idea of where they want to go for residency. For instance, people [whose] spouse has a job in a  
222 particular city, or people who want to be near family.” (Medical Student) One PD recalled “a  
223 student from our institution, just absolutely phenomenal on every level. ... [the Summer Match]  
224 would have taken a lot of burden off of her. She ended up interviewing at other programs that  
225 she didn't need to do.” (PD) Other participants believed that “programs will be more likely to  
226 keep people from their home school. ... It may just be easier to say, ‘Let's invest a lot in our own  
227 students [who] we know are people we want to keep.’” (DIO)

228 Most participants also believed that a Summer Match would selectively benefit competitive  
229 applicants such as “someone who does very well on tests and looks very good on paper.”  
230 (Student Advising Dean) Similarly, the Summer Match might “favor extremely competitive  
231 programs. Obviously the top five academic institutions might love that and everybody else might  
232 hate that.” (PD)

233 Some participants were concerned that the percentage of positions filled by programs in the  
234 Summer Match would be used as a proxy for program quality. They noted this might further  
235 reinforce applicant bias toward large, university programs traditionally perceived as prestigious.  
236 “Some programs are not going to fill in the Summer Match and that is going to be seen as a  
237 stigma.” (PD)

## 238 Unintended Consequences

239 Participants were concerned about possible unintended consequences of a Summer Match. First,  
240 the potential stigma for applicants who failed to Match in the summer: “What does it mean if  
241 somebody applies early in a field, they don't match, then they go into the general pool? ... Have  
242 they now hurt their chances?” (Student Advising Dean)

243 Some participants feared that unmatched applicants in the summer would “be more anxious and  
244 want to apply to many [more] programs.” (Medical Student) One cautioned of “a scenario where  
245 someone applies to five programs... and doesn't match early decision. Instead of applying to 20  
246 programs [in the Match], now they apply to 50 because now they're panicked.” (DIO) One dean  
247 remarked “that although on the surface it sounds like it could really reduce stress, it will amp up  
248 the competition.” (Student Advising Dean)

249 Most participants believed the Summer Match would be so popular that the majority of students  
250 would apply, resulting in an overwhelming number of applications, thereby functionally moving  
251 the residency application season into the summer. “Why wouldn't everybody do it early?”  
252 questioned a dean who was concerned that if “a program is going to fill all of their slots in the  
253 summer match, there's not going to be any slots left in the March match.” (Dean for Medical  
254 Education)

255 Lastly, participants were also divided on the potential consequences of a Summer Match for  
256 students “who are at a socio-economic disadvantage, because [they] would interview and apply  
257 to fewer schools. If they don't get in, then [they'd] have spent a ton of money on those schools,  
258 and time, and plane tickets, plus... the regular Match.” (Medical Student) Similarly concerning,  
259 “it will be very hard for people with limited finances. You're going to pay pretty hefty airline  
260 fees if you're booking flights last minute.” (DIO)

## 261 Return On Investment

262 Medical student participants were particularly enthusiastic about a Summer Match, as matching  
263 early might reduce their uncertainty about the future: “I would love to participate. I really am not  
264 a fan of having my future up in the air.” (Medical Student) One student believed “that if done  
265 really well, it can help decrease the number of applicants... and it can trickle down to affect the

266 match system in general.” The same student added, “I have a very strong preference for where I  
267 want to go. So, I would definitely participate.” (Medical Student)

268 Many educational administrators were concerned that a Summer Match would increase overall  
269 program director workload without substantially decreasing application volume: “I think from a  
270 residency standpoint, unless you're going to get all of your applicants through the early decision  
271 process, it actually increases the work.” (DIO)

272 Participants were divided on whether the value of the Summer Match would be worth disruption  
273 of summer vacations by additional summertime work. “I was a program director until three years  
274 ago. Children’s vacations from school are in the summer, and my family would have killed me if  
275 I said, ‘I'm going to spend the summer reviewing applications and doing interview season.’ ”  
276 (DIO) Similarly, one PD believed the Summer Match would be “more work for me with less  
277 bang for my buck. All of a sudden, we're reviewing applications in a time when we have other  
278 things that are traditionally on our plate.” (PD)

279 Some participants thought that it would be difficult to prepare for a summertime application  
280 process because “it takes too many resources... And having to add additional events to the  
281 process... I think it'd be difficult.” (DIO)

