2. Joseph AW, Ishii L, Joseph SS, et al. Prevalence of body dysmorphic disorder and surgeon diagnostic accuracy in facial plastic and oculoplastic surgery clinics. *JAMA Facial Plast Surg.* 2017;19:269–274.
3. Veale D, Eshkevari E, Ellison N, et al. Psychological characteristics and motivation of women seeking labiaplasty. *Psychol Med.* 2014;44:555–566.
4. Willis RN, Wong CS, Patel BC. Labiaplasty labia minora reduction. In: *StatPearls.* Treasure Island, Fla: StatPearls Publishing LLC; 2019.
5. Creighton S. Against: Labiaplasty is an unnecessary cosmetic procedure. *BJOG.* 2014;121:768.

Overlapping and Concurrent Surgery in Plastic Surgery Training Programs: A Program Director Survey

The practice of double-booking surgery has garnered national attention. A 2015 *Boston Globe* exposé launched this practice into public consciousness and it quickly became a subject of controversy.[1] Many patients were shocked to learn their surgeon may not be present throughout their entire operation.[2] Advocates argued such practices are critical in the transition from trainee to surgeon.[3]

The American College of Surgeons and the American Society of Plastic Surgeons stated their positions on such practices, both making critical distinctions between overlapping and concurrent surgery.[4,5] During overlapping operations, the surgeon is present for predetermined "critical" portions, and noncritical portions are delegated to qualified assistants/trainees. During concurrent operations, the surgeon delegates one critical portion to a qualified assistant/trainee in order to perform a critical portion of a different case contemporaneously. Both groups expressed concerns regarding concurrent surgery and emphasized the need for informed consent in both practices. Nevertheless, concerns for unlawful billing moved the Senate Finance Committee to publish a report criticizing variations in definitions, stressing the need for disclosure, and demanding robust oversight.[2]

While the discussion continues, academic plastic surgeon perspectives remain uncharacterized. To address this, we developed a survey to assess program directors' perspectives, evaluate institutional policies, and determine the prevalence of overlapping/concurrent surgery. Institutional review board approval was obtained for a 17-item survey that was distributed to all 102 plastic and reconstructive surgery program directors. Three survey rounds yielded a response rate of 61 percent ($n = 62$).

Results indicate that overlapping/concurrent surgery practices in plastic and reconstructive surgery training programs are evolving, with 56 percent of program directors reporting a policy change within the last 5 years. A majority (81 percent) of programs have a policy regarding such practices. While 79 percent allow overlapping surgery, 73 percent prohibit concurrent surgery (Fig. 1). Overlapping surgery occurs weekly in many programs, and regional frequencies were similar (Fig. 2). Overlapping surgery is viewed favorably by program directors, most of whom believe it has a positive effect on training, access to plastic surgeons, and billing (Fig. 1). Concurrent surgery perspectives/practices were not evaluated, as the practice was widely prohibited. Despite progress, policies regarding overlapping/

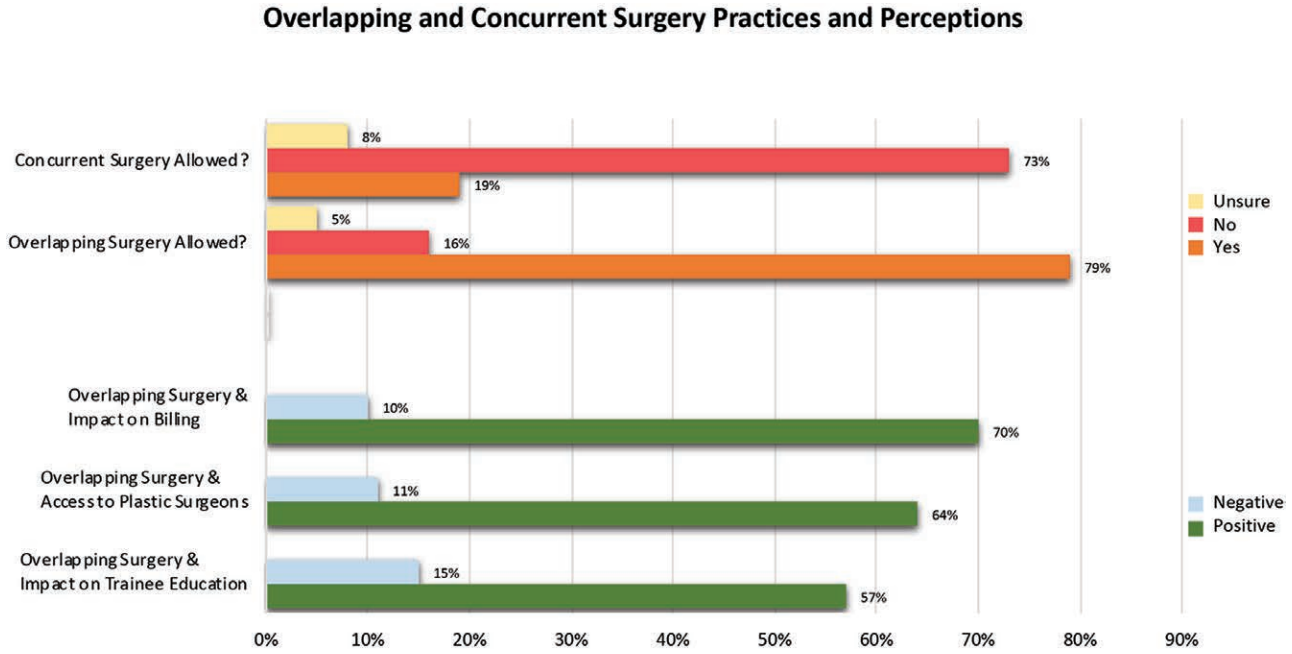

Fig. 1. Overlapping and concurrent surgery practices and perceptions. Relative percentages of overlapping and concurrent surgery practices in plastic and reconstructive surgery training programs across the United States, as well as program director perceptions of the impact of overlapping surgery on various areas.

