The Plastic Surgery Central Application versus ERAS: Which is Preferred?

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Background: The Plastic Surgery Central Application (PSCA), designed to provide an equitable and streamlined application for both applicants and programs, was first designed in 2019, piloted in the 2020–21 application cycle, and is now in its fourth cycle in 2023–24. It has included preference signaling since the 2022–23 cycle, a feature in which applicants can send five "signals" to programs to express interest. We surveyed both program directors (PDs) and applicants following the 2023 match on their perceptions of PSCA versus Electronic Residency Application Service (ERAS).
Methods: Surveys were deployed to applicants from three integrated plastic surgery programs during the 2022–23 cycle and all PDs. Respondents were asked basic demographic information, which application system they preferred: PSCA or ERAS, how well they were able to highlight/evaluate different areas of the application, and about their experiences specifically with preference signaling.
Results: Forty-two (48%) PDs and 93 (29%) applicants responded. Most PDs (72%) and applicants (59%) preferred PSCA, with only 18% and 27% preferring ERAS. The remainder had no preference. Ninety-three percent of applicants reported that the cost savings of the PSCA were important. Most applicants (78%) and PDs (80%) were in favor or strongly in favor of the preference signaling program.
Conclusions: Most applicants and PDs prefer PSCA over ERAS. These data, in conjunction with the cost savings, suggest that the PSCA may be a better alternative for the integrated plastic surgery match. Future analyses of these application systems will help provide the best application for prospective residents. *(Plast Reconstr Surg Glob Open 2024; 12:e5703; doi: 10.1097/GOX.0000000000005703; Published online 28 March 2024.)*

INTRODUCTION

Applying to integrated plastic surgery residency has historically taken place through the Electronic Residency Application Service (ERAS). The application process through ERAS is associated with a significant cost for applicants,[1] who overall report that cost is an important part of the application process.[2] To combat this issue, the Plastic Surgery Central Application (PSCA) was created in 2019 and first piloted in the 2020–21 application cycle (then called the Plastic Surgery Common Application).[3] In addition to mitigating the cost, the PSCA also attempted to streamline the process for programs to encourage a true holistic review[4] by creating an "NIH biosketch" type application that allowed applicants to showcase their most important highlights, summary statements, and components of their applications without the additional page length and excess.

In the 2020–21 pilot year, 20 of 86 programs (23.2%) used the PSCA to evaluate applicants. After the initial voluntary pilot, the American Council of Academic Plastic Surgeons recommended that all programs use the PSCA as a supplemental application for the 2021–22 cycle,[5] and 12 programs chose to use the PSCA exclusively. While nearly every program uses the PSCA in some capacity, the number of PSCA-only programs has grown substantially, with 26 programs in the 2022–23 application cycle, and 44 in the 2023–24 application cycle.[6] Review of the PSCA

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has taken place after each year's cycle, including a qualitative review following the pilot application[3] and an external survey assessing participant's perspectives following the 2021–22 cycle.[7] Overall, the results of the most recent survey showed the majority of respondents preferred to apply with the PSCA alone. Additionally, the 2022–23 cycle was the first year to use "tokens," or preference signaling,[8–11] for applicants to express sincere interest in up to five programs. In addition to the use of five tokens per applicant, PSCA also used a "signal statement" as part of the application, which allowed the applicant to craft a brief message to the specific program (up to 100 words) to help express why a token was being given, which is a feature that is unique to PSCA. As the application changes, and with the ever-evolving undergraduate and graduate medical education, PSCA is under constant review and change to best fit the needs of both the applicants and program directors (PDs).

We sought to analyze both applicants' and PDs' perspectives of the 2022–23 cycle to help better understand and adapt to the needs of those involved in application submission and review.

METHODS

Following institutional review board approval, an electronic survey was distributed to both integrated plastic surgery PDs as well as residency applicants after the 2022–23 application cycle. Surveys were sent through SurveyMonkey (surveymonkey.com, Palo Alto, Calif.), and consisted of a maximum of 39 questions for applicants and 22 questions for PDs (branching logic was used). Three hundred twenty-six applicants and 88 PDs were identified. An initial recruitment email was sent on May 29, 2023, and three reminder emails were sent before closing the survey on July 24, 2023.