282 Several participants believed that it would be strategically necessary for all programs to  
283 participate: “Well, I think that it's an arms race. If it's something that gets implemented, it's  
284 something you have to participate in. If you're going to compete for the best applicants, and the  
285 best applicants are going to apply [early], then you have to participate.” (DIO)

## 286 **Discussion**

287 Our sample of educational administrators and trainees believe that residency application process  
288 reform is needed to address the burden of rising residency application numbers and costs to  
289 students and programs. Participants had broadly favorable views of a Summer Match as a  
290 potential solution, while recognizing implementation challenges and unintended consequences.  
291 We therefore recommend pilot testing of an optional Summer Match as an important policy  
292 solution. Testing by single specialties using independent residency application processes may be  
293 most feasible and would provide critical insights before NRMP implementation across all  
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294 specialties. Emergency Medicine is among those specialties most strained by the current  
295 application process and thus represents a potential collaborator with the most to gain in a pilot  
296 test. Our Summer Match Protocol is modeled after early decision programs used for decades by  
297 approximately 25% of U. S. colleges and universities<sup>19</sup>. Available information about early  
298 decision suggests both benefits and challenges, including many that are similar to concepts  
299 discussed by our participants. Early decision limits students to only one application, uses binding  
300 admittance decisions, and thereby reduces the total number of college applications<sup>20</sup>. Criticisms  
301 include differential benefit to privileged or elite applicants, disadvantages to first-generation  
302 students, and a lack of rigorously defined screening tools to guide admission decisions<sup>21</sup>. Similar  
303 issues were raised in this study and would need to be mitigated in a Summer Match.

304 Participants were concerned that shifting the workload of program directors from winter to  
305 summer might increase program director stress. Importantly, our intended outcome of a Summer  
306 Match is a decrease in overall workload, not more or less convenient work. Strict application  
307 limits in a Summer Match might address these concerns. Removing successful Summer Match  
308 students from the Match pool could theoretically reduce the total number of applications  
309 submitted, thereby decreasing the work burden to residency programs. Careful research and pilot  
310 testing would need to evaluate whether this assumption is accurate.

311 Key features of our Summer Match Protocol include opt-in participation by both applicants and  
312 programs, no change to the current Match timeline, and binding match outcomes for both stages.  
313 Participants suggested that students be limited to less than ten applications in a Summer Match,  
314 and our model uses a two-application limit to avoid excessive applications in the summer and  
315 control the size of the Summer Match. This limit closely resembles collegiate early decision.  
316 Programs would be limited to offer no more than 25% of their entry-level positions. This limit is  
317 based on participant feedback that higher numbers of Summer Match positions would place  
318 pressure on most students to apply early, functionally moving the Match. Participants  
319 additionally pointed out that in a Summer Match it may be difficult or impossible for medical  
320 schools to produce a formal MSPE. Our model therefore includes a “mini-MSPE”, which more  
321 closely approximates a letter of good standing. The final format of this document would need to  
322 be established prior to testing and implementation. Students who do not match in the summer  
323 would be automatically enrolled in ERAS and NRMP for the Match, with no additional fee to

324 reapply to programs. Their participation in the Summer Match would not be disclosed to other  
325 programs, to prevent stigma.

326 Implementation of a Summer Match will require extensive collaborative partnerships between  
327 the Association of American Medical Colleges, the NRMP, specialty organizations, medical  
328 schools, and student organizations. It would be irresponsible not to acknowledge and address the  
329 financial impact to organizations and individuals that would result from Match reform, and these  
330 implications must be carefully considered. We believe the majority of stakeholder concerns can  
331 be addressed with well-designed pilot testing of our Summer Match Protocol.

332 In summary, we suggest pilot testing of the Summer Match proposal by the NRMP or single  
333 specialties that includes rigorous program evaluation. Such evaluations should include trainee  
334 performance, trainee transfer out of specialty rate, medical student performance post-match,  
335 qualitative study of applicants who match and don't match in the summer, number of applications  
336 per program, faculty time required to complete two match processes, quality of MSPEs,  
337 weighting and importance of application elements in file review, and equitability of the process.

