

Improving the fellowship interview experience for reproductive endocrinology and infertility candidates: a survey

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Objective: To collect data on the current reproductive endocrinology and infertility (REI) fellowship interview process so that it may be improved in the future.

Design: Web-based cross-sectional survey. In addition, fellowship program directors and coordinators were contacted by e-mail.

Setting: Survey data were collected after completion of the 2018 REI fellowship interview season.

Patient(s): Not applicable.

Intervention(s): None.

Main Outcome Measure(s): Number of days used for interviews, missed opportunities to interview, frequency of travel to the same city, average money spent, recommendations for how the interview process could be improved.

Result(s): There were 44 survey respondents. The mean number of interviews attended was 12.6 (range, 1–22). On average 13.4 (0–30) days off work were used to interview. About 68.1% (n = 30) missed an opportunity to interview at a program they were interested in. The most common reasons were the interview date was the same day as another interview, could not attend due to geographic location, and cost was too high. About 72% (n = 31) traveled to the same city more than once for an interview. The average cost per interview was \$478 (range, \$200–\$1,000) and average cost per interview season was \$5,660 (range, \$900–\$15,000). Fellowship program data were available from 43 of 48 programs contacted. The number of dates that had conflicting interviews scheduled were 26.

Conclusion(s): These data highlight the need to coordinate the REI fellowship recruitment process between programs to reduce conflicting interview dates and mitigate costs to applicants. Based on these results, a concrete action plan is presented. (Fertil Steril Rep® 2020;1:37–42. ©2020 by American Society for Reproductive Medicine.)

Key Words: Fellowship, graduate medical education, gynecology organization, match, subspecialty fellowship interviews

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The interview process for candidates applying for fellowship programs in reproductive endocrinology and infertility (REI) is highly competitive. The procedures involved in the application and interview process have many challenges for applicants and programs.

In 2017, the application process for REI transitioned to the electronic residency application service (ERAS), which is an electronic application system organized by the Association of Medical Colleges for many fellowship programs from different subspecialties (1).

Previously, the application process was managed by the Society for Reproductive Endocrinology and Infertility (SREI), which consisted of a paper application, often followed by supplemental applications requested by individual programs. This process was cumbersome for applicants, and ERAS has streamlined the application process by making all applications electronic, compiling and distributing letters of recommendation confidentially, as well as having a unified system for fellowship programs to receive and review this information. Although ERAS gives programs the freedom to set their own application deadlines, the ERAS

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system for REI is only open from December to May 31 each year, and thus no applications can be submitted after this date the year prior to starting fellowship (1).

There was a range between 36 and 44 REI fellowship programs participating in the match each year, with available positions ranging from 42–54 (data taken from the National Resident Matching Program [NRMP; MATCH] between 2015 and 2019) (2). The 2019 appointment year was particularly competitive as there were 1.6 applicants per position, which is the most applicants per position there has been during the past 5 years (range, 1.1–1.6 applicants per position) (2). During this same application cycle, the lowest percent of applicants matching to REI fellowship was reported at 63.4% (52 applicants matching out of the 82 who participated in the MATCH) (2).

In a 2016 “Call to Action” attention was brought to the lack of communication and coordination between subspecialty programs in obstetrics and gynecology relating to interview dates and timing (3). Challenges during the interview process include applicants receiving conflicting interview dates, the expense of traveling, and missed days of residency training, sometimes even >15 days. A survey of applicants applying to gynecologic oncology fellowship found that applicants spent an average of \$6,000 on interviews and missed an average of 15 days from work (4). These issues do not apply to the field of obstetrics and gynecology alone, as the literature suggests similar challenges for other surgical subspecialties, such as general surgery residents who also report missing at least a week of training for interviews, and most applicants spending >\$4,000 (5).

