

A National Survey of Perspectives of Physician Assistants in Academic Plastic and Reconstructive Surgery

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Background: Physician assistants (PAs) are an essential part of the healthcare team who improve access and efficiencies in patient care. A better understanding of the impact and current utilization of PAs in plastic and reconstructive surgery is needed. The purpose of this national survey was to evaluate the role and scope of practice of PAs in academic plastic surgery, as well as characterize current trends of PA utilization, compensation, and perceived value from a PA perspective.

Methods: A voluntary, anonymous 50-question survey was distributed via SurveyMonkey to practicing PAs at 98 academic plastic surgery programs. The survey included questions about employment characteristics, involvement in clinical research and academic work, structural organization, academic benefits, compensation, and position held.

Results: Ninety-one PAs from 35 plastic surgery programs completed the survey and were included (overall program response rate = 36.8%, participants response rate = 30.4%). Practice environments included outpatient clinics, the operating room, and inpatient care. Most commonly, respondents supported multiple surgeons as opposed to one surgeon's practice. For 57% of respondents, compensation is based on a tiered system that accounts for specialty and experience. The reported mode base salary range corroborates national averages and most reported annual bonuses based on merit. The majority of respondents felt valued in their role.

Conclusions: Through this national survey, we provide granularity as to how PAs are utilized and compensated in academic plastic surgery. We offer insight into the overall perceived value from a PA perspective that helps define the role and will ultimately help strengthen collaboration. (*Plast Reconstr Surg Glob Open* 2023; 11:e4989; doi: 10.1097/GOX.0000000000004989; Published online 22 May 2023.)

INTRODUCTION

Physician assistants (PAs) have become an essential part of the healthcare team by improving access and optimizing efficiencies in patient care. Between 2010 and 2020, the number of practicing PAs in the United States grew by 73% to 129,400, and between 2016 and 2020, the profession saw a 17% increase in the number of PAs choosing careers in surgical subspecialties.¹⁻³ In the surgical world, PAs are a critical component of the surgical team, extending the capabilities of the surgeon by conducting

outpatient clinics, managing inpatient consults and post-operative patients, participating as the first surgical assistant in the operating room, performing minor office procedures, and providing care at night and on weekends while "on call."^{4,5} In the setting of an academic practice, PAs also play a vital role in maintaining patient continuity-of-care together with resident workforce and providing stability, given that typically the PAs do not rotate on/off a service. PAs can also help maintain compliance with resident work-hour restrictions and have a positive impact on the ability to distribute workload more effectively amongst all members of the surgical team.

As PAs continue to integrate into the surgical workforce, a better understanding of the impact and current utilization of PAs in plastic and reconstructive surgery is

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needed. The purpose of this national survey was to evaluate the current role and scope of practice of PAs in academic plastic surgery, as well as characterize current trends of PA utilization, compensation, and perceived value from a PA perspective.

METHODS

After institutional review board approval, a voluntary, anonymous 50-question survey was distributed electronically three times via SurveyMonkey (SurveyMonkey, San Mateo, Calif.) to practicing PAs at 98 academic plastic surgery programs via an American Council of Academic Plastic Surgeons program administrators’ group in June and July 2021. (See survey, Supplemental Digital Content 1, which includes questions about the employment characteristics, daily labor, involvement in clinical research and academic work, workload, structural organization, academic benefits, compensation, and personal perspectives on position held. <http://links.lww.com/PRSGO/C587>.) Only participants who completed the entire survey were included in the study. A descriptive analysis was performed to report frequencies and percentages of responses using the Survey Monkey software.

Takeaways

Question: How do you define the role of physician assistants (PAs) in academic plastic and reconstructive surgery?

Findings: Ninety-one PAs from 35 plastic surgery programs completed the survey and were included. Practice environments included outpatient clinics, the operating room, and inpatient care. Most commonly, respondents supported multiple surgeons. Salary ranges corroborated national averages. PAs overall felt valued in their roles.

Meaning: This article provides granularity as to how physician assistants working in academic plastic and reconstructive surgery are utilized, compensated, and valued.

RESULTS

Ninety-one PAs from a total of 35 plastic surgery programs completed the survey and were included in the study (overall program response rate = 36.8%, participants response rate = 30.4%). Ninety-six percent of respondents reported full-time employment. The largest percentage of participants reported to have between 2 and 4 years (36.2%) of clinical experience, followed by 5–9 years (35.2%). Only 19.8% of PAs had 10 or more years of experience, whereas 8.8% had less than one year of experience (Fig. 1).

