

# 10 Years Later: Lessons Learned from an Academic Multidisciplinary Cosmetic Center

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**Background:** In 2006, a Centers for Medicare and Medicaid Services-accredited multidisciplinary academic ambulatory surgery center was established with the goal of delivering high-quality, efficient reconstructive, and cosmetic services in an academic setting. We review our decade-long experience since its establishment.

**Methods:** Clinical and financial data from 2006 to 2016 are reviewed. All cosmetic procedures, including both minimally invasive and operative cases, are included. Data are compared to nationally published reports.

**Results:** Nearly 3,500 cosmetic surgeries and 10,000 minimally invasive procedures were performed. Compared with national averages, surgical volume in abdominoplasty is high, whereas rhinoplasty and breast augmentation is low. Regarding trend data, breast augmentation volume has decreased by 25%, whereas minimally invasive procedural volume continues to grow and is comparable with national reports. Similarly, where surgical revenue remains steady, minimally invasive revenue has increased significantly. The majority of surgical cases (70%) are reconstructive in nature and insurance-based. Payer mix is 71% private insurance, 18% Medicare and Medicaid, and 11% self-pay. Despite year-over-year revenue increases, net profit in 2015 was \$6,120. Rent and anesthesia costs exceed national averages, and employee salary and wages are the highest expenditure.

**Conclusion:** Although the creation of our academic cosmetic ambulatory surgery center has greatly increased the overall volume of cosmetic surgery performed at the University of Wisconsin, the majority of surgical volume and revenue is reconstructive. As is seen nationwide, minimally invasive cosmetic procedures represent our most rapidly expanding revenue stream. (*Plast Reconstr Surg Glob Open* 2017;5:e1459; doi: 10.1097/GOX.0000000000001459; Published online 21 September 2017.)

In 2006, a free-standing multidisciplinary cosmetic surgery center was opened at the University of Wisconsin-Madison. This off-site center has become an integral component of the Division of Plastic Surgery and its residency program.<sup>1</sup> The purpose of this article was to reflect on our experience 10 years after the successful implementation of an aesthetic services center.

Ten years ago, our ambulatory surgery center (ASC) was established for 3 reasons. (1) To address the growing demand for outpatient cosmetic surgery services. (2) To establish a larger volume of self-pay patients to help en-

sure the financial viability of our program, in an era of declining reimbursements of insurance-based cases. (3) To enhance resident and medical student education and exposure to cosmetic surgery cases, as well as a unique outpatient experience.

Dr. Wallace Reed and John Ford created the first free-standing ASC in 1970.<sup>2</sup> ASCs provide surgical services to patients who do not require hospitalization, and the duration of service does not exceed 24 hours. As anesthesia and surgery have become safer, the number of outpatient operations has increased exponentially.

Ambulatory Surgery Centers are one of the last vestiges of health care where physicians play a predominant role. Sixty-two percentage of all ASCs are exclusively physician owned, and roughly 86% of all ASCs are owned in part by a physician. Twenty-four percentage of all ASCs are in part hospital owned. Although the percentage of hospital owned ASCs had previously been increasing, we would expect this number to stabilize or decrease in the

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future. The Bipartisan Budget Act of 2015 mandates that all new off campus Hospital Outpatient Departments will be considered ASCs. Before this, all hospital-owned ASCs, regardless of location, were considered hospital outpatient facilities. This hospital-based reimbursement was significantly higher than ambulatory surgery fees. Although previously established hospital-owned ASCs will be grandfathered in and continue to receive hospital-based reimbursement, new hospital-owned ASCs will receive reimbursement based on ambulatory fees, which are typically 50–60% the total value of hospital-based fees.<sup>3</sup>

Our multidisciplinary surgery center is a Medicare-approved facility. Medicare approval of ASCs began in 1982 and requires that facilities are subject to specific safety regulations and quality improvement measures. The number of Medicare-certified ASCs has risen significantly, with over 5,000 ASCs to date, receiving 3.8 Billion dollars in Medicare payments. Medicare-approved ASCs must report and submit a variety of quality improvement measures including patient burn, fall, wrong site surgery, safe surgery checklist, and facility volume.<sup>4</sup> The Outpatient and Ambulatory Surgery Survey is a 37 question survey administered to all Medicare-approved ASCs beginning in 2018. This patient experience survey will further allow documentation and

comparison between hospital-based outpatient surgery centers and ambulatory surgery centers.

### SURGICAL VOLUME

On a national scale, the top 5 most common cosmetic surgical procedures are breast augmentation, liposuction, nose reshaping, eyelid surgery, and tummy tuck. The top 5 most common minimally invasive procedures are Botox injections, fillers, chemical peels, laser hair removal, and microdermabrasion.<sup>5</sup> By some reports, annual expenditures on minimally invasive procedures exceed 8 billion dollars, more than twice what is spent by Medicare on ambulatory surgery centers. It is striking that minimally invasive procedures are 30× more common than surgical procedures.

Our cosmetic clinical volume mirrors national data in that minimally invasive procedures are significantly more common than surgical procedures (Fig. 1). Since opening, we have performed nearly 3,500 cosmetic surgeries, and 10,000 minimally invasive procedures, with a yearly average of approximately 400 cosmetic surgical cases and 1,000 minimally invasive procedures. Although our ambulatory surgery center was initially opened as a cosmetic surgery center, the majority of our volume is insurance based

