PLASTIC SURGERY
CLOSED CLAIMS STUDY

An expert analysis of medical malpractice allegations

We shine a light on risks and trends others cannot see
PLASTIC SURGERY CLOSED CLAIMS STUDY

INTRODUCTION
We shine a light on risks and trends that others cannot see by constantly looking ahead and providing innovative tools to identify potential sources of patient injury and enhance safety.

We rigorously analyze the claims experience of our 79,000 members nationwide and translate the findings into patient safety initiatives that protect our members and their patients. Analyzing the collective experience of so many physicians provides broader, more reliable information. It also expands knowledge beyond the experiences of any single person—even if that knowledge is gained over a lifetime of practice. We hope that the information presented here will prompt physicians to collaborate with colleagues and hospital leaders to identify system weaknesses, thereby reducing the risk of harm to patients.

STUDY DESIGN
We analyzed 1,438 claims* against plastic surgeons that closed from January 2007 through June 2015. Regardless of the outcome, all cases that closed within that time frame were included in this analysis. This is an approach that helps us better understand what motivates patients to pursue claims and gain a broader overview of the system failures and processes that result in patient harm.

This study, reinforced by expert insights and relevant case examples, focuses on the following areas:
- Most common patient allegations.
- Most common patient injuries.
- Injury severity.
- Factors contributing to patient injury.
- Strategies for mitigating risk.

Our approach to studying plastic surgery malpractice claims began by reviewing plaintiffs'/patients’ allegations, giving us insights into the perspectives and motivations for filing claims and lawsuits.

We then looked at patients’ injuries to understand the full scope of harm. Physician experts for both the plaintiffs/patients and the defendants/physicians reviewed claims and conducted medical record reviews. Our clinical analysts drew from these sources to gain an accurate and unbiased understanding of actual patient injuries.

We identified factors that led to patients’ injuries, and physician reviewers evaluated each claim to determine whether the standard of care was met. Contributing factor categories include clinical judgment, technical skill, patient behaviors, communication, clinical systems, clinical environments, and documentation.

Our team studies all aspects of the claim and, using benchmarked data, identifies risk mitigation strategies that physicians can use to decrease the risk of injury, thereby improving the quality of care.

* A written demand for payment

AUTHORS
Darrell Ranum, JD, CPHRM, Vice President, Department of Patient Safety and Risk Management
Robin Diamond, JD, MSN, RN, Senior Vice President, Department of Patient Safety and Risk Management
David B. Troxel, MD, Medical Director
**MOST COMMON PATIENT ALLEGATIONS IN PLASTIC SURGERY CLAIMS**

As illustrated in **FIGURE 1**, 74 percent of all plastic surgery claims included the three most common allegations.

![Top six plastic surgery claims by allegation category](image)

<table>
<thead>
<tr>
<th>Allegation</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improper Performance of Surgery</td>
<td>49%</td>
</tr>
<tr>
<td>Improper Management of Surgical Patient</td>
<td>13%</td>
</tr>
<tr>
<td>Improper Performance of Treatment or Procedure</td>
<td>12%</td>
</tr>
<tr>
<td>Retained Foreign Body—Surgical</td>
<td>6%</td>
</tr>
<tr>
<td>Breach of Confidentiality</td>
<td>4%</td>
</tr>
<tr>
<td>Failure to Obtain Consent</td>
<td>3%</td>
</tr>
</tbody>
</table>

49% Improper performance of surgery. This allegation was often made when the outcome of surgery differed from the patient’s expectations. However, a number of these claims arose from complications that were known to the patient as a risk of the procedure, and the documentation showed that the potential risks were discussed with the patient prior to surgery. Our experts determined that substandard care was found in only 5 percent of all plastic surgery claims.

**CASE EXAMPLE:** A 55-year-old obese female was admitted to the hospital for abdominoplasty and liposuction of her trunk. Surgery lasted eight hours. Her systolic blood pressure remained in the 90s during surgery. The patient was given 500 cc of Hespan along with 7,800 cc of IV fluid. Urine output decreased toward the end of the procedure, so she was given 100 mg Lasix. The patient’s estimated blood loss was 650 cc. At end of surgery, her blood pressure was 120/80.

In the post anesthesia care unit (PACU), the patient was awake and alert. About 90 minutes later, her blood pressure dropped to 55/43. She developed respiratory distress and...

Two weeks later, the infectious disease specialist noted hardened black eschar involving both nipple areas with some wound dehiscence and underlying fat necrosis. Ten days later, wound cultures were positive for *Pseudomonas aeruginosa*. The patient was started on Levaquin and referred to a wound care specialist who started hyperbaric treatments.

The patient underwent several stages of reconstructive surgery. She now has severe scars and deformity of both breasts. Reviewers were critical that too much breast tissue had been removed and that the implants compromised the circulation.

13% Improper management of surgical patient. These allegations arose from cases in which surgical complications were not managed effectively. Examples included delayed treatment of infections leading to scarring, tissue necrosis, and sepsis; optic nerve infarcts from incorrect positioning of the patient; scarring from an operating room fire near the patient’s face; and decreased circulation resulting in tissue necrosis from improper use of compression garments and hose.

**CASE EXAMPLE:** A 25-year-old female consulted a plastic surgeon about a breast lift. She weighed 157 pounds and was size 37D. The surgeon recommended breast lifts with implants. The patient signed a seven-page consent form that outlined specific risks, including tissue necrosis. She was given antibiotics prior to her mastopexy and augmentation.

During the seven-hour surgery, the surgeon removed 327 grams of tissue from the left breast and 414 grams from the right. Photos taken postoperatively showed pink nipples. Antibiotics were given following surgery.

At the office visit one week following surgery, cultures were negative, but Levaquin was again prescribed. During the second office visit two days later, the surgeon applied a crisscrossed bandage because of swelling. Four days later, external ultrasound was used to evaluate the cause of the swelling. It was noted that the areolae were changing color. The surgeon asked the patient to return to the office in two days.