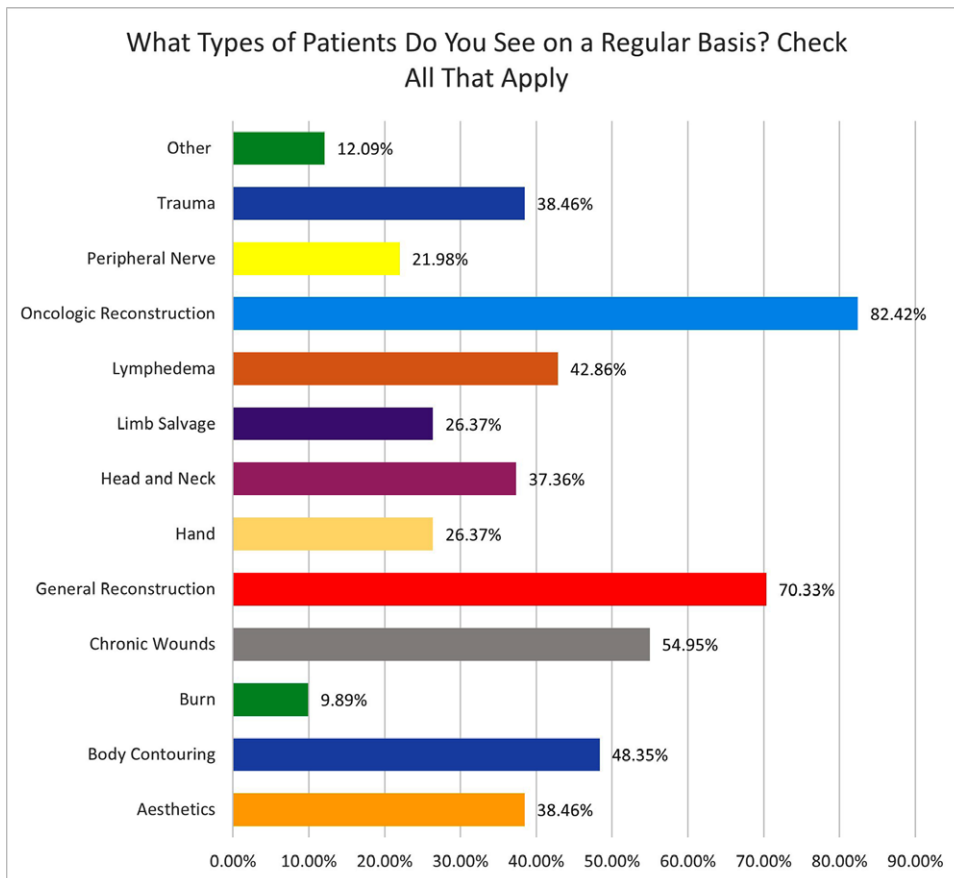


Fig. 1. Years of employment in plastic surgery.

How Many Years of Experience Do You Have in Plastic Surgery?

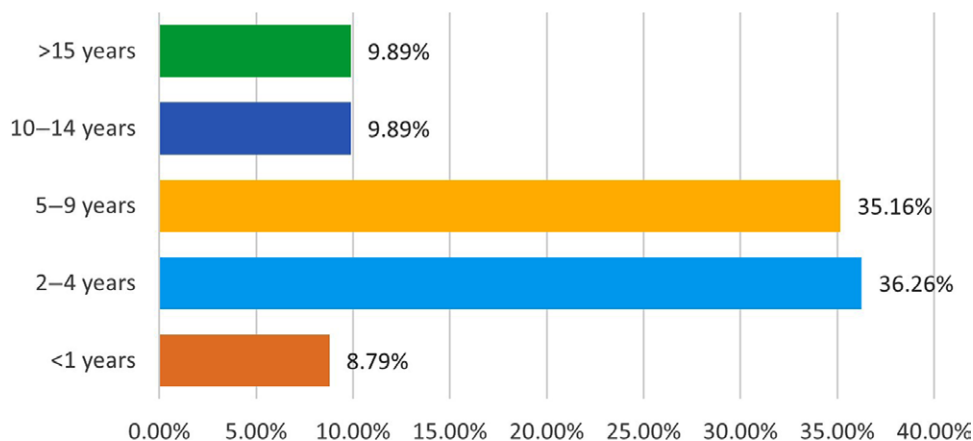


Fig. 2. Patients treated by PAs.