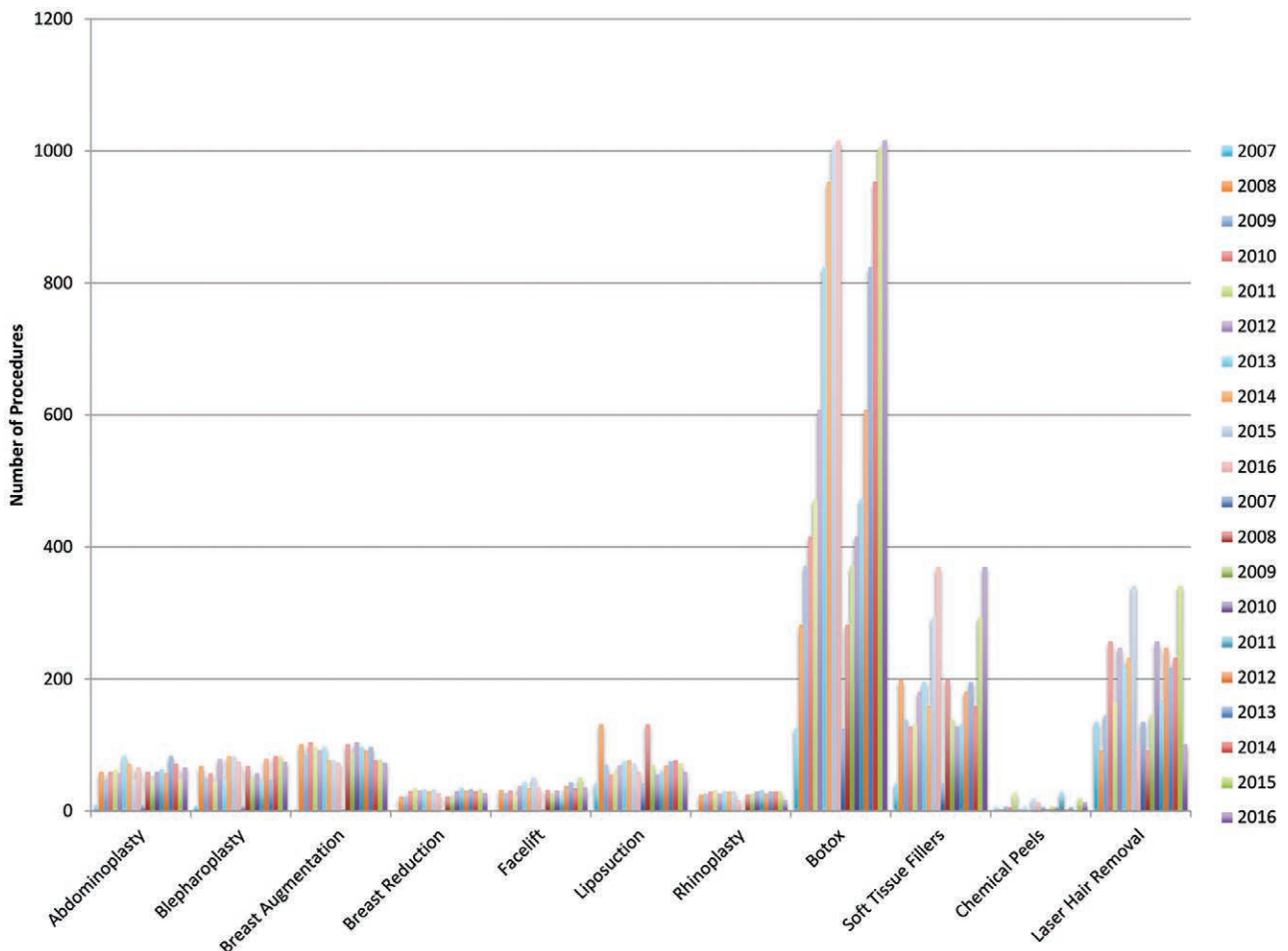


Fig. 1. Total cosmetic clinical volume.

and reconstructive in nature (70%), and only 30% of our volume is cosmetic.

Overall surgical volume has remained steady over the past 10 years. Our surgical volume did not decline with the most recent recession. However, the surgical volume of breast augmentation has decreased by 25% since the creation of our ambulatory surgery center. In comparison with national statistics, abdominoplasty is more common at our center, whereas breast augmentation and rhinoplasty are much less common at our center (Figs. 2, 3).

Unlike surgical volume, our minimally invasive volume increased each year. Although there is often discussion of a “conversion factor,” where minimally invasive procedures translate to increased surgical volume, we do not see this trend in our overall data. In comparison with national statistics, chemical peels are less common at our center, likely secondary to our volume of laser resurfacing (Figs. 4, 5).

### REVENUES

Overall, surgical revenue has remained steady (Figs. 6, 7), whereas minimally invasive revenue has increased each year (Fig. 8). In a review of our overall cos-

metic volume (Fig. 6), revenue from minimally invasive procedures from both Botox injections and soft-tissue fillers actually exceeds surgical revenue in 2016.

In a review of all physician fees at our multidisciplinary center, we find that anesthesia receives a significant percentage of total physician fees, even with the inclusion of minimally invasive revenue generated in the clinic (Fig. 9). In a review by Birkmeyer et al.<sup>6</sup> of the most common inpatient surgical procedures, we find that the average surgeon fee accounts for ~34.3–67.5% of the total physician payment, and the average anesthesiology fee accounted for ~10.9–15.4% of the total physician payment. In contrast, the average anesthesia payment at our ambulatory surgery center is about 23%.

Employee salary and wages account for the largest expenditure at our multidisciplinary ambulatory surgery center (Fig. 10). In a comparison to national data, our occupancy costs and anesthesia costs account for a disproportionate amount of all total expenses. Our rental and occupancy costs are significantly higher than the national average<sup>7</sup> (Fig. 11).

