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Purpose

- Gender disparities persist amongst surgical specialties in compensation, leadership roles, and career advancement opportunities.¹⁻⁶
- Disparity is evident in ophthalmology: in 2021 female ophthalmologists performed fewer cataract surgeries on average than males, even controlling for clinical volume and physician experience.¹
- In this study, we surveyed the surgical volume of male and female surgeons performing upper blepharoplasty on Medicare beneficiaries to determine if a similar inequality exists in the United States.

Methods

- The 2018 Medicare Provider Utilization and Payment Data: Physician and Other Provider dataset, specifically narrowed by provider and service, was queried for blepharoplasty surgeries utilizing the Current Procedural Terminology Code 15283.
 - All Medicare claims filed under ambulatory surgical services and centers were excluded, so as only to include claims filed under individual providers.
- Surgeons were identified by their National Provider Identification numbers and subsequently matched to the Physician Compare National Downloadable File, from which physician gender was determined.
- Gender differences in regards to total surgical volume were assessed.
- Welch two-sample t-tests were performed to determine significance between the number of blepharoplasties performed by male and female surgeons.
 - All analyses were performed in R version 4.0.3 (R Foundation for Statistical Computing, Vienna, Austria).
- This study was exempted by the University of Texas at Austin Dell Medical School Institutional Review Board and adhered to the Declaration of Helsinki.

Results

Gender	Count	Mean Blephs Done	Standard Deviation	Minimum	Maximum
Male	834	36.3	34.9	11	298
Female	251	33.3	25.5	11	163

Table 1. Number of functional upper blepharoplasties performed by male and female surgeons.

Total Blepharoplasty Procedures Performed by Gender

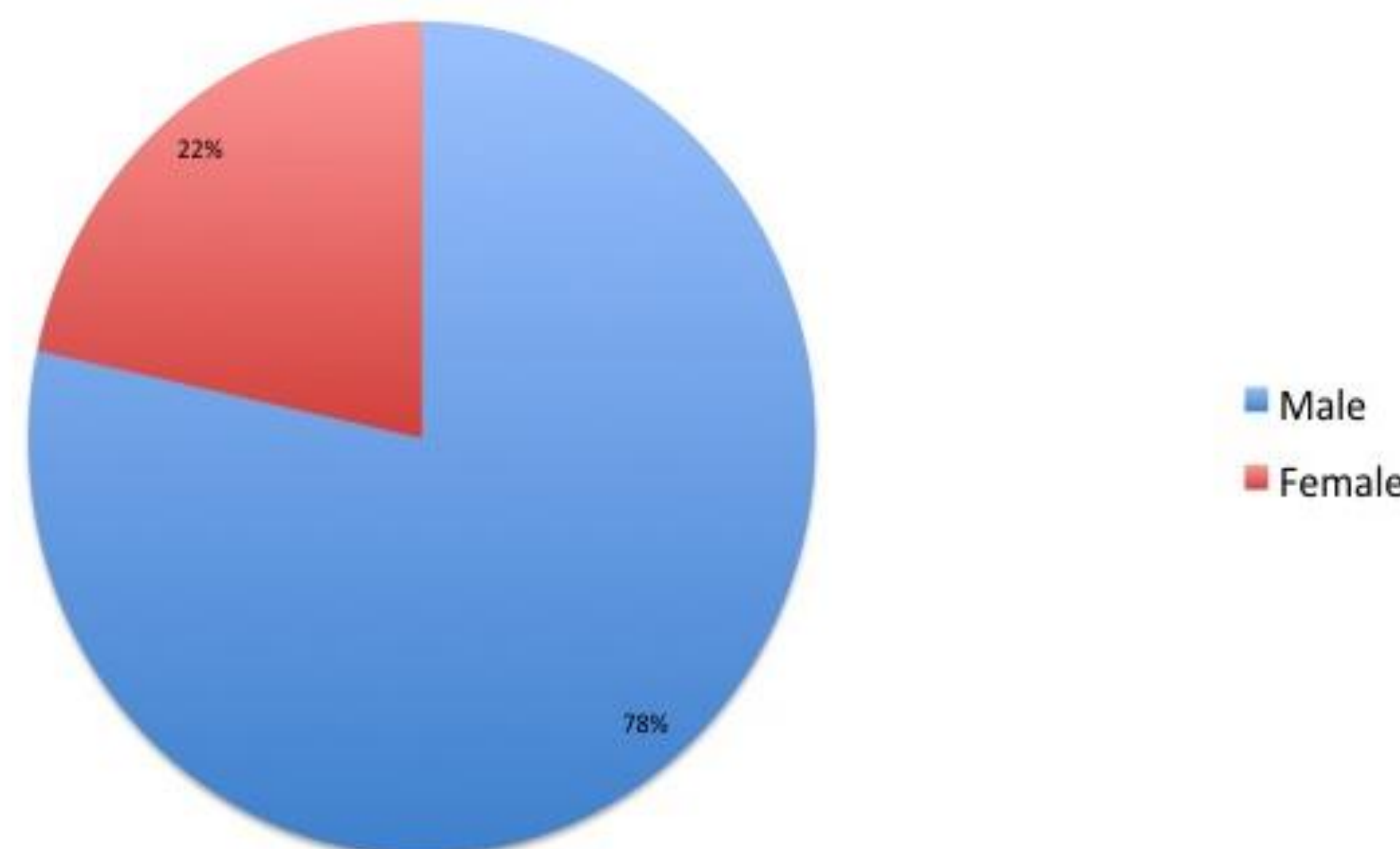


Figure 1: Total upper blepharoplasty procedures by gender

- 38,611 blepharoplasties performed by 1,085 surgeons were assessed.
- 834 (76.9%) male surgeons performed 30,248 (78.3%) blepharoplasties as compared to 251 (23.1%) female surgeons who performed 8,347 (21.6%) blepharoplasties.
- On average, blepharoplasties per surgeon were 36.3 for men, versus 33.3 for women (95% confidence interval [CI] -6.97 - 0.94, $p = 0.135$).