Applicants were requested to provide basic demographic and baseline clinical and education information. They were then asked which application system they preferred and how well they were able to highlight themselves in a variety of areas including academic work, research work, clinical work, volunteer work, extracurricular activities, and personal attributes. Additionally, applicants were asked about their experience with the PSCA preference signaling, and a free text option to provide additional feedback. A similar survey was sent to PDs.

Following closure of the survey, responses were analyzed. All responses are quantitative/qualitative in nature and no additional statistical testing was performed.

RESULTS

Program Directors

A total of 88 PDs were identified, of which 42 responded (48% response rate). Program demographics and baseline data are shown in Table 1. On average, programs received 319 ± 49 applications and offered 35 ± 10 interviews for 2 ± 1 postgraduate year 1 (PGY-1) integrated positions.

When asked which application system they preferred, the majority (72%) of PDs who responded preferred the

Takeaways

Question: Which application system do applicants and program directors prefer, PSCA or ERAS?

Findings: Most applicants and program directors preferred PSCA over ERAS. Additionally, most respondents were in favor of continuing the preference signaling program.

Meaning: As the landscape of applying to integrated plastic surgery residency continues to evolve, the PSCA is preferred by most. With its constant adaptation to both applicant and program director feedback, this application system may prove to be a suitable alternative to the traditional application system.

PSCA, compared with 18% preferring ERAS, with 10% having no preference. PDs were then asked specifically about how well they were able to evaluate applicants in six different domains, as described in the methods, and then whether they were better able to evaluate these domains better on ERAS or PSCA. These data are shown in Figure 1 and Table 2, respectively. The majority of respondents indicated that they were able to evaluate applicants on all areas "very well" or "somewhat well" (Fig. 1). Further, PD respondents reported that they were better able to evaluate applicants on all of those areas on PSCA compared with ERAS (Table 2). For those who used the previous versions of the PSCA, 83% of respondents reported the PSCA application used in 2022–23 (developed in house by Learner Centric Applications) was superior to the previous iterations [using Momentive (SurveyMonkey) in 2021–22 and REDCap in 2020–21].

PDs were then queried specifically about their experience with preference signaling. They were asked about how they felt before using it and how they felt after using it for one year. Overall, 55% of respondents were either in favor or strongly in favor before using it, which increased to 78% being in favor or strongly in favor after using this feature, suggesting overall satisfaction with the signaling process. When considering who to interview, 77% of respondents reported considering signaling during this process. The majority of PDs agreed that

Table 1. Program Director Demographics

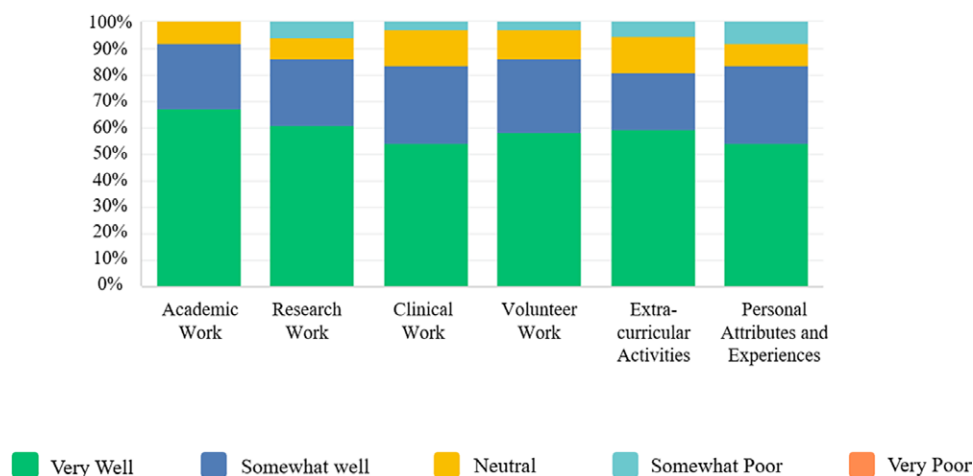| Demographics	n (%)
Region	
Northeast	9 (21%)
Midwest	12 (29%)
South	17 (40%)
West	4 (10%)
Program Length	
<5 years	7 (17%)
5–10 years	14 (33%)
>10 years	21 (50%)
Applications received	319 ± 49
Interviews offered	35 ± 10
Positions offered	2 ± 1

Fig. 1. Program director responses on how well they were able to evaluate applicants on each of the six domains on the PSCA.