Although 30% of all clinical volume at our multidisciplinary academic surgery center is cosmetic, only 11%

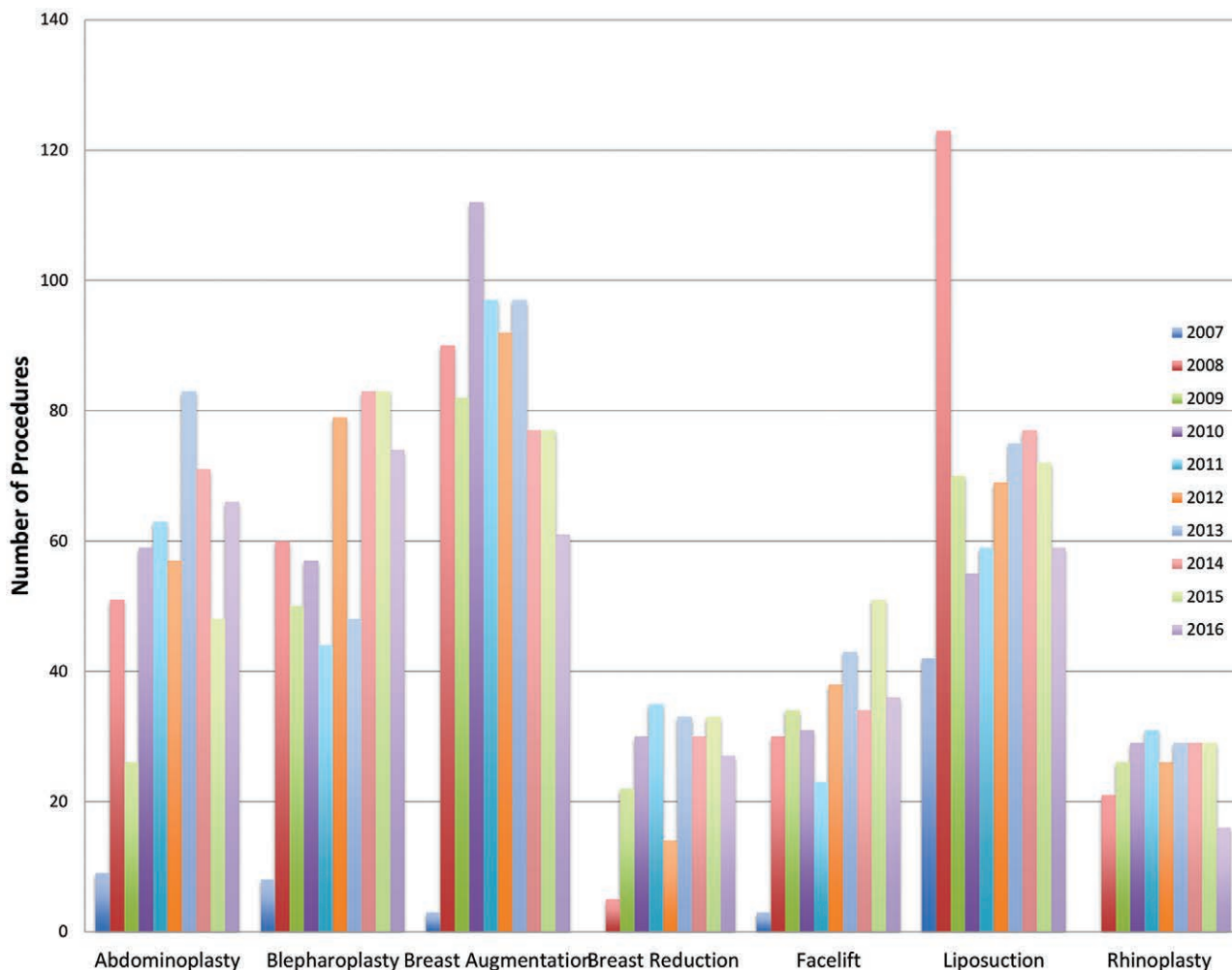


Fig. 2. Total cosmetic surgery volume.

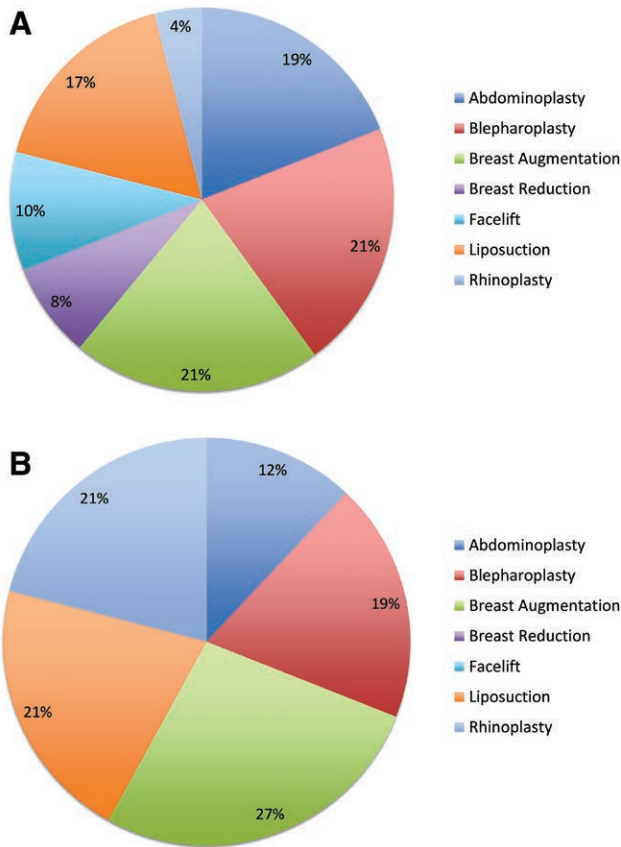


Fig. 3. A, Total surgical volume. B, National surgical volume.

of all revenue is generated from cosmetic surgery. In our Medicare-approved ASC with relatively higher facility fees, insured payors are more profitable than self-pay patients (Fig. 12). Given this economic reality, if our center was 100% cosmetic, it would operate at a significant loss. This

is in contrast to other academic surgery centers that have shown that aesthetic and reconstructive cases are equally profitable.<sup>8</sup> This discrepancy may be due to lower cosmetic surgery fees in our geographic area.