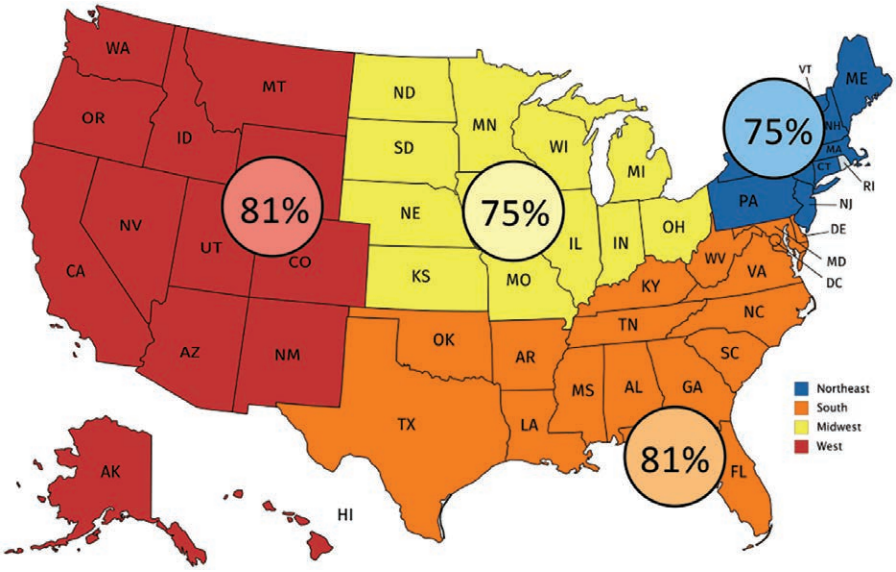

Fig. 2. Regional permissibility of overlapping surgery. Percentage of institutions that allow overlapping surgery by region. The Northeast subgroup included Maine, New Hampshire, Vermont, New York, Massachusetts, Connecticut, Rhode Island, Pennsylvania, and New Jersey. The South subgroup included Delaware, Maryland, District of Columbia, Virginia, West Virginia, Kentucky, Tennessee, North Carolina, South Carolina, Georgia, Florida, Alabama, Mississippi, Louisiana, Arkansas, Oklahoma, and Texas. The Midwest subgroup included Ohio, Indiana, Michigan, Illinois, Wisconsin, Minnesota, Iowa, Missouri, Kansas, Nebraska, South Dakota, and North Dakota. The West subgroup included New Mexico, Colorado, Wyoming, Montana, Idaho, Utah, Arizona, Nevada, California, Oregon, Washington, Hawaii, and Alaska.

concurrent surgery require refinement and standardization across training programs. A minority (40 percent) of program directors reported a requirement for patient disclosure, validating Senate Finance Committee concerns shared by the public.[2] A minority (32 percent) reported a requirement for electronic medical record documentation, presenting an obstacle to future investigation.

Going forward, we advocate for adoption of the American Society of Plastic Surgeons recommendations regarding overlapping/concurrent surgery in plastic and reconstructive surgery training programs.[5] We support overlapping surgery, provided that operative roles and critical portions be incorporated into the informed consent process to protect patient autonomy. During overlapping surgeries, a backup surgeon should be available and documented in the operative report. Concurrent surgery is not recommended, and should be reserved for emergencies during which a backup surgeon should be available for critical portions. To increase transparency and facilitate research, the presence of the primary surgeon during critical portions of the operation should be documented in the operative report. Adopting these policies helps to ensure best practice while maximizing benefit to patients, surgeons, trainees, and the healthcare system.

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REFERENCES

1. Abelson J, Saltzman J, Kowalczyk L. Clash in the name of care. Available at: https://apps.bostonglobe.com/spotlight/clash-in-the-name-of-care/story/. The Boston Globe, October 2015. Accessed April 1, 2019.
2. Senate Finance Committee. Concurrent and overlapping surgery: Additional measures warranted. Available at: https://www.finance.senate.gov/imo/media/doc/Concurrent%20Surgeries%20Report%20FINAL%20.pdf. Washington, DC. December 6, 2016. Accessed April 14, 2019.
3. Drolet BC, Brower JP, Miller BM. Trainee involvement in patient care: A necessity and reality in teaching hospitals. *J Grad Med Educ.* 2017;9:159–161.
4. American College of Surgeons. Statements on principles. Available at: https://www.facs.org/about-acs/statements/stonprin. Chicago, Ill: American College of Surgeons. April 12, 2016. Accessed April 21, 2019.
5. American Society of Plastic Surgeons. Policy statement: Concurrent surgery. Available at: https://www.plasticsurgery.org/Documents/Health-Policy/Positions/ASPS-Statement_Concurrent-Surgery.pdf. Arlington Heights, Ill: American Society of Plastic Surgeons, March 2017. Accessed March 25, 2019.