In addition, with residents from multiple obstetrics and gynecology subspecialties interviewing during the same time period, significant stress on residency programs ensues to provide adequate clinical coverage to ensure patient safety. The previous consensus of fellowship directors was that increased coordination would help alleviate the stress on residents and residency programs during this process, namely by coordinating a proposed interview schedule where each subspecialty would perform their interviews during assigned weeks. Other suggested changes included possibly performing virtual prescreening interviews of borderline applicants before an on-site invitation for interview, as well as increasing social media coordination between applicants to reduce costs (3). The objective of this study is to collect and analyze data on the current REI fellowship interview process so that it may be more streamlined and improved for future applicants and programs. It is our desire to suggest practical steps and present a measurable action plan that could help improve the process to minimize the reported challenges for all the parties involved.

MATERIALS AND METHODS

This study was reviewed by the Institutional Review Board of the University of South Florida and met criteria for exemption. Fellowship program directors and coordinators were contacted by e-mail to obtain general information about the 2018 REI fellowship interview season. The REI fellowship programs and contact information were obtained from the

Accreditation Council for Graduate Medical Education (ACGME) Public website, using the advanced program search feature for the specialty, “Reproductive endocrinology and infertility.” Programs were asked, “what were the dates of any REI Fellowship interviews that were performed in 2018,” and if the program did not participate in the match, “in past years, when and how many interview dates were typically held?”

A separate survey was designed for program applicants. The survey questions are listed as [Supplemental Table 1](#), available online. This survey was hosted online in Qualtrics and all surveys were anonymous with no personal identifiers recorded or requested. The survey was made available online through the social media platform Facebook, as well as distributed through the REI Fellows list-serve after completion of the 2018 REI fellowship season. The survey was available to anyone with access to the Qualtrics survey link for a 1-month period. Survey participation was entirely voluntary.

Statistical analysis consisted of descriptive statistics for numerical data using Microsoft Excel and qualitative data or free response was organized by theme and compiled. Based on the findings from REI fellowship candidates and programs, the goal would be to suggest practical steps to improve and streamline the interview process for all parties involved following a proposed solution from the Society for Reproductive Endocrinology and Infertility (SREI) (6). In February 2019 after completion of the 2018 interview season, a proposal to standardize the REI fellowship recruitment process was sent from SREI to all REI fellowship program directors, proposing to:

1. Standardize the interview process by setting an earlier deadline for applications. An ideal time can be decided among the Program Directors (PD). Early May appears to be popular among the PDs queried.
2. Agree on a prescribed turn-around time for invitations to be sent out, ideally 4 weeks.
3. Agree on a specific date and time for all of the invitations to candidates to be sent out by the programs.
4. Create additional transparency by posting program interview dates on the institutional website and possibly the SREI website.
5. Encourage regional coordination of interview dates to facilitate efficient candidate travel.

For full details of the SREI proposal, please see [Supplemental Table 2](#), available online.

RESULTS

Fellowship program data were available from 43 of 48 programs contacted. The 2018 interview season spanned from June 4 through August 30, 2018. The most popular interview date was Monday, August 27 (5 interviews). The number of dates that had conflicting interviews scheduled were 26. Most programs offered two interview dates (46.5%, $n = 20$ programs), 30% ($n = 13$) offered three interview dates, 16% ($n = 7$) offered one date, and 6.9% ($n = 3$) offered four dates.

From the online applicant survey, there were 44 survey respondents. Of those, 38.6% ($n = 17$) participated in the

2018 REI interview season, 29.5% (n = 13) in 2017 and 31.8% (n = 14) participated >2 years prior. The mean number of interviews attended was 12.6 (range, 1–22). On average 13.4 (0–30) days off work or vacation were used to interview. There were 68.1% (n = 30) of respondents who missed an opportunity to interview at a program they were interested in, with most common reasons being the interview date was the same day as another interview, could not attend due to geographic location, and cost was too great. About 72% (n = 31 of 43 respondents to this question) traveled to the same city more than once for an interview. The average estimated cost per interview was \$478 (range, \$200–\$1,000) and average estimated cost per interview season per applicant was \$5,660 (range, \$900–\$15,000).

This survey identified multiple other recommendations for improvement from applicants, which were found to fit into recurring themes that included improving the timing and duration of interviews, increasing geographic coordination of interviews, including a virtual component to interviews, offering interviews in a centralized location, and transitioning cost from applicants to programs. For a list of representative applicant responses, please refer to [Table 1](#).