### 338 **Limitations**

339 Our study has several important limitations. Our sampling strategy may have enriched  
340 recruitment of those with favorable or strong opinions of the project, although we believe our  
341 sample to be relatively diverse. Furthermore, our sample includes no international medical  
342 graduates or osteopathic physicians, which are two groups disproportionately affected by the  
343 costs and competitiveness of the residency application process. Despite the interview script  
344 clearly stating that there were no wrong answers to our questions, participants may have inferred  
345 that the interviewer had a favorable opinion of the Summer Match and softened any negative  
346 opinions that they held. Data collection occurred prior to the announcement that the United  
347 States Medical Licensing Exam Step 1 will change to Pass/Fail scoring<sup>22</sup> and prior to the  
348 dramatic changes to the application process that happened due to the COVID-19 pandemic; thus,  
349 it is possible that participants would have changed their opinions knowing that virtual interviews  
350 can be successful and that there would be less discriminating data about students available during

351 a Summer Match. Finally, our four physician investigators are from the same specialty, which  
352 may have yielded homogenous opinions of the Summer Match proposal.

## 353 **Conclusions**

354 Based on our study findings, we believe that our Summer Match Protocol is worth further  
355 investigation by the NRMP or single specialties, in collaboration with stakeholder organizations,  
356 as a potential policy change to refine the residency application process. Should the NRMP or  
357 single specialties choose to pursue a Summer Match, rigorous program evaluation would need to  
358 be undertaken to determine its effects.

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## 423 **Supplemental Content**

424 Supplemental Information linked to the online version of the paper at Wiley-Blackwell:

- Supplement 1. Summer Match Interview Guides and Methods

Author Manuscript

**Table 1: Participants**

	Educational Administrators*			Trainees†		Total
	Residency Program Director	Designated Institutional Official	Medical School Dean	Medical Student	Resident Physician**	
<b>Gender</b>						
Male	4	2	2	3	4	15
Female	8	2	4	5	0	19
<b>Institution</b>						
University	8	3	6	8	4	29
Community	3	1	0	0	0	4
County	1	0	0	0	0	1
<b>Location</b>						
West Coast	1	0	4	5	2	12
Midwest	6	2	0	1	2	11
East Coast	5	2	2	2	0	11
<b>Sampling</b>						
Contacted (% success)	18 (67%)	6 (67%)	7 (86%)	14 (57%)	6 (67%)	51
Interviewed (% of total)	12 (35%)	4 (11%)	6 (18%)	8 (24%)	4 (12%)	34

Table 1: Participant demographics and sample breakdown. Note that all participants are allopathic medical graduates or students.

\* Specialties represented: emergency medicine, endocrinology, internal medicine, obstetrics and gynecology, pathology, pediatric neurology, pediatrics, psychiatry, radiology