During the next office visit, the surgeon noted clear drainage. An examination of both breasts revealed blisters and erythema around incision sites. The blisters were debrided; cultures grew *Alcaligenes*, and the patient was referred to an infectious disease specialist. He noted bilateral necrosis in areas around the nipples with vertical incision inflammation consistent with infection. He started the patient on IV antibiotics.
became lethargic. The patient was reintubated and given several doses of ephedrine, but her blood pressure continued to drop. Hespan was started. The patient’s heart rate was in the 60s before her blood pressure dropped further. A code was called.

A hospitalist placed a central line for rapid fluid administra-
tion. A chest x-ray showed no pulmonary edema. The patient was given bicarb and calcium chloride for acidosis and hypocalcemia. She was started on dopamine. The patient’s hemoglobin was found to be 4.4 gm/dL. Following placement of an arterial line, she was transferred to the ICU.

Numerous consults were requested, and she remained on pressor support. She had no signs or symptoms of disseminated intravascular coagulation (DIC), renal failure, or rhabdomyolysis. Following the transfusion of 2 units of packed red blood cells, her hemoglobin was 6.2 gm/dL, and her platelet count was 156,000/mcL.

The working diagnosis was shock due to severe anemia. Initially, her physicians thought the anemia was due to massive fluid shifts since the low serum albumin was consistent with continued aggressive fluid management.

The next morning, the patient had a cardiac arrest, became bradycardic, and expired. No autopsy was performed. Physician reviewers thought the low hemoglobin levels were not due to hemodilution by IV fluids but to acute blood loss and felt the patient should have had a CT of the abdomen and pelvis to determine the source of blood loss.

A Total FX treatment to her face used Deep FX and Active FX.

CASE EXAMPLE: A 60-year-old female, with a history of thyroid disease, consulted a plastic surgeon about laser resurfacing of her face to address sun damage. The plan was for a Total FX laser treatment and volumization.

A Total FX treatment to her face used Deep FX and Active FX. The patient tolerated the treatment well. She was examined by the surgeon the next day. The patient was using Aquaphor. She was told to avoid sun exposure and to start showering and washing her face gently using her fingers. She was also advised to keep her face moisturized.

During a follow-up examination five days later, areas of fibrinous exudate were identified in deeper treatment areas. The patient also complained of decreased sensation along her jaw line, especially in the deep zone. Other areas were healing well, but the patient complained of feeling swelling and tightness with

---

12% Improper performance of treatment or procedure. Examples of this allegation included sclerotherapy injections that resulted in edema and scarring, fat injections that resulted in disfigurement, and pulsed light treatments that resulted in hypopigmentation of the face. Patients also suffered nerve damage and scarring from liposuction of the face and burns during laser facial hair removal or resurfacing of the face.

**CASE EXAMPLE:** A 55-year-old female was treated by a plastic surgeon for evacuation of an abscessed facial hematoma sustained in a fall. Three years later, the patient returned to the surgeon and complained of brow ptosis, facial skin laxity, and a residual malar soft tissue deficit from the previous hematoma surgery. The surgeon recommended endoscopic brow lift and a limited incision mid-facelift with sutures. The patient had a history of a previous facelift. He also recommended fat injection to her cheek and canthopexy laterally. For facial skin laxity and wrinkling, he recommended a trichloroacetic acid (TCA) peel. The plan was to do primary areas of the perioral, corrugators, and forehead with feathering to the rest of her face with TCA.

The surgeon documented the discussion of risks, including delayed healing, scarring, and swelling. He gave a prescription for Renova to use preoperatively to prepare the skin. The patient signed the consent for all of the procedures, including the TCA peel.

After completing the surgical procedures, the chemical peel was performed with TCA at 50 percent. Feathering of margins was done with 25 percent TCA. A light frost was allowed but was somewhat uneven in penetration. The peel was neutralized prior to any evidence of invasion of the reticular dermis. The entire peel area was soaked with cold compresses and then coated with a layer of Aquaphor and antibiotic ointment prior to covering the skin with gauze. The patient was discharged in stable condition.

Following this treatment, the patient was seen in the office more than 15 times with complaints of burns and scarring of the face. The surgeon gave cortisone injections to soften the scars from the chemical peel.

The patient then sought treatment from a second surgeon. He performed two surgeries for ectropion of both lower eyelids. Surgery was successful.

The patient/plaintiff filed a claim against the first plastic surgeon, alleging improper performance of the skin peel procedure. The patient’s/plaintiff’s experts thought the concentration of TCA was too high, opining that most surgeons don’t use concentrations higher than 30 percent. They also said that Renova should not have been prescribed prior to surgery. Defense experts disagreed and stated that the 50 percent TCA concentration and the use of Renova prior to the skin peel were reasonable and did not fall outside the standard of care.

**CASE EXAMPLE:** A 55-year-old female was treated by a plastic surgeon for evacuation of an abscessed facial hematoma sustained in a fall. Three years later, the patient returned to the surgeon and complained of brow ptosis, facial skin laxity, and a residual malar soft tissue deficit from the previous hematoma surgery. The surgeon recommended endoscopic brow lift and a limited incision mid-facelift with sutures. The patient had a history of a previous facelift. He also recommended fat injection to her cheek and canthopexy laterally. For facial skin laxity and wrinkling, he recommended a trichloroacetic acid (TCA) peel. The plan was to do primary areas of the perioral, corrugators, and forehead with feathering to the rest of her face with TCA.

The surgeon documented the discussion of risks, including delayed healing, scarring, and swelling. He gave a prescription for Renova to use preoperatively to prepare the skin. The patient signed the consent for all of the procedures, including the TCA peel.

After completing the surgical procedures, the chemical peel was performed with TCA at 50 percent. Feathering of margins was done with 25 percent TCA. A light frost was allowed but was somewhat uneven in penetration. The peel was neutralized prior to any evidence of invasion of the reticular dermis. The entire peel area was soaked with cold compresses and then coated with a layer of Aquaphor and antibiotic ointment prior to covering the skin with gauze. The patient was discharged in stable condition.