DISCUSSION

This survey, which included 68.1% of recent participants of the REI interview process (2017 and 2018 interview cycle), shows the need for significant improvement in the entire process so the outcome can be optimized for the programs and candidates. Although >90% of the programs offered between one and three interview dates during the cycle, 68% of the applicants were still not able to attend interviews at all of their desired programs due to conflicts in dates and 72% needed to travel to the same city more than once. It was evident from the respondents of the survey that these types of issues could easily be overcome by having more coordinated efforts between fellowship programs, which could ultimately lessen some of the burden on applicants and residency programs. Since the initial “Call to Action” in 2016, it is reassuring to find that steps have been taken by the board members of the Society for Reproductive Endocrinology and Infertility (SREI) to improve the REI fellowship interview experience and process through recommendation of specific action plans. Although these action plans have not been implemented, validation of the need for improvement in the process as a result of this survey serves as an avenue for a concrete proposal for future implementation by the board of SREI.

Although not specifically asked of fellowship programs in responses from program coordinators and directors, it was eagerly shared that there be some geographic coordination of interview dates between programs located in the Northeast and Mid-Atlantic, as well as in California as displayed in [Supplemental Table 3](#), available online. These programs communicate with each other before confirming their interview dates to try to group dates within their geographic location as well as reduce overlap of dates. Despite this coordination, this survey noted an abundance of overlapping interview dates (26 in total) with one date having five different interviews scheduled. At present this is likely due to only a

TABLE 1

Response comments concerning recommendations on how the REI fellowship interview process could be improved.

Timing of interviews

- Making interviews earlier so that we can use days off from both PGY3 and PGY4 years.
- Limiting the number of days the applicant is required to be there for the whole interview (dinner and interview itself).
- Ending interviews earlier to be able to accommodate flights out.
- Notify applicants at same time of all interviews so planning/prioritizing can take place.
- Have all interview offers come at the same time. That is one of the hardest aspects is turning down an interview when you still haven't heard from many.

Geographic coordination of interview dates

- Try to align interview dates between programs in the same city.
- Coordinate within cities. I traveled to NYC a total of 5 times! Consolidate the interview time period. Make interview days shorter.
- The programs should work to ensure there are no conflicting dates. Dates should be arranged by region.
- Have ACGME work with programs to cluster dates by region to ease the strain on programs for those applying for fellowship.

Virtual component to interviews

- Centralized interviewing system would be nice, with virtual tour. Everyone could go to one location to interview at a variety of different programs.
- Video interviews that you send to many institutions. They all ask the same things.
- Video or FaceTime interviews.

Centralized interview location

- The cost and difficulty of travel has to be mitigated. The easiest way I can think of would be to have pre-interviews at ASRM (or another location where many programs and applicants meet together). Programs could then invite applicants they were most interested in to an interview at their institution. The goal would be that both applicants and programs would do fewer formal interviews.
- Programs should talk with one another and coordinate. Or interview at ASRM like MIGS does at AAGL.

Transitioning cost from applicants to programs

- Help cover cost.
- Programs should pay for applicants' lodging. There were two places that did this one was my home program though.

Note: ACGME = Accreditation Council for Graduate Medical Education; PGY = post-graduate year.

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limited number of programs coordinating their dates. Broader coordination of interview dates between programs and by geographic location will likely resolve the issue of applicants traveling to same city more than once (72%, n = 31) and will give opportunity to 70% (n = 21) of the applicants that were unable to attend interviews because of geographic location, distance or other travel-related issues. To reduce frequent travel to the same city, emphasis should be focused on not just reducing overlapping interview dates but coordinating interview dates during adjacent days for those programs in the same city. This could also help reduce days missed from work, as many applicants have a particular geographic region of preference, which may increase the likelihood that they would have multiple interviews in the same city.