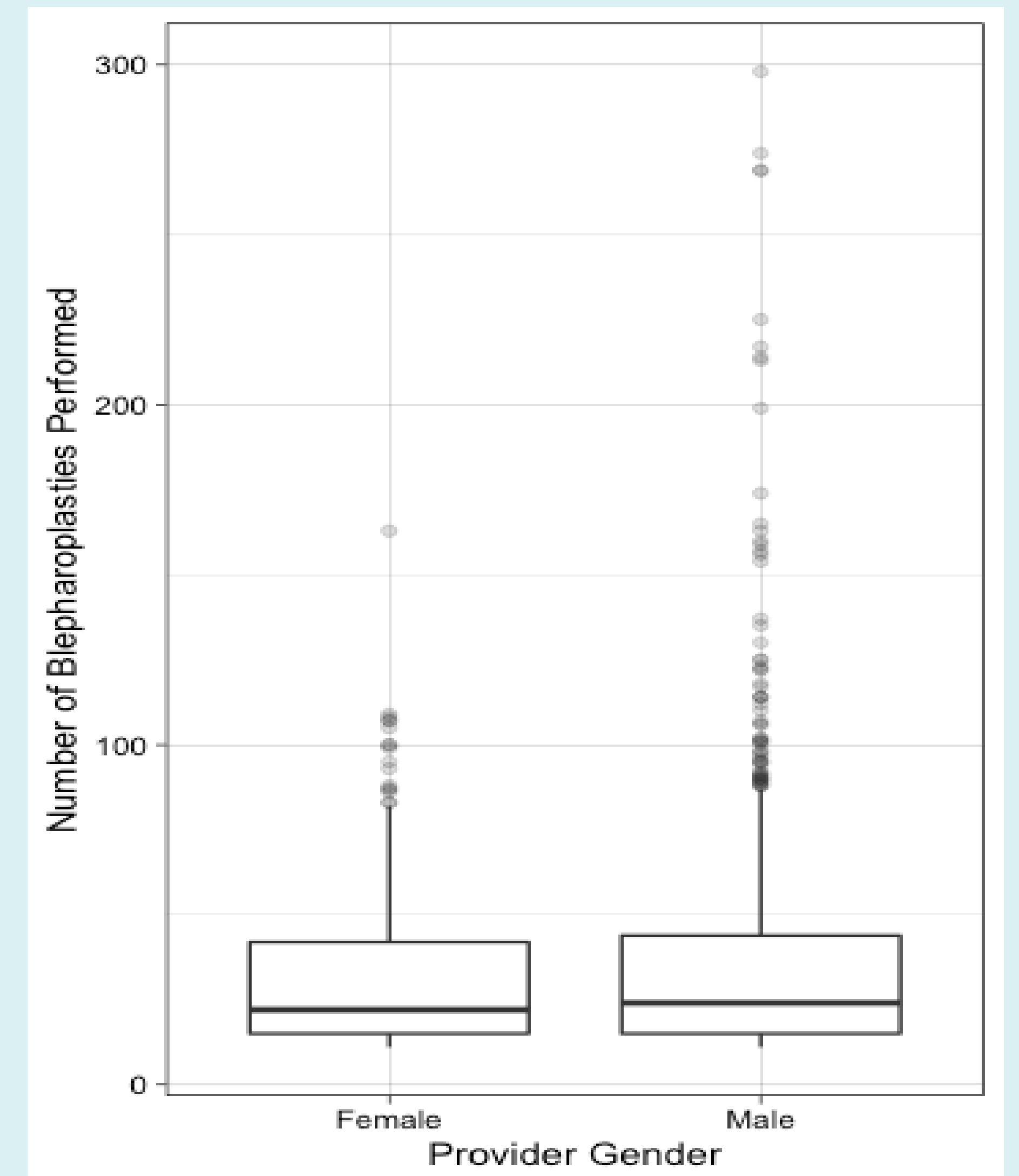


Figure 2. Boxplot comparing number of blepharoplasty procedures performed by gender.

Conclusions

- In the United States, males performed more upper blepharoplasty as compared to female surgeons.
- However, when analyzing procedures performed per surgeon, no statistically significant gender difference was noted.
- While this parity data across blepharoplasty surgeons is reassuring, continued awareness and analysis of gender disparity across surgical specialties is recommended.

References

1. Feng PW, Ahluwalia A, Adelman RA, Chow JH. Gender differences in surgical volume among cataract surgeons. *Ophthalmology*. 2021. 128(5):795-796.
2. Spector ND, Overholser B. Examining gender disparity in medicine and setting a course forward. *JAMA Network Open*. 2019. 2(6):e196484.
3. Ahmad S, Ramulu P, Akpek E, et al. Gender-specific trends in ophthalmologist Medicare collections. *Am J Ophthalmol*. 2020. 214:32-39.
4. French DD, Margo CE, Campbell RR, Greenberg PB. Volume of cataract surgery and surgeon gender: the Florida Ambulatory Surgery Center experience 2005 through 2012. *J Med Pract Manage*. 2016. 31(5):297-302.
5. Gong D, Winn BJ, Beal CJ, et al. Gender differences in case volume among ophthalmology residents. *JAMA Ophthalmol*. 2019. 137(9):1015-1020.
6. Epstein A, Homer N, Watson A, Nakra T, Bratton E, Somogyi M. Female cosmetic surgeons: past and present perspectives. *Am J Cosm Surg*. 2021. 00(0): 1-5.