After 10 years of operation, net patient service revenue continues to increase (Fig. 13). However, overall profit is small and our academic surgery center breaks even (Fig. 14). Significant expenses because of higher anesthesia costs and occupancy costs limit a larger profit margin.

### CONSIDERATIONS FOR A MULTIDISCIPLINARY ACADEMIC SURGERY CENTER

Although financial stability and profits are a large component of the “success” of any newly established surgery center, there are many other considerations. The creation of our ASC has played a role in faculty job satisfaction and retention. It has enhanced the experience of our residents with not only cosmetic surgery, but the practical details of an outpatient facility. As the majority of plastic surgery residents will go on to a private practice environment, it is crucial for their future success that they familiarize themselves with this environment.<sup>9</sup> In a survey of our medical students, 100% note the unique exposure to a different practice setting and patient population. In a survey of our residents, 60% cite efficiency and organization as the primary advantage of our ASC when compared with the inpatient facility. Still others note the unique exposure to other experts in our multidisciplinary center. Access to physicians in the fields of oculoplastic, otolaryngology, and dermatology allows all of us to learn from each other in a collegial environment. This small and more controlled environment provides a unique opportunity to conduct clinical research with fewer preoperative, intraoperative, and postoperative variables than would be seen in a larger inpatient setting. Indeed, multiple research studies have

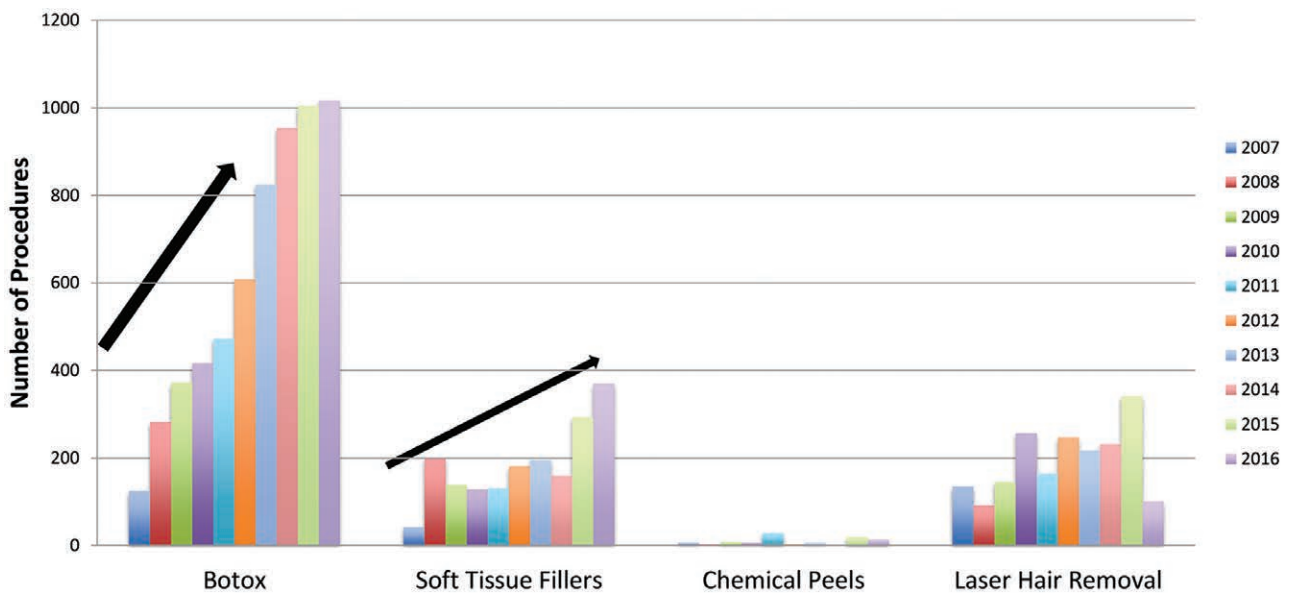
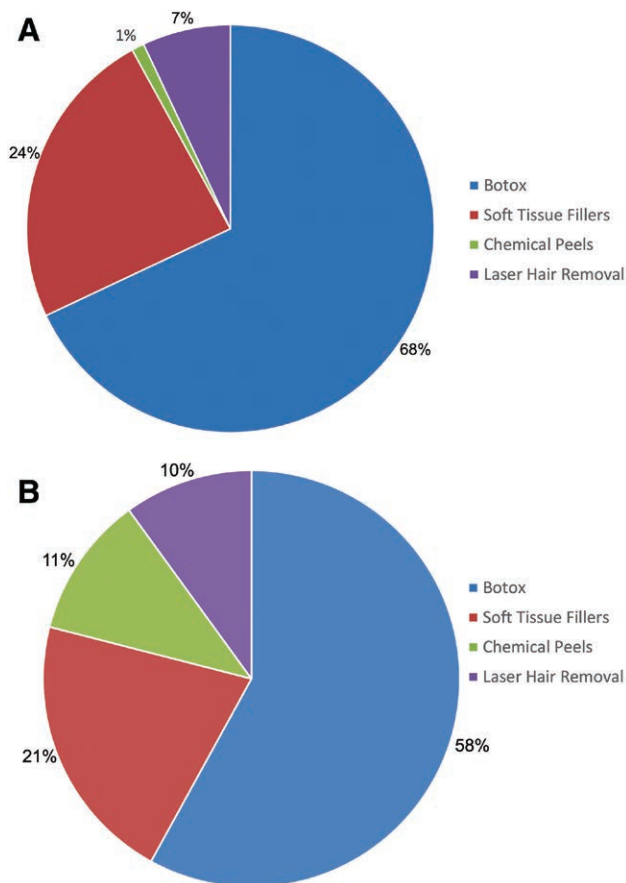


Fig. 4. Total minimally invasive volume.