The average amount of money spent on the interview season was \$5,660, which is comparable to what gynecologic oncology applicants reported spending at an average of

\$6,000 (4) and general surgery residents at \$4,000 (5). This amount is not insignificant. Of the 30 respondents who stated they missed an opportunity to interview at a program they were interested in, 30% (n = 9) listed, “travel cost was too expensive” as a reason. In addition, this survey did not address the actual application fees that are paid to ERAS, which represents an additional burden on applicants with a token fee to enter the system of \$105, and additional costs per application. Although the first 10 applications are bundled at \$115, the price increases per application at more than this number, with applications 11–20 at \$13 each, applications 21–30 at \$16 each, and applications >31 costing \$26 each (7), which quickly adds up. By streamlining the interview process, it is possible applicants will apply to less programs, spend less money traveling for interviews, and miss fewer days of training/work.

Reducing the burden on fellowship programs is another important goal. In February 2019, after completion of the 2018 interview season, a proposal to standardize the REI fellowship recruitment process was sent from SREI to all REI fellowship program directors to try to encourage coordination between programs for the current 2019 interview season (Supplemental Table 2). Proposed action items included setting an earlier deadline for fellowship applications (a preagreed upon date), offering interviews to applicants ideally 4 weeks after receiving applications, preferably on a preagreed upon date, posting interview dates online, and coordinating regional interview dates to limit travel costs (6).

Based on these recommendations and the findings from this survey, the suggested steps and timeline to streamline the entire interview process for optimal outcome is proposed as follows:

1. Standardize the interview process by setting an earlier deadline for applications.
 - a. Deadline for all REI program applications will be May 1.
2. Agree on a prescribed turn-around time for invitations to be sent out.
 - a. Programs will have 4 weeks from May 2–May 31 to review all applications and request any supplemental application materials.
3. Agree on a specific date and time for all of the invitations to candidates to be sent out by the programs.
 - a. All interview invitations will be sent to candidates between June 1 and June 7.
4. Create additional transparency by posting program interview dates on the institutional website and possibly the SREI website.
 - a. Planned interview dates should be coordinated by geographic region to minimize overlap of interview dates.
 - i. Coordination will be facilitated by each program coordinator posting their interview dates to a shared Google calendar.
 - b. All interview dates should be selected by May 15, submitted to SREI by this date for posting on the SREI website and shared in the Google calendar.
 - c. Interviews should be held during a 12-week window between June 22 and September 13.

TABLE 2**REI fellowship programs categorized by geographic region.**

West (9 programs)

1. Cedars-Sinai Medical Center Program
2. Oregon Health & Science University Program
3. Stanford Health care—Stanford University Program
4. UC San Diego
5. UCLA David Geffen School of Medicine/UCLA Medical Center Program
6. University of California (San Francisco) Program
7. University of Southern California/LAC+USC Medical Center
8. University of Colorado Program
9. University of Utah

Midwest (10 programs)

1. Case Western Reserve University/University Hospitals Cleveland Medical
2. Cleveland Clinic Foundation Program
3. Detroit Medical Center/Wayne State University
4. Mayo Clinic College of Medicine and Science Program
5. McGaw Medical Center of Northwestern University Program
6. University of Illinois College of Medicine at Chicago Program
7. University of Iowa Hospitals and Clinics Program
8. University of Michigan Hospitals and Health Centers Program
9. UPMC Medical Education Program
10. Washington University/B-JH/SLCH Consortium Program

New England (7 programs)

1. Beth Israel Deaconess Medical Center Program
2. Brigham and Women's Hospital Program
3. Brown University (Women and Infants Hospital of Rhode Island) Program
4. Massachusetts General Hospital Program
5. University of Connecticut Program
6. University of Vermont Medical Center Program
7. Yale-New Haven Medical Center Program

Northeast (9 programs)

1. Drexel University College of Medicine/Hahnemann University Hospital Program
2. Icahn School of Medicine at Mount Sinai Program
3. Montefiore Medical Center/Albert Einstein College of Medicine Program
4. New York Presbyterian Hospital (Columbia Campus) Program
5. New York Presbyterian Hospital (Cornell Campus) Program
6. New York University School of Medicine Program
7. Rutgers New Jersey Medical School Program
8. Sidney Kimmel Medical College at Thomas Jefferson University/TJUH Program
9. Zucker School of Medicine at Hofstra/Northwell Program