Following this treatment, the patient was seen in the office more than 15 times with complaints of burns and scarring of the face. The surgeon gave cortisone injections to soften the scars from the chemical peel.

The patient then sought treatment from a second surgeon. He performed two surgeries for ectropion of both lower eyelids. Surgery was successful.

The patient/plaintiff filed a claim against the first plastic surgeon, alleging improper performance of the skin peel procedure. The patient’s/plaintiff’s experts thought the concentration of TCA was too high, opining that most surgeons don’t use concentrations higher than 30 percent. They also said that Renova should not have been prescribed prior to surgery. Defense experts disagreed and stated that the 50 percent TCA concentration and the use of Renova prior to the skin peel were reasonable and did not fall outside the standard of care.

**CASE EXAMPLE:** A 50-year-old female, with a history of neck disease, consulted a plastic surgeon about laser resurfacing of her face to address sun damage. The plan was for a Total FX laser treatment and volumization.

A Total FX treatment to her face used Deep FX and Active FX. The patient tolerated the treatment well. She was examined by the surgeon the next day. The patient was using Aquaphor. She was told to avoid sun exposure and to start showering and washing her face gently using her fingers. She was also advised to keep her face moisturized.

During a follow-up examination five days later, areas of fibrinous exudate were identified in deeper treatment areas. The patient also complained of decreased sensation along her jaw line, especially in the deep zone. Other areas were healing well, but the patient complained of feeling swelling and tightness with
occasional itching. She was advised to use Benadryl cream and continue using Aquaphor when the skin looked dry. During the next office visit nine days later, most scabs were off.

Seven weeks following surgery, the surgeon noted some areas of concern. The lid-cheek junction showed scarring. A scar was noted in the middle of her forehead as well as in preauricular areas. The patient was advised to use topical hydrocortisone cream. The surgeon gave her silicone gel sheeting to use at night. The patient was given intense pulsed light (IPL) treatments with some flattening of the scars.

Two weeks after these treatments, the surgeon noted that the recorded settings for Deep FX energy used during the original procedure were not correct. The following week, the surgeon examined the patient and discovered that she had developed a new hypertrophic scar over her right temple area. He treated it with desonide cream and injected it with Kenalog. He then talked with the patient about her scarring and expressed his opinion that the scars were not due to the laser treatment but were, instead, a reaction to the skin products she had received. He asked if she had a history of connective tissue disorders and about her history of healing. He then referred her to another plastic surgeon.

Expert reviews were mixed. The primary question was whether the documented 25 percent laser setting was outside the standard of care. Some experts were not supportive, suggesting that, in order to cause an injury to this depth, the defendant must have used a higher energy setting than recorded. It was determined that the patient’s scars were permanent but could be reduced with additional treatment.

### MOST COMMON PATIENT INJURIES

<table>
<thead>
<tr>
<th>Injury</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emotional Trauma</td>
<td>35%</td>
</tr>
<tr>
<td>Scarring</td>
<td>23%</td>
</tr>
<tr>
<td>Cosmetic Injury</td>
<td>14%</td>
</tr>
<tr>
<td>Infection</td>
<td>12%</td>
</tr>
</tbody>
</table>

The most common injury in these plastic surgery claims was emotional trauma (35 percent), followed by scarring (23 percent), cosmetic injury (14 percent), and infection (12 percent).

Patients also suffered from burns (6 percent), ongoing pain (6 percent), tissue necrosis (4 percent), and nerve damage (4 percent). In 3 percent of plastic surgery claims, the patient expired as a result of injury. Less frequent patient injuries included retained foreign bodies, wound dehiscence, hematomas, adverse reactions to medication, contractures, and punctures or perforations of an organ (2 percent each).

Patient deaths were attributed to deep vein thrombosis (DVT) and pulmonary embolus (PE); acute blood loss due to punctures during liposuction; excessive levels of narcotic medications causing respiratory depression; cardiac arrest; malignant hyperthermia; abdominal compartment syndrome; and aspiration pneumonia.

**CASE EXAMPLE:** A 39-year-old obese patient presented to the plastic surgeon complaining of drooping breasts and abdominal fat. The surgeon noted abdominal laxity with an umbilical hernia and postpartum involutional breast atrophy with ptosis. He recommended bilateral mastopexy with breast augmentation and abdominoplasty with umbilical hernia repair. He also recommended liposuction of the submental area, bilateral flanks, and medial thighs.

The patient gave consent for each procedure. The consent included the risks of PE and death. The surgeon used bilateral sequential leg compression devices during the surgery, which lasted over six hours. In the PACU, the patient was moving all extremities and was able to cough and breathe deeply. She was discharged an hour and 15 minutes after the surgery.

The following morning, the family could not arouse the patient. Emergency medical services were called, and the patient was pronounced dead. The cause of death was listed as bilateral DVT and PE, secondary to a lengthy surgical procedure on an obese patient. The surgeon testified that he normally ordered heparin prophylactically but failed to write the order in this case. The patient’s family alleged that this failure resulted in the PE.

The defense experts were critical of the decision to discharge the patient so soon after surgery. They opined that the number of procedures (seven) done at one time on an obese patient was excessive. They said the documentation indicated that the patient was not aware of the increased risk of PE when multiple procedures are done during the same surgery. They were critical that no heparin or Lovenox prophylaxis had been ordered and expressed concern that the extensive documentation regarding the risks of the procedure had been done after the patient’s death.
INJURY SEVERITY

Patient injury severity in each case was identified using the National Association of Insurance Commissioners (NAIC) Injury Severity Scale (see FIGURE 2).

The NAIC Injury Severity Scale was rolled into low, medium, and high categories for FIGURES 3 and 4. (See the NAIC table showing the scale equivalents of low, medium, and high severity.)

