Training Genitourinary Reconstructive Surgeons: A Survey of Graduated Fellows and Fellowship Directors

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OBJECTIVE To review the Society of Genitourinary Reconstructive Surgeons fellowship and matching process. There are currently 20 fellowships offered. A centralized match began in 2013-2014. Fellowship directors and graduated fellows were surveyed regarding their experience in their matching process, fellowship, employment opportunities, and their current practice.

METHODS A web-based survey was distributed to fellowship graduates and directors. A total of 20 and 14 open ended and multiple-choice questions were asked, respectively. Multiple choice questions were rated using a Likert scale.

RESULTS A total of 24/41 (59%) graduated fellows and 14/17 (82%) fellowship directors completed the survey. Overall satisfaction for the application and match process was 4/5 for both groups. Fellow respondents reported a 96%, 92%, 92%, and 88% feeling of competency in urethral reconstruction, male incontinence, urinary diversion/ureteral reconstruction, and male sexual health, respectively. A total of 92% of graduates practice in a location that they consider in their top 3 destinations. The majority, 58%, practice in academia.

CONCLUSION The Society of Genitourinary Reconstructive Surgeons has offered a recognized fellowship since 2014. Recent graduates express positive support of their fellowship training with excellent competency and employment opportunities. Fellowship directors continue to discuss broadening training to further advance this dynamic field. UROLOGY 131: 36–39, 2019. © 2019 Elsevier Inc.

The field of reconstructive urology has grown significantly over the past several decades anchored by a few well-recognized forefathers. Unofficial but well-established fellowships existed in a select few centers both nationally and internationally for many years. Exposure to and interest in complex genitourinary (GU) trauma and reconstruction blossomed as newly trained fellows began to populate academic centers. The field itself and the Society of Genitourinary Reconstructive Surgeons (GURS)[1] grew at a rapid rate along with new opportunities to train additional fellows. The society recognized the need to organize and regulate fellowship training.

Criteria and metrics were developed that reflected the diverse and expansive nature of the disease process and conditions we treat in our specialty. Standards were established for minimum case volumes, types of cases, academic effort, institutional sponsorship, and professionalism. In an effort to be transparent for applicants, case logs from each of the institutions were available for review. The society felt this was important to reflect the unique training experience at each program.

In 2012 the first GURS Match occurred allowing applicants to apply to any verified GURS fellowship program. Each program is reviewed annually to determine continued verification or probation status. In this study, we anonymously surveyed both fellowship program directors and graduated fellows about their experiences with the application and matching process, breadth of training, employment opportunities out of fellowship, and practice environment after training to identify areas of improvement for the future. The GURS fellowship committee conducted this study as an assessment to ensure that the fellowship graduates the most up to date, relevant, and highly trained GU reconstructive surgeons.

MATERIALS AND METHODS

In April 2017, an anonymous web-based survey was distributed to GURS fellowship program directors and graduates. Graduates were fellows in the 2013-2014, 2014-2015, and 2015-2016 academic years and only included programs participating in the GURS match. A total of 20 and 14 open ended and multiple-choice questions were asked of graduated fellows and fellowship directors, respectively. Multiple choice questions were rated using a 5-point Likert scale of "strongly agree," "agree," "neutral," "disagree," or "strongly disagree."

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Submitted: November 25, 2018, accepted (with revisions): April 1, 2019

https://doi.org/10.1016/j.urology.2019.04.037
0090-4295

RESULTS

Graduated Fellow Respondents

Match Process. A total of 24 of 41 graduated fellows responded to the survey, for a response rate of 59%. (Table 1) Satisfaction with the application, interview, and overall match process was 83.3% (20/24), 87.5% (21/24), and 79.2% (19/24), respectively. In an open-ended question, graduated fellows were critical of programs who they felt had participated in the match despite having "promised" or "internally filled" a position outside of the match.

Fellowship Experience. The perceived surgical experience of fellowship graduates was assessed according to several index cases. Most frequently fellowship graduates agreed or strongly agreed that they had sufficient urethroplasty (91.7%) and genital reconstruction (91.7%) training. In descending order, graduated fellows then felt they had sufficient male incontinence (83.3%), male sexual health (79.2%), and urinary diversion and ureteral reconstruction (70.8%) training.

Similarly, 95.8% of graduated fellows evaluated themselves as competent to perform urethroplasties while 91.7% expressed confidence performing male incontinence surgeries, urinary diversion and ureteral reconstruction, and genital reconstruction. To the question, "overall, I feel competent to enter unsupervised reconstructive urology practice after fellowship," 100% agreed or strongly agreed.

Graduated fellows were asked, "What would you have added to your fellowship which would have been beneficial to your practice?" Sixteen responses were given which were widely varied, but included more upper tract reconstruction, robotic surgery, and protected research time. The strong majority, 91.7% (22/24), of respondents would have repeated the GURS fellowship that they had completed. When asked about their current reconstructive practice, 91.7% responded they were either satisfied or strongly satisfied.