**Fig. 5.** A, Total minimally invasive volume. B, National minimally invasive volume.

been generated from this facility.<sup>10,11</sup> Further well-designed studies by our residents are being executed in a prospective high-quality manner.

Ambulatory Surgery centers offer unique advantages to our patient population. Patient satisfaction data favor our ASC over more traditional hospital-based outpatient surgery centers and inpatient centers. Furthermore, ASCs have the ability to offer significant cost savings to patients over hospital-based outpatient surgery centers. In an era of “skin in the game insurance” with rising premiums and deductibles, we can significantly reduce cost to our patients by transitioning care to ASCs.<sup>12</sup> On a global scale, with the growing shift in bundled payments, accountable care organizations, and cost efficiency, ambulatory surgery centers have the opportunity to play a significant cost saving role, with estimates of more than 7.5 B in savings from 2008 to 2011, and 57.6 B in savings over the next 10 years.<sup>13</sup> The newly appointed Secretary of Health and Human Services, Dr. Tom Price, is advocating a shift from “defined benefits” to “defined contributions.” A finite dollar amount available to spend on health care will make cost savings even more crucial for our patients. By avoiding very high facility fees at a hospital-based outpatient center, ambulatory surgery centers can provide our patients with excellent care at a reasonable individual cost.

Ultimately, as anesthesia and surgery become safer, more and more cases will become appropriate for ambulatory surgery. A classic example for plastic surgeons is breast reduction, where 75% of all cases are now conducted in an outpatient setting.<sup>14</sup>

## LESSONS LEARNED

Ten years after the creation of our multidisciplinary academic surgery center, it is clear that it has enhanced our clinical experience. However, the benefit of hindsight clearly identifies areas that could have been managed differently. The first consideration is anesthesia services. The majority of ASCs (70%) contract with anesthesia groups without a salary. In exchange, these anesthesia groups receive all professional fees. A minority follow an employment model (26%), where the ASC will retain all professional fees, but the anesthesia group will receive a salary. In the owner provider model, an anesthesia group provides physician owners a per patient fee for management services.<sup>15</sup> Given the concern that this would generate overuse of anesthesia services and violation of antikick back laws by the Office of the Inspector General, this is not a common model for delivery of services.<sup>16</sup> Our anesthesia costs are high. Anesthesia fees exceed average anesthesia physician payment per procedure when compared with nationally reported inpatient fees, while further receiving a significant subsidy (~620,000/y) in addition to these increased professional fees.

The second consideration is unexpected admissions and emergencies. Overall, readmission after outpatient surgery is rare.<sup>17</sup> However, in the setting of those unexpected emergencies, a hospital contract with decreased negotiated prices would be ideal. Currently, all unforeseen readmissions to the hospital are billed to our surgery center at Medicaid rates. Renegotiation of hospital contracts at a fixed rate would be more financially favorable.

Although our current facility is comparable with national Medicare-approved ambulatory surgery centers, the number of procedure rooms and clinic space limits the adoption of new technology and other offerings such as cool sculpting.

As always, personnel costs are the highest component of expense. In retrospect, the ability to maintain a flexible work force with full and part time staff that are able to respond to ebb and flows of volume could limit personnel costs. Furthermore, turnover or poor retention can lead to added economic expense and loss of productivity.<sup>18</sup>

## FUTURE PLANS

By 2026, we hope to have continued to enhance the role of our ASC in our hospital system and community. The addition of services such as hair transplantation and cool sculpting can expand our patient population. We hope to expand our offerings of injectables and other minimally invasive procedures. Currently, our wait times for injectables are significant and lead to a delay in care that is associated with a significant source of revenue, with minimal overhead. The last consideration is the addition