Mid-Atlantic (8 programs)

1. Clinical Center at the National Institutes of Health Program
2. Duke University
3. Eastern Virginia Medical School Program
4. Johns Hopkins University Program
5. University of Cincinnati Medical Center/College of Medicine Program
6. University of Louisville School of Medicine Program
7. University of North Carolina Hospitals Program
8. University of Pennsylvania Health System Program

South (8 programs)

1. Baylor College of Medicine Program
2. Emory University School of Medicine Program
3. Medical College of Georgia Program
4. University of Alabama
5. University of Oklahoma Health Sciences Center Program
6. University of South Florida
7. University of Texas Health Science Center School of Medicine at San Antonio Program
8. University of Texas Southwestern Medical School Program

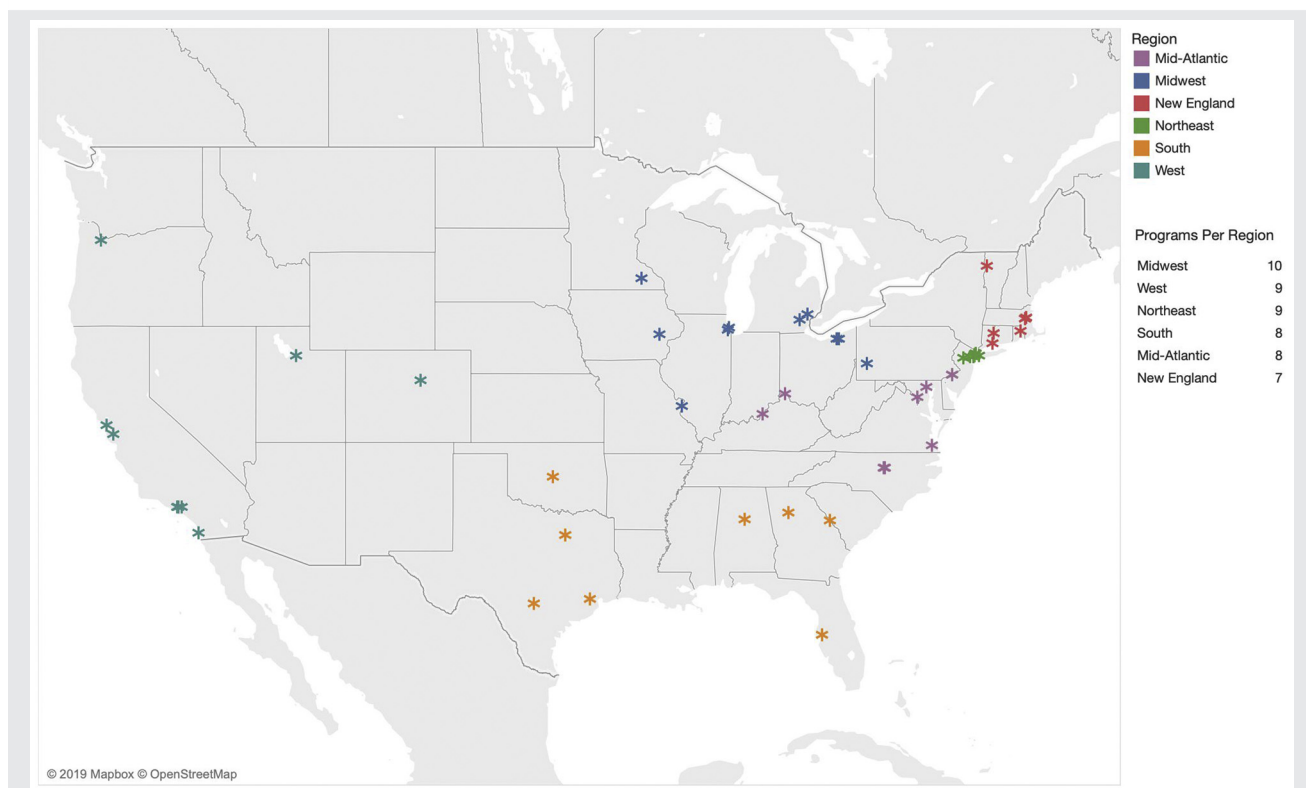
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- d. Programs are recommended to hold a maximum of two interview dates during the 12-week cycle.
- 5. Encourage regional coordination of interview dates to facilitate efficient candidate travel.
 - a. Interview dates will be coordinated by region on a 6-week cycle that repeats once for the 12-week interview season. There will be 2 additional flexible weeks at the opening of interview season available for any program to interview if desired. These weeks may be ideal for local candidates who do not have to make extensive travel plans.
 - a. Flexible weeks at the start of the interview season:
 - i. Week 1, June 8–14—Open to all regions
 - ii. Week 2, June 15–21—Open to all regions
 - b. First geographic session of interviews:
 - i. Week 1, June 22–28—West (9 programs)
 - ii. Week 2, June 29–July 5—Midwest (10 programs)
 - iii. Week 3, July 6–12—New England (7 programs)
 - iv. Week 4, July 13–19—Northeast (9 programs)
 - v. Week 5, July 20–26—Mid-Atlantic (8 programs)
 - vi. Week 6, July 27–August 2—South (8 programs)
 - c. Second geographic session of interviews:
 - i. Week 7, August 3–August 9—West (9 programs)
 - ii. Week 8, August 10–August 16—Midwest (10 programs)
 - iii. Week 9, August 17–August 23—New England (7 programs)
 - iv. Week 10, August 24–August 30—Northeast (9 programs)
 - v. Week 11, August 31–September 6—Mid-Atlantic (8 programs)
 - vi. Week 12, September 7–September 13—South (8 programs)