Table 2. Program Director Responses to on Which Application They Were Better Able to Evaluate Applicants in the Following Domains

Domain	Better on PSCA	Better on ERAS	No Difference
Academic work	45%	13%	34%
Research work	55%	13%	24%
Clinical work	52%	16%	24%
Volunteer work	50%	13%	29%
Extracurricular activities	44%	17%	31%
Personal attributes and experiences	55%	8%	29%

applicants should not signal their home program (56%), though many (21%) were unsure if they agreed with that practice. However, when considering programs at which applicants complete subinternships, only 44% thought applicants should not have to send signals to these other programs, 36% did not agree with that practice, and 21% again were unsure. Overall, 67% agreed that limiting signals to five per applicant was an effective way to express sincere interest, and 56% of PDs reported that applicants without a home program should receive the option to send an extra signal.

APPLICANTS

Ninety-three applicants responded from a total of 326 identified, for a response rate of 28.5%. Applicant demographic information is shown in Table 3. The majority of applicants were from allopathic medical schools (84%), and 33% of applicants were from NIH top-40 schools. With the recent transition to Step 1 becoming pass/fail, 6% of applicants reported that they took the test for pass/fail instead of for a score, and 92% of applicants included their Step 2 Clinical Knowledge score on the examination. Roughly 60% of applicants had home integrated plastic surgery programs at their medical school, and applicants on average completed 3 ± 1 away rotations. There were two applicants who completed the survey who were reapplicants.

Overall, most applicant respondents preferred using PSCA (59%) over ERAS (27%), followed by those who had no preference (14%). Seventy-three percent were either somewhat satisfied (51%) or very satisfied (22%) with the PSCA. When asked how important the cost savings of the PSCA were, 63% reported extremely important, followed by very important (15%), somewhat important (15%), not so important (5%), and not at all important (3%). When considering cost to *not* be a factor, 49% of respondents still preferred PSCA compared with ERAS (33%) and unsure (19%).

Similar to PDs, applicants were asked how well they were able to accurately highlight their achievements on six key domains in their applications on the PSCA, and if they felt they were better able to do this on ERAS or PSCA, which is shown in Figure 2 and Table 4, respectively. Notably, most applicants reported that they were able to highlight all domains of their application "very well" or "somewhat well" (Fig. 2); however, when asked whether they were better able to highlight these domains on PSCA or ERAS or no difference between the two application platforms, the results were more variable, as shown in Figure 2. Applicants reported only being able to better highlight their academic work, personal attributes and experiences and clinical work better on PSCA when compared with ERAS, whereas more applicants were better able to highlight their research, volunteer work, and extracurricular activities on ERAS, as seen in Table 4.

Table 3. Applicant Demographics

Training Path	
MD	78 (84%)
DO	3 (3%)
IMG	11 (12%)
NIH Top-40	31 (33%)
Took Step 1 for pass/fail	6 (6%)
Step 2 clinical knowledge on application	83 (92%)
AOA	
Yes	25 (29%)
No	37 (43%)
N/A – no chapter at school	24 (28%)
Dedicated research time (during or after medical school)	40 (46%)
Home integrated program	51 (59%)
Away rotations completed	3 ± 1
Reapplicant	2 (2%)

Most respondents (59%) responded that the short answer questions on PSCA helped highlight their application, and 62% thought there should be no change to these questions.