Roles and Responsibilities of the Physician Assistant in Academic Plastic Surgery

The majority of respondents reported working in a combination of inpatient and outpatient settings, as opposed to a single working environment. The most common practice environments were outpatient clinics (93.4%) followed by the operating room (87.9%) and inpatient care (80.2%). PAs reported caring for a wide spectrum of patients, including aesthetics, body contouring, burn, wound care, general reconstruction, hand and upper extremity, head and neck, limb salvage, lymphedema, peripheral nerve, trauma, pediatric, and gender affirmation (Fig. 2). Seventy-three percent of surveyed PAs ran clinics with visit types, including new and established patient evaluations, postoperative care, and minor procedures. Over 24% of respondents reported performing office procedures. Twenty-five percent of surveyed PAs performed emergency room consultations, and 28% performed inpatient consultations.

Most commonly, respondents supported multiple surgeons (45%) as opposed to one surgeon's practice (38%). Eight percent of PAs reported working primarily with residents/fellows in inpatient roles daily, and 5.5% primarily worked to support the practice or a specific surgeon. Table 1 describes the sizes of the divisions/departments represented. Table 2 describes the number of PAs used in each division or department. Fifty-seven percent of

Table 1. Number of Surgeons Used in Plastic Surgery Division/Department

Number of Surgeons	Responses
1–3	6.59% (n = 6)
4–7	16.48% (n = 15)
7–10	32.97% (n = 30)
11–14	29.67% (n = 27)
>15	13.19% (n = 12)

Table 2. Number of PAs Reported in Plastic Surgery Division/Department

Number of PAs	Responses
1–4	46.67% (n = 42)
5–8	13.33% (n = 12)
9–12	15.56% (n = 14)
13–16	7.78% (n = 7)
>16	16.67% (n = 15)

respondents reported working with nurse practitioners in their division or department as well as PAs.

Most respondents have a 5-day (47.8%) or a 4-day (40%) work week with reported work hour ranges varying from 31 to 40 (28.6%), 41 to 45 (31.8%), and 46 to 50 (20.8%) [Fig. 3]. Most respondents do not take call (88.89%). In addition to all other clinical duties, 43.9% of respondents participated in clinical research.

Compensation

Sixty-seven percent of respondents reported that their salary is paid by the medical center, while 32% reported compensation through their individual division or department. One respondent reported funding through a foundation, and another reported that their funding source was unknown. For 57% of respondents, compensation is based on a tiered system that accounts for specialty and relevant experience. The other 43% reported all advanced practice providers are on the same pay scale regardless of their specialty and primary place of work. Due to the complexity of plastic surgery skills, some reported a “clinical skills pay increase” that plastic surgery PAs received once they complete specified criteria for training.

The mode base salary range was \$105,000 to \$135,000 per year (range 75k–155K) excluding bonuses, which corroborates a recent American Academy of Physician Assistants average pay salary range (Fig. 4).⁶ Reported compensation was further broken down by region (Fig. 5).

On average, how many hours per week do you work (excluding call)?

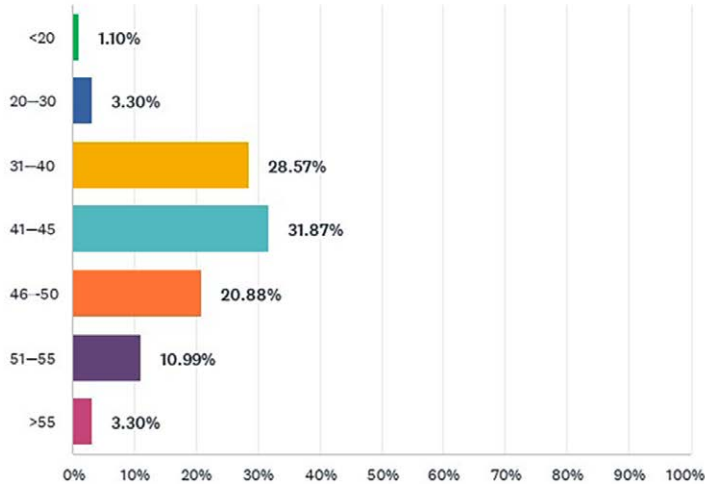


Fig. 3. Average hours worked.