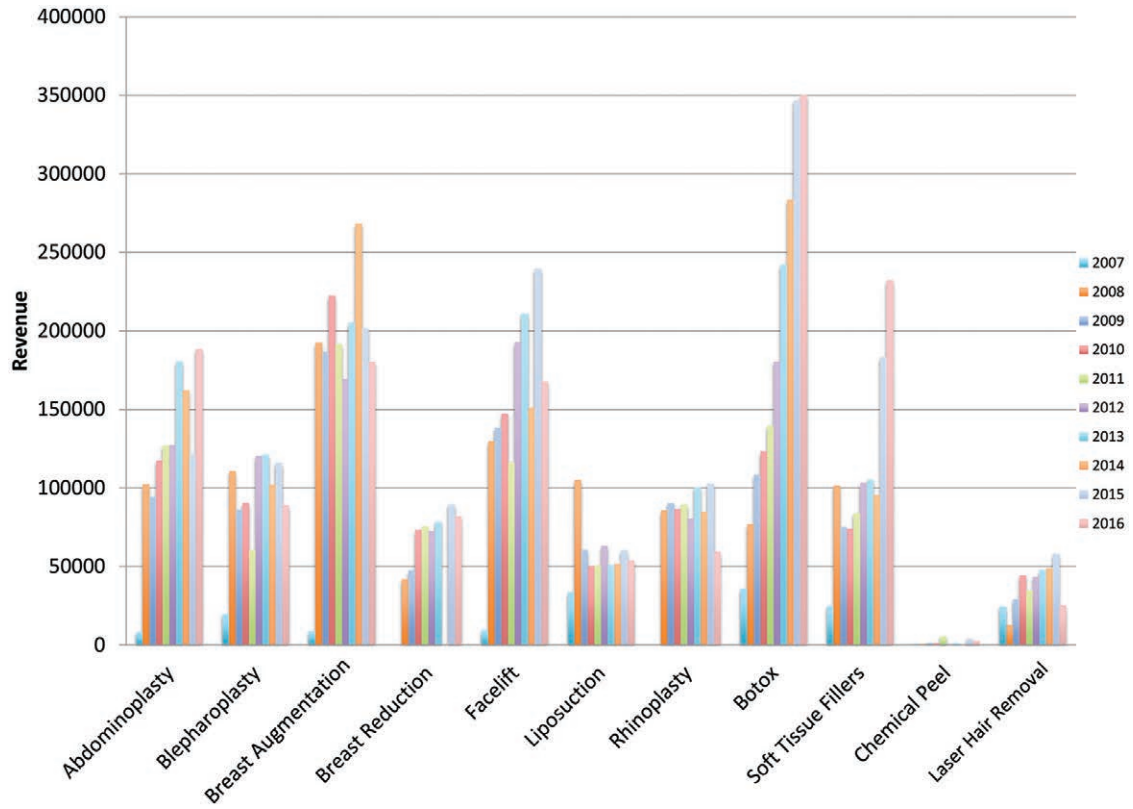


Fig. 6. Total cosmetic clinical revenue.

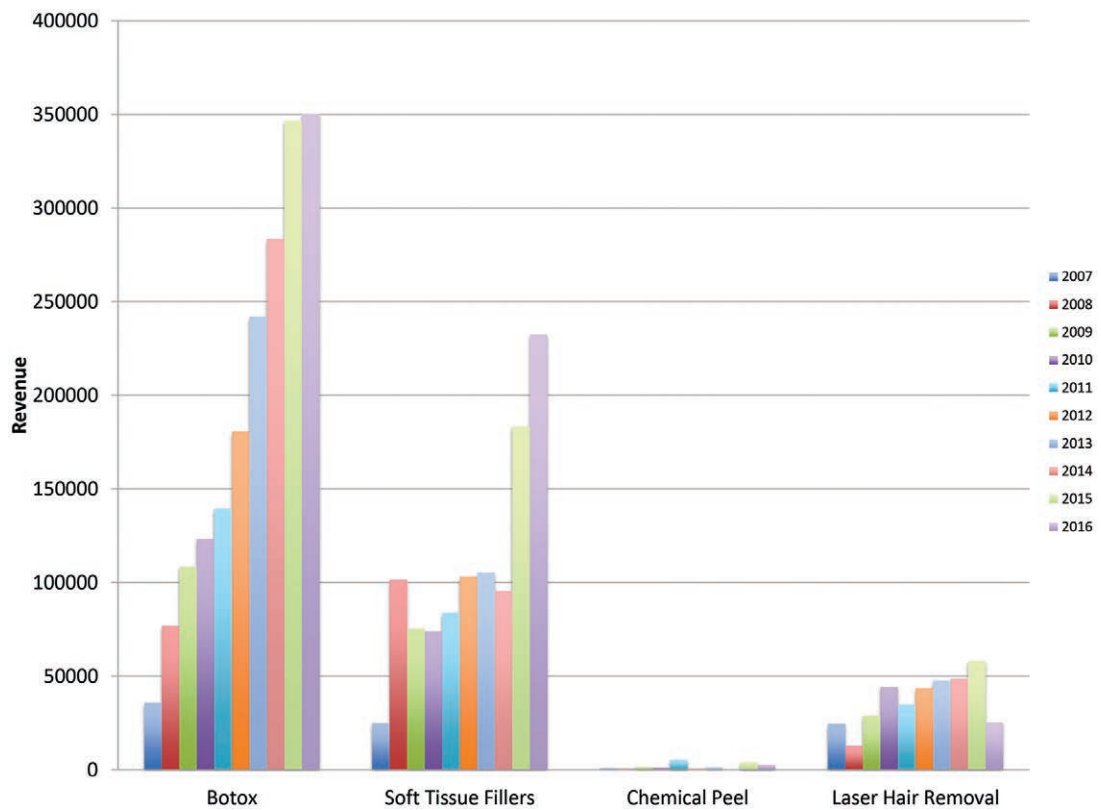
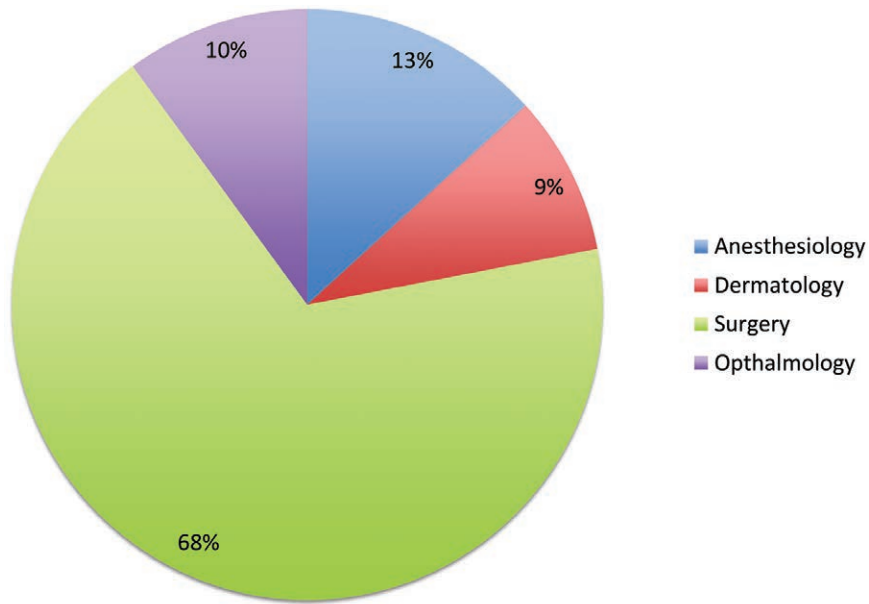


Fig. 7. Total cosmetic surgery revenue.



\*Physician fees only: Includes minimally invasive revenue

Fig. 8. Total cosmetic minimally invasive revenue.