For a complete list of which programs fall into each geographic region, please see [Table 2](#) and [Figure 1](#). Program participation in this suggested streamlined process would be voluntary, the process could be continually reevaluated to determine need for further refinement, and elimination of some of the previously reported challenges in the interview process for programs and applicants.

The anticipated benefits of this proposal impact applicants and programs. Setting an earlier and uniform application deadline with a prescribed turnaround time allows applicants to have more control of their schedule in planning for interview dates, particularly for programs they are most interested in. The interview season spanning from June through September also overlaps the post-graduate year

FIGURE 1



Map of the current fellowship programs as listed by the Accreditation Council for Graduate Medical Education August 2019, organized by geographic region.

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(PGY)3 and PGY4 year for those applicants who are in residency, therefore allowing missed days to be allocated between two separate academic years, which is beneficial for days off of work as well as reducing days missed on PGY4 rotations. In addition, candidates may plan their work, vacation, or rotations according to programs they are interested in, based on the assigned week schedule as well as interview dates, which are posted earlier on SREI by May 15. With each fellowship program only holding a maximum of two interview dates, there will be less planning, cost, and time away from work for faculty participating in these interviews. Geographically grouping interviews will allow candidates to target particular regions yet reducing repeated flights and visits to the same city multiple times during the interview season. After successful implementation of these proposed changes for the 2020 fellowship interview season, we will obtain more feedback on what we can do to continue to improve and refine the interview process.

The limitations of this study include a low response rate to the survey of only 44 participants. It was impossible to calculate an exact response rate as the survey link was freely available online. It is, therefore, difficult to know how many individuals saw the link and chose whether or not to participate. It is known, however, that in the 2018 application cycle there were 82 people who participated in the NRMP and 57 in 2017, and a total during the past five application cycles of 343 (2). Nevertheless, the survey did not assess whether participants went through the NRMP, as some may have not participated in the match. In addition, the survey did not assess whether the participants had matched or not, as it was believed that this sensitive question may discourage some applicants from completing the survey.

In conclusion, much useful qualitative data were obtained from the respondents and this will be used to improve the interview experience for applicants and programs in the future. Although most subspecialty fellowships and program directors agree there are problems that need to be addressed, the key lies in taking action to implement change for the future. With the proposal presented, there now exist concrete action plans and steps each program can take to improve the interview process for the benefit of the applicants and programs.

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