FIGURES 3 and 4 provide a comparison of low-, medium-, and high-severity injuries between plastic surgery and general surgery. Plastic surgery procedures had a large percentage of low-severity injuries (32.8 percent) compared with low-severity injuries (3.8 percent) in general surgery procedures. Low-severity plastic surgery cases were mostly emotional injuries involving disappointment with surgical outcomes that included scarring, deformity, discoloration, and asymmetry.

Medium-severity cases for plastic surgery (61.9 percent) and general surgery (59.3 percent) were similar. Medium-severity plastic surgery injuries included scarring, infection, burns, tissue necrosis, nerve damage, ongoing pain, and deformity.

High-severity injuries were very different between plastic surgery (5.3 percent) and general surgery (36.9 percent). Most high-severity plastic surgery injuries resulted from blood loss, thrombosis, and respiratory and cardiac arrest.
FACTORs CONTRIBUTING TO PATIENT INJURY

We engage practicing physicians to help evaluate malpractice cases and identify factors that contributed to patient injury. **FIGURE 5** illustrates the top seven contributing factors identified by our physician reviewers. Note that because multiple factors often contributed to patient injury, the percentages total more than 100 percent.

**FIGURE 5**

Top seven factors that contributed to patient injury

- **42% Technical performance.** Factors related to technical performance included performing a procedure on an incorrect body site, misidentifying an anatomical structure, and using poor technique. The physician reviewers found that only 5 percent of all plastic surgery cases involved substandard care.

The following case is an example of substandard care.

**CASE EXAMPLE:** A 42-year-old female, 5 feet 4 inches, weighing 192 pounds (BMI 33), requested liposuction of the abdomen. She had liposuction on two previous occasions. The plastic surgeon discussed possible abdominoplasty, but the patient requested only liposuction of the abdomen and flank.

During the preoperative consultation, the risks of the procedures were discussed, including shock, blood transfusions, hematomas, infection, skin loss, and PE. The procedure required five small stab wounds to gain access for infiltration. A total of three liters of standard tumescent solution were injected into the upper and lower abdominal regions and both flanks. Blunt-ended cannulas were used. About 3.7 liters of lipoaspirate were removed.

She tolerated the procedure well, but after an hour in the PACU, the anesthesiologist was called to assess the patient because of difficulty breathing. Her oxygen saturation was 99 percent, and bilateral breath sounds were clear. The abdominal binding was loosened. The plan was to discharge the patient when stable. The patient was discharged three hours later without another physician assessment.

Later that evening, the patient went to the ER and was found to have multiple bowel perforations. She never regained consciousness. The cause of death was sepsis, necrotizing fasciitis, and adult respiratory distress syndrome.

Her family filed a lawsuit alleging negligent performance of surgery leading to bowel perforations and death. Experts were not supportive of the care provided. They stated that multiple perforations in several different areas exceeded the standard risk of the procedure. Nurses were criticized for inadequate monitoring and not bringing the steadily declining blood pressures in the PACU to the attention of the surgeon. The patient was discharged in an unstable condition. The surgeon was also criticized for waiting 20 hours after admission before taking the patient to surgery.

No negligence was found in the following cases, even though the patients alleged that the standard of care was not met.

**CASE EXAMPLE:** A 30-year-old male requested a chin augmentation. He had prior dermal filler injections and was pleased with the outcome but decided to have an implant to achieve the maximum degree of chin projection possible.

After signing a generic consent form, the chin augmentation was performed. The patient was discharged the same day. The following day, the surgeon evaluated the patient and found minimal swelling or bruising. The mental nerve appeared to be intact with normal sensory distribution. There were no signs of infection or bleeding. The patient was pleased with the results.

Two days following surgery, he returned to the surgeon’s office complaining of swelling and minimal pain. No problems were
identified. One week following surgery, a nurse removed the sutures and applied Steri-Strips. The plan was for the patient to return to the office in one month.

Three weeks following surgery, the patient notified the surgeon that he was having pain and difficulty eating, speaking, and smiling. He complained that the implant was too large, causing an asymmetric appearance. He demanded a revision using a smaller implant and filed a claim. Experts agreed that the implant was large, but the patient’s complaints were not due to negligent performance of surgery.

“He was having pain and difficulty eating, speaking, and smiling.”

**CASE EXAMPLE:** A 37-year-old female was scheduled for laser removal of superficial veins on her nose. She was taking bupropion for depression and had no known allergies. The surgeon identified telangiectasia on both sides of her nose. The detailed consent discussion included possible problems with healing, infection, crusting, scarring, change in skin color, and blistering.

The procedure for spider veins on the left side of her nose involved three pulses of light. The surgeon noted immediate blistering and bruising when the equipment was set on spot size #5. He reduced the spot size to #3, and two additional pulses were given. The patient continued to have blisters, so the surgeon discontinued the procedure and provided immediate wound care, including ice and antibiotic ointment. He told the patient to wash the area gently twice daily and to apply antibiotic ointment. The surgeon called the patient twice that day to make sure that the condition was not worsening.

Five days later, the surgeon examined her and noted that the ecchymosis was resolving. There was some drainage and crusting but no blistering or inflammation. Two days later, the ecchymosis was almost completely resolved, and the skin was healing. His plan was to see her the following week, but she never returned to his office despite follow-up phone calls to her home. The patient filed a claim alleging that improper performance of the procedure resulted in scarring. Defense experts were supportive of the care provided and noted that the surgeon was well trained and experienced with laser treatments.

The patient later filed a claim against the first plastic surgeon, alleging improper performance of liposuction that resulted in an uneven skin surface. Experts were supportive of the surgeon’s work. They noted that the informed consent included the possibility that a less-than-ideal outcome could result from dimpling. They opined that the plastic surgeon met the standard of care and that the outcome was related more to the patient’s skin laxity than to improper performance of the procedure.