Please choose the closest range to your annual base salary only (exclude bonuses)

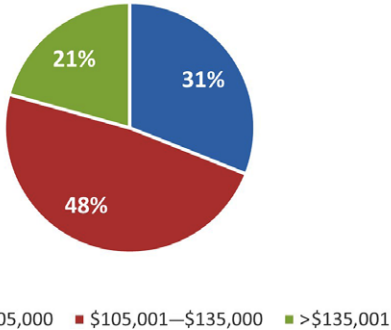


Fig. 4. Annual base salary.

For those who reported working more than 40 hours per week, only 21.2% are provided overtime compensation, and for those who do take call, the majority are paid hourly. Forty-six percent of respondents received an annual bonus. The bonus amounts ranged from \$1000-\$3000 (57.9%), \$3000-\$5000 (14%), \$5001-\$8000 (8.8%), and greater than \$10,000 (5.3%). These bonuses are most commonly based on merit (44.3%), followed by clinical advancement programs (22.9%), productivity measures (21.3%), patient satisfaction (6.6%), and/or RVU production (1.6%). Unique benefits are inherent to individual academic institutions, which include opportunities for advancement, retirement contributions, continuing medical education (CME) funds, and tuition reimbursement for the employee and/or their family members. Forty-one percent receive an annual amount of CME funds of \$1001-\$2000 (40.9%). In addition to CME funds, 49.4%

Compensation by US Region

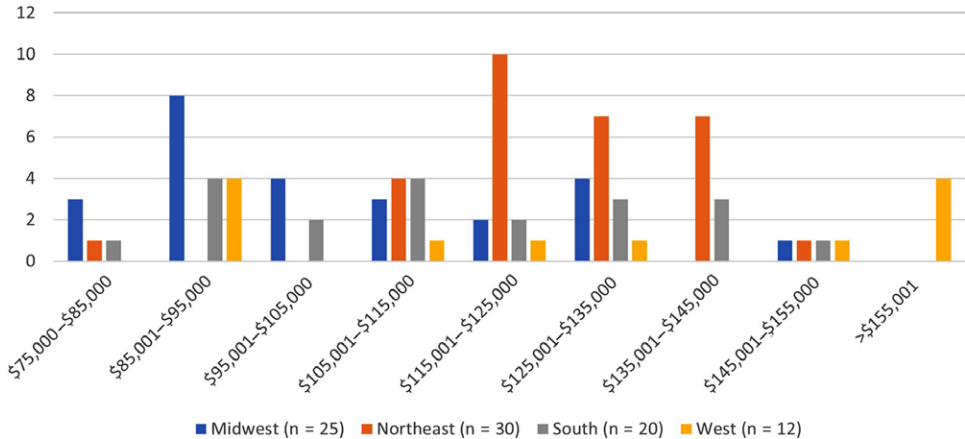


Fig. 5. Compensation by region.

receive reimbursement for professional organization dues and 86% have their Drug Enforcement Association expenses covered, an average cost of \$731 every 3 years.⁷ National membership organizations for PAs in plastic surgery include American Academy of Physician Assistants (80%), American Society of Plastic Surgeons (22.9%), and American Society for Aesthetic Plastic Surgery/The Aesthetic Society (5.7%). A little over half (55%) reported their institutions perform frequent market analyses to adjust compensation. In order to support their current role, opportunities for advancement within their role, or self-betterment, 47.5% of respondents have considered pursuing advanced degrees. Examples include a doctor of physician assistant studies, master's/PhD in health care administration, master's/PhD of public health, or a master's in business administration (MBA). Despite affiliations with academic centers, nearly 46% of respondents receive tuition assistance should they pursue advanced degrees while used.

Value

We asked if our respondents felt valued at their institution as an academic plastic surgery PA, with 12.4% reporting “all of the time”; 56.2%, “most of the time”; 28%, “sometimes”; and 3.4%, “almost never” (Fig. 6). When asked what measures would make PAs feel more valued, we had multiple responses of “work-life balance,” “improved compensation,” “performing up to our scope of practice,” “being treated as an associate as opposed to an assistant,” “appreciation from attendings,” “being paid overtime,” and “student loan repayment option.”

DISCUSSION

This survey provides the most contemporary information and insight into the roles, responsibilities, structure,

and value of PAs in academic plastic and reconstructive surgery. PAs are involved in specialized multidisciplinary care teams and help improve patient care by extending the reach of the surgeons they support. In this national survey, we provide granularity as to how PAs are utilized and compensated in this setting. We also offer insight to the overall perceived value from a PA perspective.