Employment Opportunities and Practice After Fellowship. Graduated fellows were queried regarding their job search and current practice setting. Graduates interviewed at an average of 4 jobs before accepting a position (range 0-10, median 3). The distribution of graduated fellow employment was 58.3% academia, 16.7% large group practice, 8.33% private practice, 4.2% HMO, and 12.5% other (hospital employed, military, mixed private/public practice). A total of 87.5% secured employment before finishing their fellowship. The remaining respondents took no more than 6 months to accept a position. A total of 92% of GURS graduates practice in a location that they consider in their top 3 destinations. Twenty graduates (83.3%) feel that the volume of reconstruction in their practice is sufficient and 87.5% feel their hospital resources are adequate for a reconstructive practice.

Table 1. Demographics of fellowship graduate respondents

Age	30-39	20
	40-49	3
	Did not answer	1
Year of fellowship	2013-2014	6
	2014-2015	10
	2015-2016	8
Duration of fellowship	1 year	24
Practice region	East	6
	Midwest	3
	South	5
	West	8
	International	1
	Did not answer	1

Fellowship Program Director Respondents

Match Process. A total of 14 of 17 fellowship program directors responded to the survey, for a response rate of 82%. Satisfaction of the mechanics of the current application process were 85.7% (12/14) satisfied, 7.1% (1/14) strongly satisfied, and the remaining 7.1% (1/14) neutral. To the question, "would you favor a centralized process where the applicant applies to a single AUA/GURS site rather than to each individual program?" the responses were split 50/50. All program directors were satisfied or strongly satisfied with the applicant being responsible for coordinating their interviews and all felt that 2 weeks was an appropriate time frame to submit preference lists.

Program directors were asked the question, "Do you believe the Match is a fair and equal opportunity process?" Eighty-six percent responded "yes" and 14% "no." Those who responded "no" expressed concern with unfair behind the scenes processes with respect to choosing applicants.

Fellowship Experience. Overall satisfaction with the fellowship program was 86% (12) positive and 14% (2) negative. One of the 2 negative responses was a comment that the fellowship closed because the fellowship program director changed institutions. The second expressed criticism with a strong overall emphasis on male urethroplasty in the GURS fellowship. A follow-up question asked for additional aspects of the fellowship training that should be offered. Suggestions included focused research training, more upper tract reconstruction training, fewer urethroplasty minimum requirements, more abdominal reconstruction, and the option for multiple training "tracks."

A specific question asking if an additional training track with urethroplasty not as the primary fellowship qualification was needed received 36% (5/14) positive responses and 64% (9/14) negative responses. Those who responded "yes" suggested a robotic or abdominal reconstruction track and a prosthetic track. Other commenters suggested lowering the minimum urethroplasty requirement from 60 to 45 without offering an additional training track.

Finally, the survey inquired if GURS fellowship programs should seek accreditation requiring recognized board specialty, similar to pediatric urology or female pelvic medicine and reconstructive surgery, and 86% (12) said "no" and 14% (2) said "yes."

COMMENT

According to the 2017 AUA census, 38% of practicing urologists have completed fellowship training.[2] Of these fellowship trained urologists, 2.9% reported training in male GU reconstruction, compared to 12.1% in oncology, 6.9% in robotic surgery, and 6.3% in pediatrics.[2] Advanced training in GU reconstructive surgery after urology residency has been offered for many years but only in 2012 did the Society of GURS organize a verified fellowship process with specific standards of

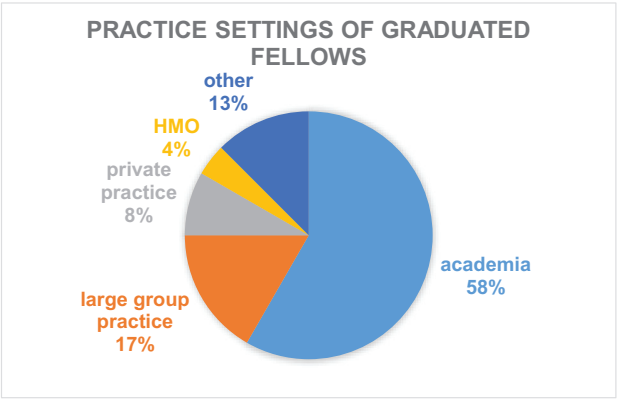

Figure 1. Fellowship graduates reported their current practice setting. (Color version available online.)

training across programs. This survey was created as an opportunity to evaluate experiences and opinions of graduated fellows and fellowship directors in order to improve the educational experiences in the future and assess postgraduate employment opportunities and practice patterns.