**CASE EXAMPLE:** A 52-year-old female met with her surgeon to discuss liposuction of her thighs and buttocks. The plastic surgeon had performed prior procedures on this patient.

The patient signed an informed consent that listed dimpling as a risk. The surgeon performed liposuction of buttocks and inner and outer thighs down to knee level. There were no surgical complications. At a two-week follow-up evaluation, the surgeon noted that healing appeared to be normal. About three weeks later, the patient called to complain that the skin appeared to be sagging and wrinkling; she was told to wear support garments.

Three months following surgery, the surgeon noted that the patient felt better about the results but complained of numbness on parts of her leg. At the six-month visit, the patient complained to the office nurse that the left side was more swollen than the right side. The patient’s scars appeared to be healing well. To address the patient’s concerns, the surgeon offered a “touch-up” procedure, but the patient sought a second opinion from another surgeon, who performed additional surgery that included liposuction of her thighs, knees, and flanks. Subsequently, she consulted with a third surgeon regarding body contouring, but she canceled the surgery after it was scheduled.

The patient later filed a claim against the first plastic surgeon, alleging improper performance of liposuction that resulted in an uneven skin surface. Experts were supportive of the surgeon’s work. They noted that the informed consent included the possibility that a less-than-ideal outcome could result from dimpling. They opined that the plastic surgeon met the standard of care and that the outcome was related more to the patient’s skin laxity than to improper performance of the procedure.

**CASE EXAMPLE:** A 30-year-old patient (5 feet 4 inches, 147 pounds, gravida 4, para 4) who did not speak English consulted with a plastic surgeon. Their communication took place through an interpreter. The patient was a smoker with a history of depression. The surgeon’s examination documented loss of abdominal muscle tone, diastasis recti, and redundant abdominal skin. He recommended abdominoplasty.

Prior to surgery, the risks and possible complications were discussed, and the patient was advised to stop smoking seven to 10 days prior to surgery. It was later discovered

---

41% Patient factors. Patient factors, which included behaviors and body characteristics, affected the outcome of care, highlighting the important role that patients play in their own care and recovery. Claims were made by patients who were noncompliant with treatment plans, follow-up appointments, and medication plans and by patients who went to other doctors due to dissatisfaction with the care received. By seeking care from other physicians, patients eliminated the plastic surgeons’ ability to address concerns and provide follow-up care. Patient factors also included body characteristics that delayed healing or caused excessive scarring.

---

**PLASTIC SURGERY CLOSED CLAIMS STUDY**
that she continued to smoke during that time. The surgery was completed without complications, and the patient was discharged. At the follow-up exam four days later, the patient’s umbilicus was in the midline, but the incision was black and blue. The surgeon felt this was due to the patient’s continued smoking, and she was again advised to stop smoking.

At the three-week follow-up visit, the wound appeared to be healing, but it was evident that she was still smoking. There continued to be residual bruising, and drainage was noted from the umbilical area. During this examination, she complained of pain and reported that a small section of the incision had opened. She was afebrile. The patient was given instructions for cleaning the wound twice daily. During an exam one week later, a “tremendous” amount of granulation tissue was noted at the site of the wound dehiscence, and the possibility of a surgical revision was discussed.

Six months following the original surgery, the wound had healed, but it had left a large scar. Ten months following surgery, she complained that her incision had not healed. Examination revealed dense fibrotic scar tissue in the abdominal midline and a bulge in the left periumbilical area. The plastic surgeon advised waiting to do the revision and again recommended that she stop smoking.

More than 18 months after surgery, the patient went to a second surgeon and requested a revision to excise the large scar. He advised against surgery due to the size of the scar and the paucity of skin. She then consulted a third surgeon, who excised the scar and found a suture granuloma and neuroma.

The patient filed a claim against the first surgeon, alleging improper performance of surgery. Defense experts gave mixed reviews. They said that the surgeon should have waited six weeks after the patient said she had stopped smoking before doing the surgery, and they felt he should have had the patient sign a consent form that specifically listed the surgical risks of continued smoking. They also said that the surgeon had removed too much skin. They noted, however, that the patient’s smoking was a significant factor in delaying her recovery and healing.

**CASE EXAMPLE:** A 40-year-old female had bilateral mastectomies for breast cancer. Eighteen months later, she had a transverse rectus abdominis myocutaneous (TRAM) flap reconstruction. The operative sponge count was incorrect, but this information was not documented in the operative record. The incision was closed prior to taking x-rays. The radiologist reported that no sponge was seen in the post-op x-rays, and the surgeon did not look at them to rule out a foreign body.

During the next two years, the plastic surgeon performed additional surgeries on the patient. Her oncologist viewed a CT scan and identified a radiopaque marker but assumed it was outside the patient’s body because the surgeon had never commented on it. Over a five-year period, the patient had five CT scans, and each scan showed the opaque marker in the sponge. Two chest x-rays showed the opaque marker in the right axilla. The patient was never notified.

Several years later, the radiopaque sponge was discovered and removed by another surgeon. The patient filed a claim alleging that the sponge required additional surgery for removal and that it had caused adenopathy and infections. She also claimed that it had caused a higher risk of recurrence of breast cancer. An expert noted that re-exploration of the surgical site was indicated when the sponge was not seen in the original x-ray, adding that the surgeon should also have directed placement of the x-ray plates in the operative area. The surgeon was also criticized for not disclosing to the patient the possibility of a retained sponge.

**CASE EXAMPLE:** A 64-year-old female presented to a plastic surgeon status post right mastectomy to discuss breast reconstruction options. She chose to have a tissue expander inserted, followed by a breast implant.

Four days after the tissue expander was inserted into the right breast, she had a deep venous thrombosis (DVT) and was started on Coumadin. The patient subsequently returned to the surgeon several times for additional saline injections into the expander.