Our results demonstrate that nearly half of the PAs surveyed support more than one surgeon's practice. Furthermore, the plastic surgery PA has a multitude of responsibilities that support an academic service, including holding outpatient clinics, evaluating inpatient consults, and assisting in the operating room. PAs are also undertaking administrative and research roles within their department and the medical center in addition to their clinical responsibilities. Unique to academic medicine is the PA's role in supporting the continuity of care in a graduate medical training environment. Working alongside surgical residents and fellows, PAs are pivotal collaborators. In a recent study published by the *American Journal of Managed Care*, it was stated that GME programs utilizing PAs allowed for increased patient throughput, safety and quality of care, and hospital length of stay.⁸ Additionally, it allowed trainees to better adhere to resident workhours, become accustomed to multidisciplinary teams, and protected the integrity of their training program.⁸ In our experience, PAs care for patients in the inpatient setting, assist in the OR, and evaluate clinic patients both independently (within scope of practice and state regulations) and alongside an attending physician; these daily roles augment the resident physician's workflow and educational experience.

Along with the variety of practice models, PAs are used under a myriad of compensation and organizational models. This represents an avenue requiring further investigation to determine best practices of institutional

Do you feel valued as a PA in an Academic Plastic Surgery setting?

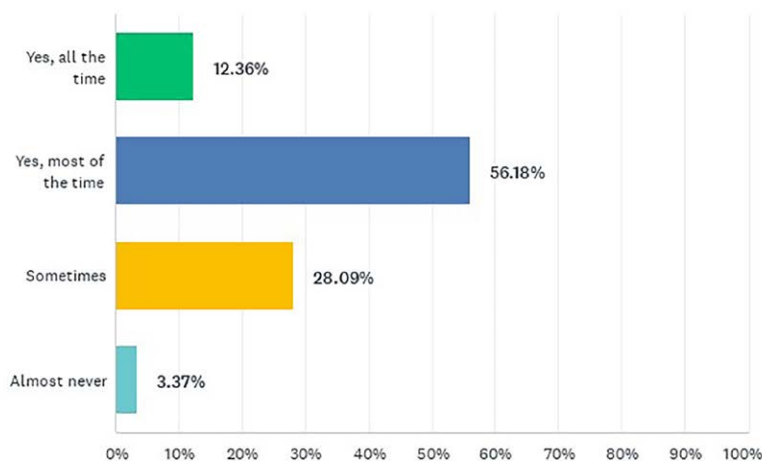


Fig. 6. Feeling valued as a PA.

organization with regard to productivity, revenue sources, retention, and overall job satisfaction. A 2017 study published by Chao et al analyzed the impact of PAs in a microsurgical practice by examining clinical productivity before and after incorporation of PAs into the workflow. They found that this addition added approximately nine additional patient encounters per day.⁹ Although this study was based on a 1:1 surgeon/PA model, its findings were consistent with results from other surgical subspecialties, concluding that PAs play an important role in downstream clinical revenue and increase the revenue-generating potential of the surgeons by improving productivity and patient care.⁸⁻¹¹

We have found it difficult in our own department to accurately capture the overall revenue stream generated by PAs due to the proportion of indirect revenue. At our institution, increasing the number of PA postoperative clinics has allowed our surgeons to be able to spend more time in the operating room. These postoperative clinics specifically are not direct revenue generators, as most patients are in the global period; however, they expand the bandwidth of the surgeon while maintaining safe and efficient care. Additionally, having a PA in clinic concomitantly with the surgeon effectively expands the number of patients that can be seen, thus further enhancing efficiency. PAs are able to effectively manage the vast majority of patient concerns, thereby allowing the surgeon additional time for academic responsibilities.

Overall job satisfaction and value in our survey was high, with 69% of respondents reporting that they feel valued “most” or “all” of the time. This sense of value is tied not only to compensation, but also to feelings of autonomy and practicing to the full extent of their licensure. Interestingly, 56% of PAs reported advancement opportunities, but the descriptions were vague and limited to a “lead” or supervisory role within advanced practice provider management. No PAs reported advancement related to research endeavors despite nearly 44% reporting research involvement. Free text responses to the survey question “what measures would help you to feel more valued” included improved compensation and/or bonus structure, increased opportunities for CME, teambuilding opportunities, and involvement in national organizations. Taking into account the incidence of healthcare provider burnout as well as the substantial financial and clinical impact of turnover, it is of utmost importance that we understand how to optimize value for the entire healthcare team, including PAs.¹²⁻¹⁴ The results of this survey can be used as a baseline to guide PAs, surgeons, and health care administrators to promote job satisfaction and retention among PAs in plastic and reconstructive surgery.

