were significantly less comfortable than attendings (median ratings 4 and 5, respectively; $p < 0.02$). Junior residents had a median rating of 5, which trended toward significance versus attending median rating of 7 ($p=0.05$).

**CONCLUSION:** It is undeniable that Plastic Surgeons play a role in the propagation of the opioid epidemic and it is our moral obligation to implement strategies to curb our contribution. We have shown that knowledge deficits do exist among trainees and that trainees are significantly less comfortable than their attending counterparts with opioid prescribing and patient management. Therefore, the implementation of more thorough post-operative pain management education in residency may be a cogent strategy in mitigating the opioid crisis.

**Identifying Drivers of Plastic Surgeons’ Online Ratings in Abdominoplasty**

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**BACKGROUND:** Patients increasingly utilize the internet for decision-making regarding cosmetic procedures, and online reviews have become both a signifier of patient preferences and a valuable source of data. We endeavored to perform a comprehensive and quantitative review of abdominoplasty reviews.

**METHODS:** Reviews were systematically obtained from Yelp (www.yelp.com), Google (www.google.com), and RealSelf (www.realself.com) via search terms “plastic surgery”, “tummy tuck”, and “abdominoplasty” for the top 30 surgeons in the top 5 metro areas by population (New York, Chicago, Los Angeles, Houston, Philadelphia) and Miami. Each review was assessed against a panel of 35 concepts that were developed via a modified Grounding Theory approach. Other data of interest included star rating of the physician, word count, and metropolitan area. Only positive (4 and 5 star, or “Worth It”) and negative (1 or 2 star, or “Not Worth It”) reviews were included. Due to the overwhelming number of positive reviews on RealSelf, a random 10% sample of positive reviews were included to provide 90% power.

**RESULTS:** Of 794 reviews meeting inclusion criteria, 402 were obtained from RealSelf, 319 from Google, and 73 from Yelp. Between all sources, 683 (86.0%) reviews were positive and 111 (14.0%) were negative. Average Yelp and Google ratings varied by metropolitan area ($p=0.4$ by ANOVA) with Philadelphia, PA having the highest average rating (5.0) and Miami, FL the lowest (4.4). Overall rating was not associated with the word length of the reviews or cost of procedure. Aesthetic outcome was a major driver of patient satisfaction or dissatisfaction— all 316 reviews mentioning a good aesthetic outcome were positive, and 50 of the 52 two reviews mentioning a poor aesthetic outcome were negative. Notably, only 368 (46.3%) of all reviews mentioned aesthetic outcome at all. Other themes cited were Bedside Manner (364, 45.8%), Surgeon as a Resource (318, 40.1%) and Interactions with Staff (264, 33.2%). Post-Operative Care was the 5th most common theme in reviews overall (185, 23.3%), but second only to Aesthetic Outcome in mentions in negative reviews. Cost of surgery did not appear to be an independent driver of review rating and was almost always perceived in the context of the patient’s outcome. Thirteen reviews from Yelp (3) and Google (10) by patients who had a consult for abdominoplasty but had not undergone surgery were not included in our analysis. Of these, 10/13 (77%) reviews were negative.

**CONCLUSION:** We present the first comprehensive and quantitative analysis of online reviews of abdominoplasty. While aesthetic outcome was the most common determinant of patient satisfaction, it was only noted in half of reviews. Surgeon characteristics such as bedside manner and availability to answer questions were weighted almost as heavily. Negative reviews cited post operative care as a critical factor and cost did not seem to play a significant role in either positive or negative reviews. As surgeons gain greater clarity on drivers of online patient satisfaction, they will be able to utilize this information to provide more responsive and patient-centric care.

**The Impact of Resident Post Graduate Year Involvement in Body Contouring Procedures: A Comprehensive Analysis of 9,638 Patients**

**Presenter:** Masoud Malyar, MD
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BACKGROUND: Plastic surgery programs have emphasized the importance of ensuring patient safety while providing residents with a complete training experience. Residents have noted aesthetic procedures being the ones they are most uncomfortable in performing during and after training. Given the rising popularity in body contouring procedures in the United States, the impact of resident involvement in these procedures were assessed. Notably, the association between resident involvement and postoperative complications remains largely unknown. As such, the aim of this study was to evaluate the impact of resident involvement on outcomes of body contouring procedures.

METHODS: A retrospective analysis of the National Surgical Quality Improvement Program database was performed (2006–2012) to identify patients undergoing body contouring procedures, using Current Procedural Terminology codes. Outcome measures included: postoperative complications, reoperation, readmission, operative time and hospital length of stay. Multivariate regression models were used to assess the impact of resident involvement and resident experience on outcomes.

RESULTS: A total of 9,638 cases were identified, of which 3,311 involved resident participation. Body contouring patients in resident involvement vs. non-resident involvement groups were significantly older (46.2 vs. 45.5 years, p=0.011), had greater body mass index (BMI) (31.0 vs. 30.6 kg/m², p=0.004), had higher incidence of diabetes (6.9% vs. 4.8%, p<0.001), were more often operated on in an inpatient setting (31.9% vs. 17.7%, p<0.001), and were more often in American Society of Anesthesiologist (ASA) classification III or IV (17.9% vs. 12.6%, p<0.001). After adjusting for confounders, resident involvement was associated with significantly higher overall complications (7.8% vs. 4.4%, p=0.003), surgical site complication rates (5.5% vs. 3.3%, p=0.019), thromboembolic events (0.7% vs. 0.4%, p=0.042), and longer operative time (180.7 vs. 171.9 minutes, p=0.005). There was a significant decrease in odds of overall complications (odds ratio (OR): 0.906; p=0.022) when looking into the impact of resident experience per year increase of post-graduate year (PGY).

CONCLUSION: Resident involvement in body contouring procedures was associated with an increased rate of overall complications in a large, national database. However, the clinical significance of these outcomes may be debated. Increased post graduate year experience as a surgical resident was inversely associated with overall complications. Guided resident autonomy and earlier exposure to body contouring procedures could lead to an optimization of clinical outcomes and resident education.

Frailty Predicts Morbidity, Complications, and Mortality in Patients Undergoing Complex Abdominal Wall Reconstruction

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INTRODUCTION: Frailty is becoming an increasingly-established risk factor for adverse postoperative outcomes. Interestingly, the efficacy of frailty indices in predicting morbidity and mortality in the plastic surgery patient population has not yet been examined. As such, given the innate high morbidity involved in complex abdominal wall reconstruction (CAWR) and the propensity for obesity, diabetes, and other comorbidities among this patient population, we sought out to determine the predictive utility of a frailty index in patients undergoing CAWR.

METHODS: A retrospective analysis was conducted using the American College of Surgeons (ACS) National Surgical Quality Improvement Project (NSQIP) database from 2005–2013. Patients undergoing CAWR were identified using Current Procedural Terminology (CPT) codes for ventral hernia repair +/- components separation technique, +/- placement of prosthetic or biologic mesh, and complexity of the defect. Pre-operative frailty index was calculating using the Modified Frailty Index (mFI) initially described by Saxton et al. Outcomes included overall morbidity, Clavien-Dindo Grade IV complications, and mortality. Multivariate regression models were used to determine the effect of mFI and each component of the mFI on our outcomes.