Several months later, the surgeon performed the right breast reconstruction with an implant and an unplanned left breast augmentation with an implant to achieve breast symmetry. A month later, the patient complained of redness and drainage from the right breast incision. Cultures revealed coagulase-negative *Staphylococcus* sensitive to tetracycline. The infection ultimately required debridement. The drainage continued and, after a month of no improvement, the right breast implant was removed. Three weeks later, the wound seemed to be healing, and she was advised to follow up with her primary care physician. The patient never returned for her scheduled follow-up appointments and terminated her relationship with the plastic surgeon.

The patient filed a claim, stating that she was not aware she had a left breast implant until she had a mammogram. She also alleged improper performance of surgery due to ongoing complaints of right-sided weakness and pain in her right arm.
and side. Experts felt the procedure was performed correctly and the postoperative complications were not the result of negligence. However, they were not supportive of performing the left breast augmentation mammoplasty without the patient’s informed consent.

CASE EXAMPLE: A 45-year-old patient consulted with a plastic surgeon about breast lifts and facial rejuvenation. The patient was diagnosed with stage two breast ptosis, brow ptosis, lower eyelid bags, facial volume deficiency, and thinning lips. The patient signed consent forms for all six procedures.

The surgeon performed breast lifts with augmentation using saline implants, facial fat grafting, submental liposuction, blepharoplasty, nasal implant, and a brow lift.

At the first follow-up appointment, the patient complained of breast tenderness and edema of the nasal bridge. The surgeon noted that there was left breast drainage. He commented that they would be able to determine in one week if the implant had ruptured. A week later, it appeared that the left breast implant was deflated. The surgeon removed and replaced the implant.

The patient continued to experience significant edema of the dorsal/nasal bridge. One month later, the patient was feeling better, and there was no evidence of infection or hematoma. However, the edema of the nose continued. She returned six weeks later to discuss a possible revision of the nasal implant because she thought it had shifted. The patient decided not to return to the surgeon, telling the office staff that she was very disappointed with the results.

She then filed a claim, alleging that she had not agreed to have the breast or nasal implants. Experts were supportive of the standard of care, adding that the postoperative events were known complications. However, they were critical there was no documented discussion regarding the types of implants to be used and the specific risks of surgery, adding that there should have been more than one preoperative visit to evaluate the patient’s mental status and expectations.

“The there was no documented discussion regarding the types of implants to be used and the specific risks of surgery.”

The surgeon performed bilateral breast reduction and the first stage of thigh liposuction in his office operating room. He removed 5,600 ml of lipoaspirate during the eight-hour surgery. Post-op heparin was given subcutaneously, and sequential leg compression devices were used.

Several days later, the patient called the surgeon’s office complaining of pain behind both knees. Her feet were cold. She was instructed to remove the orthopedic bandages on both legs, which alleviated the pain.

The patient subsequently went to the surgeon’s office for a follow-up assessment. He noted no leg swelling or calf discomfort. There was some bruising, but the patient’s pedal pulses were good.

A few days later, the patient complained of severe shortness of breath (SOB), poor exercise tolerance, and she appeared pale. The surgeon stated that she had a low hematocrit and discussed sending her to the hospital ER for evaluation of possible DVT. The patient said that the symptoms were improving, so the surgeon recommended going to the ER if symptoms became worse. It was noted that the patient had been doing a calf pump exercise since surgery.

The next day, the patient went to her primary care physician’s office with the same complaints. He sent her to the ER, where a D-dimer test result was 4,320. A CT of the chest revealed a massive PE. Doppler studies showed DVT involving the left and right popliteal veins. Heparin and Coumadin were started. The following day, an inferior vena cava filter was placed. Echo studies showed a dilated right ventricle with pulmonary hypertension.

After several days of treatment, the patient was discharged on Coumadin. The plastic surgeon attempted to contact her for follow-up assessments, but she did not return to the office. She filed a claim and alleged that the surgeon had failed to provide anticoagulant prophylaxis properly and to timely identify the signs and symptoms of DVT.

Experts were not supportive of the care provided. They were divided on the question of whether the patient should have been given anticoagulants prophylactically. They were critical of the surgeon’s failure to order venous Doppler studies at the time she began complaining of leg pain. They were also critical of the amount of lipoaspirate removed in the office setting, stating that the department of health limits the amount to

The first case example relates to medication mismanagement, and the second case relates to the mismanagement of an injury to a patient during a blepharoplasty procedure.

CASE EXAMPLE: A 31-year-old female with a BMI of 37 requested breast reduction and liposuction of her thighs. The surgeon documented their discussion of her options and the risks of the procedures.

10% Selection and management of therapy. This contributing factor was most closely associated with the selection and administration of medications. In most cases, the medication was contraindicated, the best medication for the patient’s medical condition was not used, or the medication was not ordered.

The plastic surgery closed claims study
1,000 ml. Due to the patient’s BMI, this surgery should have been done in a hospital operating room. They believed that the clots formed during the eight-hour surgery.

**CASE EXAMPLE:** A 65-year-old female was evaluated by a plastic surgeon for complaints of lax skin of the upper and lower eyelids. The surgeon recommended a facelift with upper and lower lid blepharoplasty. When starting the blepharoplasty, the patient’s right eye was punctured, and a small amount of aqueous humor came out. The puncture and lid were immediately sutured closed. A specialist in oculoplastics was called to assess the patient.

The specialist saw the patient on an emergent basis in the plastic surgeon’s surgery center. He found the intraocular pressure (IOP) to be normal by palpation and that a small corneal abrasion was present. There was also a choroidal detachment; the retina appeared to be attached to the detached choroid.

The specialist saw the patient again the next day. Her vision was limited to hand motion and counting fingers. IOPs were 15 bilaterally. A month later, her vision was limited to light perception only, and her IOP was 10. A week later, the patient’s vision could only detect hand motions. The IOP was 9, and the choroidal/retinal detachment had worsened.

The specialist performed a pars plana vitrectomy, drained the choroidal hemorrhage, and performed a fluid/air/silicone/oil exchange. Two weeks later, the patient’s vision was limited to light. A year later, the patient had no vision in her right eye.