Limitations

Although this survey provides insightful information regarding PAs practicing in academic plastic surgery, we recognize it does have limitations. We surveyed PAs practicing in academic plastic surgery practices only, potentially limiting the generalizability to other practice models (ie, private practice or community hospitals). Our response rate was 36%, which also may contribute

to responder bias in the results. Another limitation is the nature of self-reported survey results, which rely on the respondents’ awareness of points of interest; however, we believe most individuals to be well-versed in their specific work environment and compensation model. Though not in our study design, we do acknowledge that the fact we did not survey nurse practitioners is a limitation of this article and is grounds for a future, more inclusive study of the role of all advanced practice providers in plastic and reconstructive surgery. Finally, in terms of compensation, it should be acknowledged that we did not adjust for location and cost of living when reporting the results.

CONCLUSIONS

This study explores the roles and responsibilities of PAs in plastic and reconstructive surgery in academic medicine. We found that PAs are involved in various practice locations and with a multitude of responsibilities. As academic plastic surgeons have pressures to be clinically productive, prolific in research, and rise in the academic ranks, the ability of PAs to support surgeons and enhance their efficiency is important. For this collaboration to have ultimate success, ensure job satisfaction, and improve patient care, PAs need to be supported in their roles, compensated fairly, and given opportunities to grow professionally.

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DISCLOSURE

The authors have no financial interest to declare in relation to the content of this article.

REFERENCES

1. U.S. Bureau of Labor Statistics *Occupational Outlook Handbook: Physician Assistants*. Updated September 15, 2022. Available at <https://www.bls.gov/ooh/healthcare/physician-assistants.htm>. Accessed July 11, 2022.
2. Hooker RS, Cawley JF, Everett CM. Predictive modeling the physician assistant supply: 2010-2025. *Public Health Rep*. 2011;126:708-716.
3. National Commission on Certification of Physician Assistants, Inc. 2020 Statistical Profile of Recently Certified Physician Assistants: An Annual Report of the National Commission on Certification of Physician Assistants. February 2022. Available at <http://www.nccpa.net/>. Accessed July 11, 2022.
4. Althausen PL, Shannon S, Owens B, et al. Impact of hospital-employed physician assistants on a level II community-based orthopaedic trauma system. *J Orthop Trauma*. 2013;27:e87-e91.
5. Chalupa RL, Hooker RS. The education, role, distribution, and compensation of physician assistants in orthopedic surgery. *JAAPA*. 2016;29:1-7.

6. American Academy of Physician Assistants 2020 salary report. August 3, 2020. Available at <https://www.aapa.org/news-central/2020/08/2020-aapa-salary-report-shows-uptick-in-2019-pa-salaries-compensation/>. Accessed July 11, 2022.
7. Drug Enforcement Association (DEA) registration fees factsheet. July 24, 2020. Available at https://www.deadiversion.usdoj.gov/fed_regs/rules/2012/reg_csa_fees/registration_fees_fact_sheet.pdf. Accessed July 11, 2022.
8. Cawley JF, Hooker RS. Physician assistants in American medicine: the half-century mark. *Am J Manag Care*. 2013;19:e333–e341. ...
9. Chao AH, Yaney A, Skoracki RJ, et al. The impact of physician assistants on a breast reconstruction practice: outcomes and cost analysis. *Ann Plast Surg*. 2017;79:249–252.
10. Bohm ER, Dunbar M, Pitman D, et al. Experience with physician assistants in a canadian arthroplasty program. *Can J Surg*. 2010;53:103–108.
11. Larson EH, Coerver DA, Wick KH, et al. Physician assistants in orthopedic practice: a national study. *J Allied Health*. 2011;40:174–180.
12. Khansa I, Janis JE. A growing epidemic: plastic surgeons and burnout – a literature review. *Plast Reconstr Surg*. 2019;144:298e–305e.
13. Hart AM, Crowley C, Janis JE, et al. survey based assessment of burnout rates among U.S. Plastic surgery residents. *Ann Plast Surg*. 2020;85:215–220.
14. Carrau D, Janis JE. Physician burnout: solutions for individuals and organizations. *Plast Reconstr Surg - Glob Open*. 2021;9:e3418.