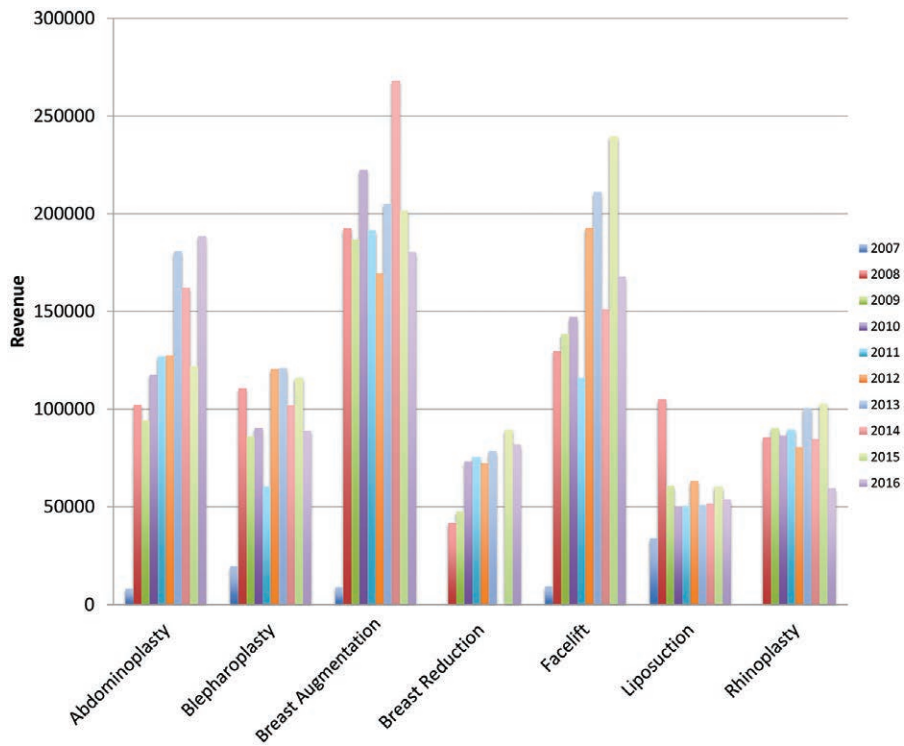


Fig. 9. Average revenue by discipline.

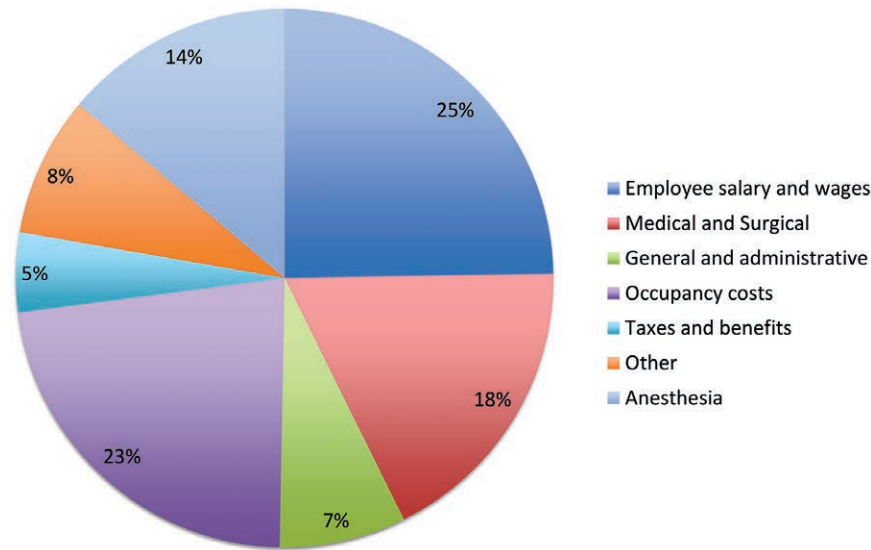


Fig. 10. Total expenses.

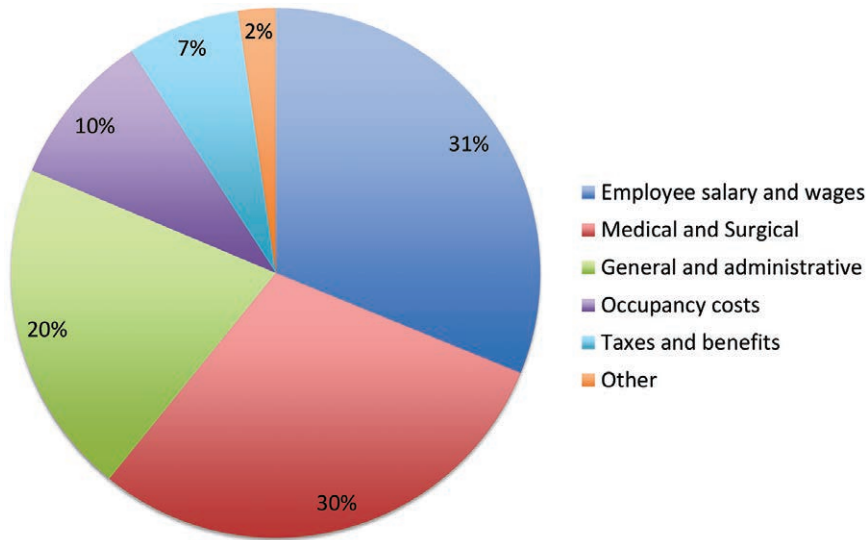


Fig. 11. National average expenses at ambulatory surgery centers: VMH Health ASC Survey.

of a resident clinic to further augment the educational experience provided at our multidisciplinary ASC.