She filed a claim alleging permanent blindness. Some expert reviews were critical because the plastic surgeon failed to use a scleral shield to protect the eye. Other reviewers criticized the eye specialist for inadequate exploration and closure of the eye wound. They believed the delay in repair affected the outcome.

**CASE EXAMPLE:** Following weight loss of 140 pounds, a 35-year-old woman saw a plastic surgeon to request a back lift and mastopexy. She signed a general consent form that did not specifically list the procedures to be performed. The surgeon later testified that he had discussed with the patient the risks of scarring and had explained that she should expect a less-than-perfect outcome due to her extensive weight loss. This information was not included in the consent form, and the conversation was not documented in the surgeon’s records.

The surgeon performed a back lift using diagonal incisions. He then inserted breast implants. He was pleased with the

An implant exchange was performed. The surgeon documented that a 339 cc implant was placed on the right side and a 304 cc implant was placed on the left.

At the first postoperative visit a month later, the surgeon noted good symmetry, but the patient complained that the left breast was larger than the right breast. At subsequent visits, she continued to complain that her right breast was undersized.

At the patient’s request, the surgeon performed a right-breast implant exchange in the office under local anesthesia. During this procedure, the RN stated that the 304 cc implant was removed from the right breast. The patient spoke up, stating that the right side was supposed to be a 339 cc implant. She believed that the surgeon had mistakenly switched the implants in the previous surgery. The plastic surgeon did not document the size of the implant that was removed. A size 397 cc implant was then put in on the right side.

At the next office visit, the patient complained that her breasts were lopsided, with the left breast larger than the right. About six months later, the surgeon did a lift procedure because of uneven nipples. Six months later, she went to another plastic surgeon for a second opinion. This surgeon noted that the implants had rippling with marked asymmetry. The second surgeon requested the patient’s records. Following his review, he said that the records were confusing regarding the size of the implants, the type of implants, and the procedures performed. The second surgeon told the patient that her case was now difficult to correct and the risk of complications was high. After several months, the patient consulted a third plastic surgeon, who diagnosed asymmetry of implants. He performed revision surgery implant exchange with no complications.

The patient filed a claim. Experts were mixed in their reviews. They stated that rippling is common, and patients often need revision surgery for asymmetry. However, the first surgeon’s documentation was confusing and made it difficult to determine what size implants were placed during his first and subsequent surgical revisions.

**CASE EXAMPLE:** A 35-year-old female consulted a plastic surgeon regarding breast augmentation. She was 5 feet 4 inches tall and weighed 114 pounds. She signed a consent form that listed breast asymmetry and rippling as risks of breast augmentation. The surgeon placed a 290 cc implant on the right side and a 272 cc implant on the left side. Several months later, the patient complained that her right implant had ruptured and that she was experiencing rippling.

**8% Insufficient or lack of documentation.** Documentation is essential for quality care, team communication, and defending medical malpractice claims successfully. In plastic surgery cases, inadequate documentation of informed consent discussions is one of the more common deficiencies.
outcome when the patient was moved to an upright position, so he did not do a full “lollipop” incision mastopexy. He did a crescent lift of one areola for symmetry.

A few days following surgery, the patient e-mailed the surgeon expressing dissatisfaction with her results. She was unhappy with the location of the incisions on her back and that a full mastopexy had not been performed as agreed. At follow-up appointments, she continued to express dissatisfaction with the results and asked for revision surgery. The surgeon told the patient to expect some improvement after healing was complete. She was unhappy with the surgeon’s responses and saw another plastic surgeon for a second opinion. The second surgeon confirmed significant scarring and lateral migration of the breast implants due to improper placement.

The patient filed a claim alleging improper performance of surgery. Expert reviews were not supportive. They disagreed with the decision to do both the back and breast procedures during one surgery. They also criticized the surgeon for incomplete documentation of the patient’s informed consent and poor documentation in the operative notes.

“The patient complained of severe pain when he gave her the injection.”

4% Lack of or failure in system for patient care. Patient injuries sometimes occur when systems and processes fail. Storing and retrieving medications became problematic when two medications that were similar in appearance were stored together. Other system failures included lack of needed supplies, equipment, or medications. Absence of hand washing and failure of other system precautions resulted in nosocomial infections. Of course, many of the other case examples in this study also include systems failures.

6% Patient assessment issues. These issues were identified when patients suffered harm from undiagnosed conditions. Some conditions existed before surgery, and others were complications of surgery. Examples included malignancy in excised lesions that were not sent for pathology evaluation, unknown pregnancy, peritonitis from bowel punctures during surgery, PE, DVT, hemorrhages, infections, and necrotic bowel.

CASE EXAMPLE: A 31-year-old obese female consulted with a plastic surgeon who recommended abdominoplasty, liposuction of the hips and thighs, and a breast lift with no implants. The patient was on birth control pills and had a history of two cesarean sections.

During the six-hour surgery, the surgeon removed 1,750 ml of lipoaspirate from the patient’s axillae, hips, and thighs. She was discharged the same day with a pain pump. That evening, the surgeon called to check on the patient’s condition, and her husband reported she was doing well.

Three days later at a follow-up visit, she complained of fatigue and SOB. The patient was given IV fluids, and her pain pump was refilled. She felt better, and the surgeon called again that evening to check on her. Five days post-op, the patient called the office complaining of calf pain. The surgeon ordered a duplex scan at the hospital. The scan was reported as normal. On the sixth day post-op, she again complained of SOB. Her respirations were clear. She was again given IV fluids and sent home.

On the seventh postoperative day, she became unresponsive at home. Resuscitation attempts by emergency medical services were unsuccessful. An autopsy revealed the cause of death was PE. Experts opined that the patient should have been advised to discontinue birth control pills before surgery, heparin should have been ordered prophylactically, and a spiral CT should have been ordered to diagnose the PE.