\*\* Specialties represented: emergency medicine, pediatrics

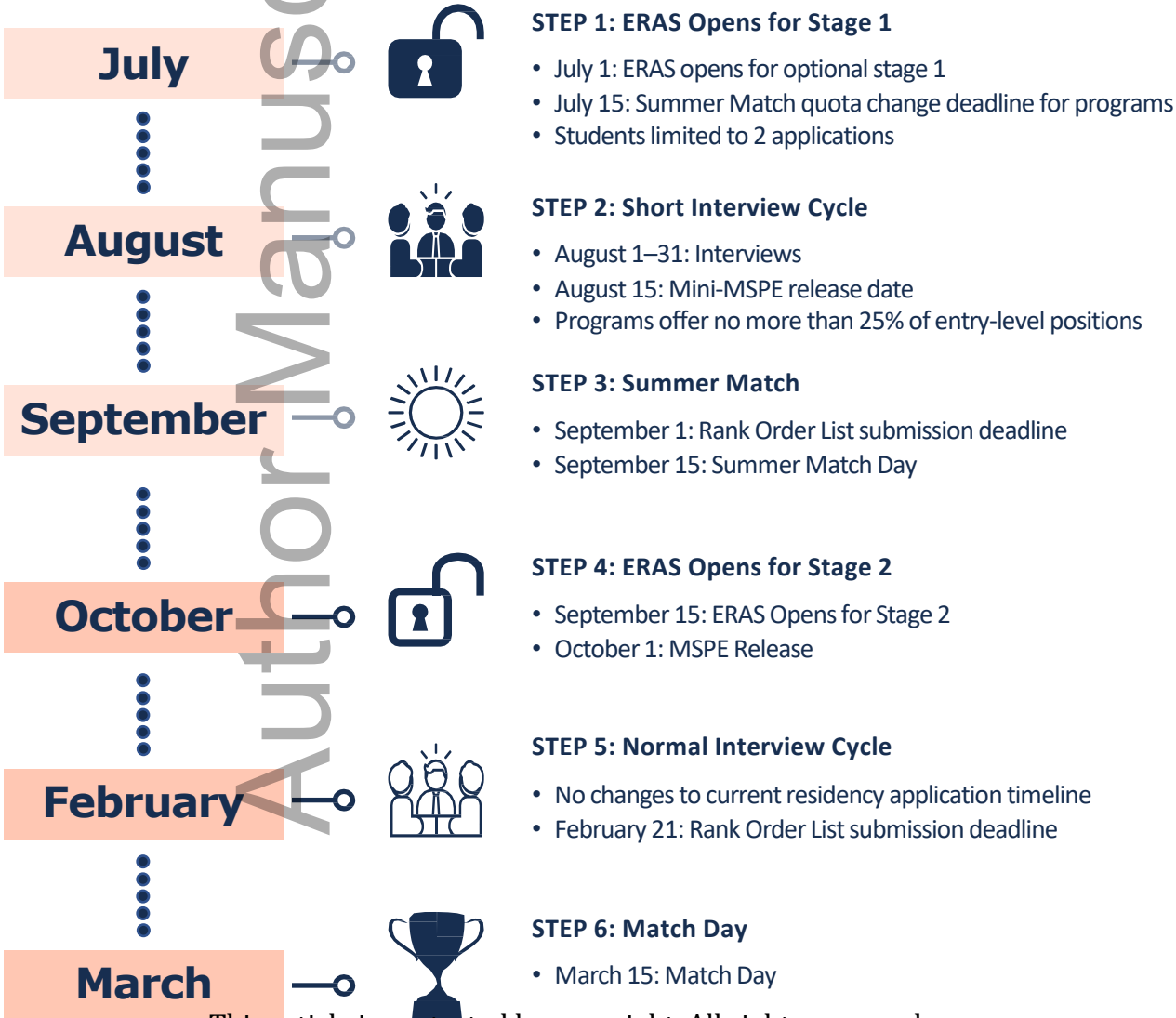
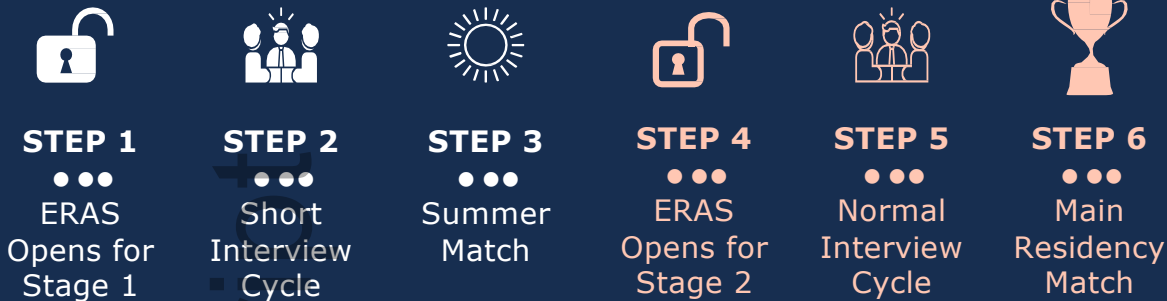
† Trainees contacted initially via email mailing lists/Twitter®, total contacted reflects initial hits from those attempts

**Table 2: Themes**

<b>Theme</b>	<b>Brief Description</b>
<b>Disrupting the Status Quo</b>	Participants expressed apprehension about changing the current residency application process, particularly deemphasizing the MSPE and away rotations as less important components of the process.
<b>Logistical Concerns</b>	Participants were divided about the ideal timing for a Summer Match. There was broad consensus on the need to limit both the number of Summer Match positions per program and the number of applications per student, to avoid encouraging all students to apply in the summer.
<b>Match Strategy</b>	The existence of a Summer Match could change program and applicant strategy in the application process by reducing the number of programs students visit for interviews. Smaller application numbers may signal interest powerfully while reducing opportunities for students to evaluate additional programs.
<b>Differential Benefits</b>	Applicants who would most likely benefit from the Summer Match are those with geographic limitations. The Summer Match may also disproportionately benefit traditionally 'competitive' applicants.
<b>Unintended Consequences</b>	Participants were concerned about several hypothetical unintended consequences of a Summer Match, including reflexive overapplying for students who fail to match in the summer, and possible disadvantages to less economically privileged students.
<b>Return On Investment</b>	The Summer Match must successfully reduce total applications submitted or improve Match outcomes significantly enough to justify summertime work by program directors.

# Summer Match Protocol

## Two-Stage Match: Summer Match + Main Match



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