An example of the importance of GURS training is illustrated by urethral stricture disease. Studies have shown nearly universal procedural failure with endoscopic urethrotomy after initially unsuccessful procedures. Current guidelines, spearheaded by GURS, advocate for urethroplasty after having failed a single attempt at endourological management to prevent the morbidity of fruitless repeat endoscopic interventions.[3] Despite these recommendations, access to reconstructive urology expertise to perform definitive urethroplasties is not available to many patients. In a study of Medicare claims data, urethral dilation or urethrotomy was performed 50 times more often than urethroplasty for urethral stricture.[4]

Areas without urology residency programs or fellowship trained male GU reconstructive urologists are reported to perform the fewest urethroplasties 5. In contrast, a study reviewing case logs of American Board of Urology certifying and recertifying urologists found newly trained urologists performed 3-times as many urethroplasties as recertifying urologists.[5] This is most likely due to the expansion of GU reconstructive urology fellowship programs and faculty.

Survey responses from graduated fellows were highly encouraging in terms of the self-reported competency rating of near 90% in all male reconstructive urology cases. This is similar to published studies in pediatric urology, whose 90% of recent fellowship graduates also report a high degree of competence in performing surgical procedures done in their practice.[6]

Employment opportunities were excellent with a 100% employment rate within 6 months of graduation and the majority practice in 1 of their top 3 desired locations. As demonstrated by Erickson et al, GURS trained urologists experience a productive clinical practice early after fellowship, with increasing number and complexity of reconstructive cases per year in practice.[7] Most graduates practice in academia, which likely reflects this highly subspecialized field and referral patterns. Overall, graduates were highly satisfied not only in their training but also their choice of fellowship.

Fellowship directors were overall satisfied with the mechanics of the match process. An important point of discussion between both the graduated fellows and fellowship directors is the perception of fellowship positions being offered "outside the match" but the program still being listed as open and inviting applicants to apply. Overall, it is important to remain fair and transparent in the matching process, particularly now that a standardized match is in place.

Both fellowship graduates and directors expressed some interest in increasing upper tract urinary reconstruction in their training programs. It is unclear if the unbalanced exposure to some programs is due to practice patterns of the individual surgeon or fellowship design. Many noted the primary focus of the GURS fellowship on urethroplasty, with some viewing this as a positive and some as a negative. More discussion is required to determine if additional training tracks should be considered or if all programs should consider increasing exposure to upper tract reconstruction and robotics.

Limitations to our study include the small sample size of respondents surveyed and the overall response rate. As this was a survey conducted after just 5 years of creation of the formalized match process, it would be interesting to conduct a similar survey once the number of graduated GURS fellows in practice increases. Additionally, competency ratings with reconstructive procedures were self-reported and a future study could seek to explore more objective outcome measures (Fig. 1).

CONCLUSION

The Society of GURS has offered a verified fellowship since 2012. Recent graduates express positive support of their fellowship training with excellent competency and employment opportunities. Despite minor differences in training across programs, 100% of graduates felt that they were competent to enter unsupervised reconstructive urology practice after fellowship.

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EDITORIAL COMMENT

The rapid growth in reconstructive urology has resulted in the proliferation of fellowships and increased resident exposure to reconstructive urological cases, driving further interest in the field. This article characterizes the early results of the Society of Genitourinary Reconstructive Surgeons (GURS) fellowship match. This study is important because it opens the GURS match to future study. However, there are several things this article does not do. A comparative analysis of prematch graduates was not performed and this survey was not designed to determine if the current match is better.

The job opportunities and practice settings are of great interest to those entering the field. The practice distribution shows that 58.3% of graduates chose academic positions. It is unknown if the current practice distribution is reflective of practice distributions from the past. My suspicion is prematch fellows sought academic positions in higher numbers. All fellows found employment, but nearly 2 in 10 (16.7%) thought their volume of reconstruction was inadequate. The reconstructive needs of the workforce are unclear and the number of fellows we need per year is unknown. An analysis of the Society of Urologic Oncology fellowship trainees revealed a potential decrease in future case volumes per urologic oncologic surgeon relative to current levels.[1] This poses a threat to maintaining surgical skills. Tracking of these employment metrics is critical as more GURS trained surgeons accumulate.

Satisfaction with practice selection should be viewed with caution as this isn't an objective measure of job quality or availability. The candidates interviewed at a median of 3 jobs and the majority practice in 1 of their top 3 destinations. It goes without saying that people are likely to seek jobs in places they desire and having an available job dramatically increases the desirability of a location. The psychology literature is rife with ways in which we view our personal decisions with choice-supportive bias. After choosing, people view their chosen option with more positive features and attribute negative features to the rejected alternatives.[2]

Overall satisfaction with the match was high at 79.2%. Another interesting phenomenon is that satisfaction decreases with increasing number of choices. The availability of options lead to high expectations, personal responsibility over decision making, and a feeling of regret over choices that weren't selected.[3] It makes one wonder if the match brings high satisfaction because the ultimate selection of a fellowship program is taken out of the candidate's hands. Two questions remain: is the current level of satisfaction among these recent graduating classes durable over the long-term and will the future graduating classes have similar satisfaction levels with the experience?

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