CASE EXAMPLE: A 42-year-old female met with a plastic surgeon for injections of Botox into frown lines on her face. The plastic surgeon removed a vial from the refrigerator, drew up the syringe, and proceeded with the injections.

The patient complained of severe pain when he gave her the injection. This patient had received previous injections of Botox without difficulty. The surgeon assured her that this was not a problem. The next day, the patient called and complained of severe swelling of her face to the point of not being able to recognize her own facial features. The doctor went to the refrigerator and realized that, rather than Botox, he had injected flu vaccine, which had been ordered for staff use.

The patient did not return to this doctor for follow-up care. She complained of continued pain on the left side of her face. She had a CT scan and hearing tests, which were both negative. She filed a claim alleging improper performance of the injection procedure. Physician reviewers concluded it was a system failure to store the two medications side by side without confirming that the correct medication had been selected. There were other factors that led to this injury as well, such as failure to follow safe medication administration protocols.
CASE EXAMPLE: A 22-year-old female presented for breast augmentation. The procedure was performed in the plastic surgeon’s office operating room. The patient received general anesthesia with isoflurane gas administered by a certified registered nurse anesthetist (CRNA).

After an hour of surgery, the patient developed elevated CO₂, tachycardia, premature ventricular contractions, and a rise in temperature consistent with malignant hyperthermia. The CRNA discontinued the anesthetic and began hyperventilation. Labetalol was given. Documentation differed as to whether the CRNA administered 120 mg dantrolene and then 150 mg of dantrolene or whether he administered only one dose. When mixing the dantrolene, the CRNA could locate only three bottles of sterile water. Administration was delayed while staff tried to locate three additional bottles in other medical offices.

Paramedics transported the patient to the hospital, where she remained comatose with multisystem organ failure and DIC. She died a short time later. The family filed a claim.

Physician experts said that emergency responders should have been called at the onset of symptoms. The delay in administering dantrolene and then giving only one dose was problematic. Experts concluded that the management of this patient’s condition was inadequate and that the systems needed for an adequate response—including mixing the dantrolene and calling emergency responders—had failed.

FREQUENCY OF PLASTIC SURGERY CLAIMS

Frequency of claims is defined as the number of claims per 100 physician full-time equivalents (FTEs) per year. The frequency of claims and suits filed against plastic surgeons has decreased significantly during the past 14 years (2002–2015), from 37 percent to 13 percent (see FIGURE 6).

Although the overall trend line shows a downward slope, claims frequency over the last six years (2010–2015) has remained almost level. It has varied from 12 percent to 16 percent in an up-and-down pattern that seems to indicate a mostly flat trend line (see INSET).
RISK MITIGATION STRATEGIES

The following strategies can be used to assist plastic surgeons in preventing some of the issues identified in this study:

- Help patients set reasonable expectations about outcomes by discussing the possibility of less-than-optimal results and complications that could delay recovery and affect appearance. In this study, the most common patient allegation (49 percent) was improper performance of surgery. Although patients assumed that surgeon negligence was the cause of the undesirable outcome, physician reviewers found that only 5 percent of the claims involved substandard care. In plastic surgery, more than in any other physician specialty, the patient’s appearance following a procedure determines whether the outcome was a success. Subjective judgments—particularly with elective procedures—drive many patients to file medical malpractice claims against plastic surgeons.

- Use patient selection criteria to evaluate and determine if a patient is a good candidate for surgery.

- Take a complete medical and surgical history. Patient histories are important in determining whether a patient is an appropriate candidate for surgery and for selecting a venue that fits the patient’s needs. Patients are not always reliable historians, so it is essential to elicit information about bleeding disorders, family histories of reactions to anesthesia, sleep apnea, and the other conditions that increase risk during or following surgery.

- Train office staff to recognize complaints from patients or families that warrant immediate follow-up. Allocate office time to seeing patients who may be experiencing complications. Direct patients who have potentially serious conditions to an ER for immediate care. It is important for surgeons and staff to listen to concerns. Patients may experience complications, such as bleeding, fever, swelling, pain, redness, or SOB. Although uncommon, DVT, PE, compartment syndrome, peritonitis, and wound infections are outcomes that represent serious threats to patients’ well-being.

- Document the details of phone calls, including any recommended follow-up.

- Ensure that your office has a clear policy and procedure for staff to track diagnostic test results. Patients do not always follow physician instructions to get laboratory tests and imaging studies. A tracking system will alert staff and physicians when test results have not been received and will enable follow-up to locate test results prior to surgery.

- Make sure that your surgery center has clear criteria for patient discharge following a procedure or surgery. For example, criteria should include when the patient can be discharged by someone other than the surgeon.

- Confirm that patients understand discharge instructions, follow-up care, and medication plans. Use read-back or repeat-back techniques. Patient compliance is a major problem, especially when patients don’t understand discharge instructions or fail to receive adequate instructions.

- Document patient noncompliance. Smoking, unauthorized activity, and failure to complete prescribed antibiotics or other medications may affect the desired results of care.

Additional Resource

The guidelines suggested here are not rules, do not constitute legal advice, and do not ensure a successful outcome. The ultimate decision regarding the appropriateness of any treatment must be made by each healthcare provider considering the circumstances of the individual situation and in accordance with the laws of the jurisdiction in which the care is rendered.

**LEARN MORE**

For more patient safety and risk management resources, visit [thedoctors.com/patientsafety](http://thedoctors.com/patientsafety).

A patient safety risk manager is always available to provide industry-leading expertise. For more information, call 800.421.2368, extension 1243, or contact [patientsafety@thedoctors.com](mailto:patientsafety@thedoctors.com).

**TAKING THE MAL OUT OF MALPRACTICE**

Thanks to our national scope, regional experts, and data-driven insights, we’re uniquely positioned to spot trends early. We shine a light on risks that others can’t see, letting you focus on caring for patients instead of defending your practice. That’s malpractice without the mal. Learn more at [thedoctors.com](http://thedoctors.com).