**CONCLUSIONS**

It is important to have a thorough understanding of Ambulatory Surgery Centers. Many plastic surgery residents will ultimately work at similar facilities and some may go on to have partial ownership of an ambulatory surgery center. Although a Medicare-approved Ambulatory Surgery Center is uniquely different from a private practice plastic surgery center, we show that in this particular setting, there are significant benefits to

insurance-based cases over cosmetic cases, particularly with respect to facility fees. Ultimately, our multidisciplinary cosmetic surgery center has benefited our program, our faculty, our residents, and most importantly, our patients.

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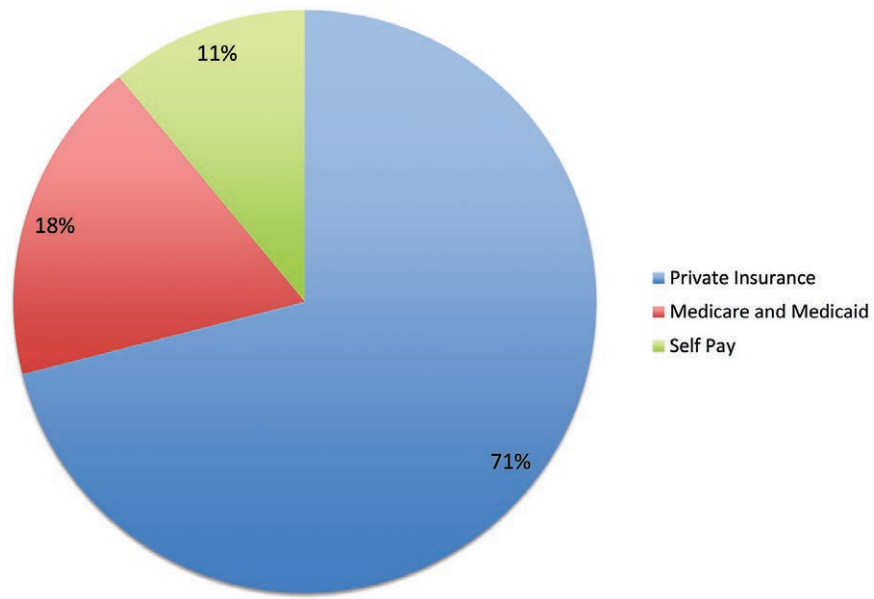


Fig. 12. Average payor mix.

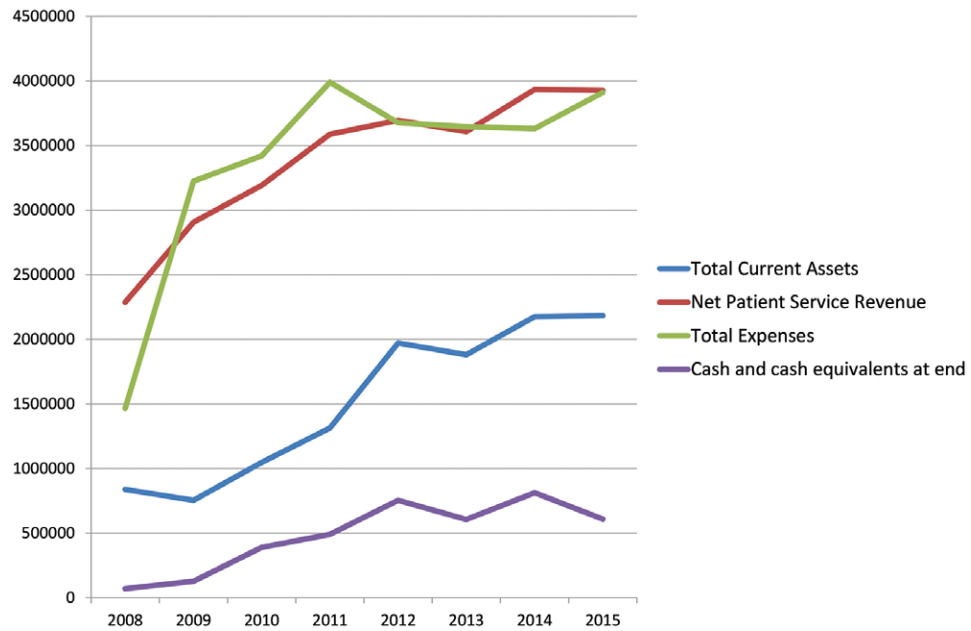
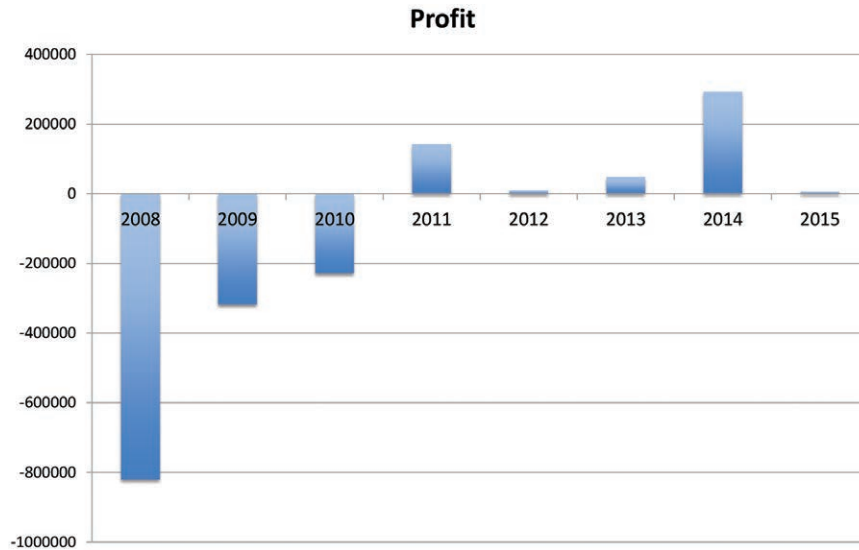


Fig. 13. Overall financial health.



**Fig. 14.** Total profit.

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