Applicants were then asked a series of questions regarding their experience with preference signaling. Of a maximum of five signals sent, applicants reported receiving interviews from 2 ± 1 programs they sent signals to. Of those with home integrated plastic surgery programs, 98% of applicants did not send signals to their home programs, though only 54% of PDs advised the applicant to not send them a signal. When considering subinternships, 92% of applicants did not send signals to programs at which they completed a visiting rotation, though only 35% of PDs at the visiting institution advised applicants on whether to use a signal for them. Forty-nine percent of applicants, however, did report that they thought the number of signals should be increased. Overall, however, 44% of applicants thought that signaling provided them the opportunity to express sincere interest, though 33% thought that it did not, and 23% were unsure. The majority were either strongly in favor (47%) or in favor (33%) of continuing the preference signaling process.

DISCUSSION

This study sought to analyze the experiences of both PDs and applicants regarding the use of the PSCA after its third full application cycle of implementation. The PSCA was developed to provide a streamlined version of the application for both applicants and programs and to combat the high costs of applying through the traditional ERAS. The most salient of our results indicated that most applicants (59%) and PDs (72%) preferred the PSCA over ERAS.

Notably, the integrated plastic surgery match is not the first specialty to split from ERAS for an independent application system. Specifically, the urology residency match program has been overseen by the American Urological Association, and the ophthalmology match through the SF Match.[12] Both of these specialties are on independent timelines from the traditional ERAS system, and have earlier match dates. Not only has integrated plastic surgery caught onto this trend with the creation of the PSCA, the American College of Obstetricians and Gynecologists announced that they will be implementing a specialty-wide application beginning in the 2024–25 cycle.[13] This application system will be in lieu of ERAS, and is grant-funded work from the American Medical Association—again with the goal of improving holistic evaluation and decreasing cost burden for applicants.

The cost of applying to integrated plastic surgery is known to be significant, with historic averages of over $1500 on application costs, over $4000 on away rotations, and $5000 on costs related to interviewing.[2,14] When asked directly how important cost savings of the PSCA were
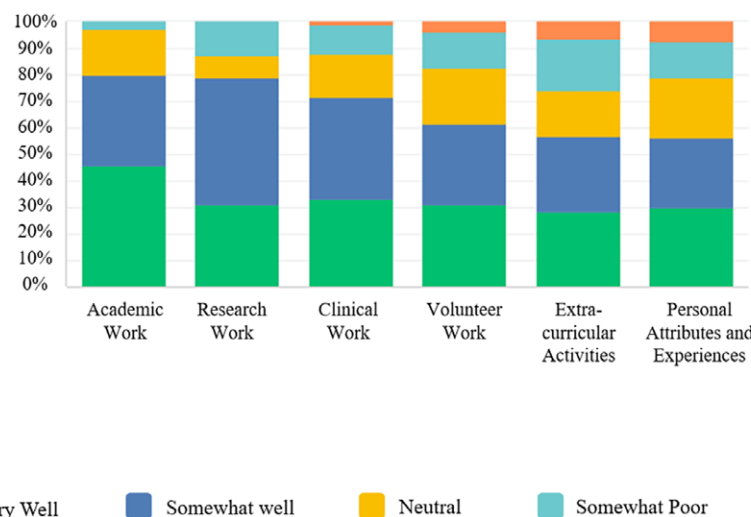

Fig. 2. Applicant responses on how well they were able to highlight each of the six domains on the PSCA.

Table 4. Applicant Responses to on Which Application They Were Better Able to Highlight their Accomplishments in the Following Domains

Domain	Better on PSCA	Better on ERAS	No Difference
Academic work	25%	22%	52%
Research work	38%	44%	16%
Clinical work	36%	15%	48%
Volunteer work	25%	44%	30%
Extracurricular activities	26%	46%	27%
Personal attributes and experiences	41%	33%	25%

compared with ERAS, over 90% of applicants agreed that it was either somewhat important (15%), very important (15%) or extremely important (63%). Additionally, applicants were asked which application system they would prefer if cost were *not* a factor. Forty-nine percent of respondents preferred the PSCA and 19% were unsure (compared with 59% preferring PSCA and 14% unsure while considering cost as a factor). These data suggest two important points: that more applicants prefer PSCA over ERAS even without the cost savings, and that cost savings are an important consideration in the application process. Although many interviews have transitioned to virtual as a result of the COVID-19 pandemic, there are still associated costs with applying virtually, albeit not as high.[15,16] However, the future of in-person versus virtual interviews remains unknown, and the subsequent potential cost ramifications are not known at this time.[17]

Although the cost savings of the application are enticing, the system must still be able to accurately disseminate information from applicants to evaluators in an accurate and succinct manner. To assess the ability of PSCA to accomplish this goal, we asked applicants and PDs to evaluate how well they were able to highlight/evaluate applicants based on their academic work, research work, clinical work, volunteer work, extracurricular activities, and personal attributes and experiences on the application. They were also asked if they were better able to do this on PSCA or ERAS. These data are shown in Figures 1 and 2 and Tables 3 and 4, respectively. Notably, PDs responded that they were better able to evaluate applicants on all domains on PSCA than ERAS. These data suggest not only that PSCA is not inferior to ERAS, but perhaps may be superior, though this data was not statistically analyzed. However, Cordero et al published the noninferiority of the PSCA in a recent analysis that compared scores of applicants on both application systems.[18] Their data showed that there was no difference in scores of six main categories of evaluation whether they were evaluated on PSCA or ERAS.

However, results varied for applicants. Only academic work, clinical work, and personal attributes and experiences were thought to be better on PSCA than ERAS. Applicants responded that they were better able to highlight research, volunteer, and extracurricular work on ERAS. These data likely stem from the fact that PSCA limits the number of items able to be highlighted for research, volunteer activities, and extracurriculars (although supplementary material can be uploaded). As a result, applicants most likely felt that they are not able to fully showcase all of the work they have done

in these domains. However, it should be noted that although the applicants may have this impression, PDs felt they were better able to evaluate each of these using the PSCA.

Preference signaling was used for the first time in the 2022–23 application cycle through PSCA and was supported by the American College of Academic Plastic Surgeons,[19] as one of the ways to help "reduce congestion" in the integrated plastic surgery match.[11] This concept was described in in 2017 by Bernstein, in which he suggested sending a "rose" to the program director—a preference signal.[10] This was later analyzed in 2019 by Whipple et al, in a simulation model to analyze the application process in competitive residency programs.[20] Through this analysis modeled after the otolaryngology match, they concluded that adding preferences for programs at the time of submission increased practical number of interviews for nearly all applicants. In the PSCA, applicants had the opportunity to send five "signals" to programs, as well as a "signal statement," a unique feature to the PSCA, to craft a brief message of up to 100 words to express why the token was being given. Our results showed that 78% of PDs and 80% of applicants were in favor or strongly in favor of continuing preference signaling. Overall, this suggests a positive experience toward the preference signaling process; however, there remains some uncertainty for applicants as 2% and 8% of applicants sent signals to their home programs and programs at which they completed away rotations, respectively. This is important, as only 54% of home- and 35% of away-rotation PDs advised applicants on whether a signal should be used for their program. The lack of guidance may ultimately result in increasing uncertainty for applicants in fear of "wasting" a signal or inadvertently not communicating sincere interest in a program. Moving forward, PDs ought to consider communicating transparent guidance to home and visiting students.

LIMITATIONS

This survey-based study is limited by response and nonresponse bias. The survey was deployed after the 2023 match to allow applicants and PDs adequate time to reflect on the interview season and the results of the match. However, the additional time before survey deployment may lead to recall bias. Finally, the data collected are largely qualitative in nature and, therefore, no statistical analysis was performed, which limited the ability to conclude superiority of one application system.

CONCLUSIONS

The PSCA is favored by most applicants and PDs when compared directly to ERAS. Additionally, preference signaling, which was first utilized in plastic surgery during the 2022–23 match cycle, was regarded as favorable by the majority of applicants and PDs. This cost-saving and streamlined application designed for the integrated plastic surgery match is an evolving system geared toward meeting and exceeding the expectations of both PDs and applicants to create an equitable and fair match for both parties.

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DISCLOSURES

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