INTRODUCTION

We rigorously analyze the claims experience of more than 76,000 members and translate the findings into industry-leading 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 are pleased to share the results of our Orthopedics Closed Claims Study. We hope that the information presented here prompts physicians to open a discussion in their practice or organization.

STUDY DESIGN

We analyzed 1,895 claims* against orthopedists that closed from 2007–2014. The study includes all claims and lawsuits (cases) in which an orthopedist was named as a defendant.

We included all cases in this study—regardless of the outcome—to help us better understand what motivates a patient to pursue a claim and to gain a broader overview of the system failures and processes that resulted in patient harm.

This study is based on the claims of more than 2,100 orthopedists. In 2014, 18 percent of our insured orthopedists were named in a claim or a suit.

This study focuses on two aspects: (1) an overview of the most common types of claims and (2) expert insights into the specific elements that led to patient injury.

MOST COMMON PATIENT ALLEGATIONS

We analyzed allegations made by patients in 1,895 claims closed against orthopedists. The three most common discussed here accounted for 75 percent of claims.

46% Improper performance of surgery. This allegation was often made when the outcome of the procedure differed from the patient’s expectations. Patient perception was not consistent with the findings of expert reviewers, who found that only a small percentage of patient injuries were due to substandard care (see “Technical performance” under Factors Contributing to Patient Injury).

Example: A patient alleged that the surgeon negligently performed a hip replacement that resulted in right foot drop and peroneal neuropathy. The medical record documentation clearly demonstrated that the surgeon and patient had discussed these risks.

The procedures that led to allegations of improper performance of surgery included total knee replacement, total hip replacement, knee arthroscopy, vertebroplasty, open reduction internal fixation, disectomy, exploration and decompression of spinal canal, shoulder arthroscopy, and rotator cuff repair.

16% Improper management of surgical patient. These cases involved clinical decisions and care provided to the patient postoperatively. Patients alleged improper management when they experienced infections, malunion or nonunion of bones, continued pain, or mechanical complications of orthopedic devices. These issues resulted in delayed recovery and often required surgical repair or, in a few cases, an amputation.

13% Diagnosis related (failure, delay, or wrong). The conditions that were alleged to have been diagnosed incorrectly included compartment syndrome, fractures, nonunion of fractures, hematomas, postoperative infections, malignant bone tumors, thromboembolism, and dislocations.

* A written notice, demand, lawsuit, arbitration proceeding, or screening panel in which a demand is made for money or a bill reduction and which alleges injury, disability, sickness, disease, or death of a patient arising from the physician’s rendering or failing to render professional services.
Example: A case alleged delay in diagnosis of compartment syndrome in a child with a fractured humerus that resulted in loss of function from the elbow down. The surgeon had documented that the child had no palpable pulses but left the cast on for 24 hours.

FACTORS CONTRIBUTING TO PATIENT INJURY

Our expert physician reviewers identified specific factors that contributed to patient injury. Here are their findings, along with some clinically specific points and examples:

35% Technical performance was the most common cause of patient injury. Although this might seem to imply negligence, reviewers found that most claims in this category were related to known risks disclosed to the patient prior to the procedure. Only a small percentage of orthopedic claims were due to substandard care. Additional factors:

- Injury was a known risk of the procedure.
- Poor technique.
- Misidentification of anatomical structure. Example: The surgeon excised a ganglion cyst on the patient’s upper right arm. Post-op, the patient developed posterior interosseous nerve palsy. Electromyography showed evidence of radial nerve neuropathy. Even though nerve damage is a known risk, questions arose about the surgeon’s description of anatomical structures around the surgery site.

29% Patient factors were the second most common contributing factor. Patients who were dissatisfied and sought other providers eliminated the treating physician’s opportunity to address concerns or unsatisfactory outcomes through follow-up. Patient behaviors affected the outcome of care when the patient did not follow the treatment plan or missed scheduled appointments. We found that patient nonadherence was more likely when there was inadequate communication between the patient/family and physician (see “Communication between patient/family and provider”). Additional factors:

- Seeking other providers due to dissatisfaction with care.
- Nonadherence with treatment plan.
- Nonadherence with follow-up calls or appointments. Example: The patient suffered an ankle fracture with displacement of the talus and disruption of the ankle mortise. Surgery was postponed due to the patient’s comorbidities and need for medical clearance. The patient was admitted, and physical therapy (PT) was ordered to decrease edema until the patient could be cleared for surgery. However, the patient refused to participate in the PT sessions. Two days later, the patient died as the result of a pulmonary embolism (PE). Even though the plaintiff’s family alleged that the injury was improperly managed, the documentation by the physical therapist, the surgeon,

and the nursing staff clearly demonstrated that the patient refused all PT sessions.

12% Selection and management of therapy was the third most common factor associated with patient injury. In some cases, reviewers found that a patient was not a good candidate for a procedure or approach. Other examples included failing to order medication and ordering medication that was inappropriate for the patient’s medical condition. Additional factors:

- Inappropriate surgical and other invasive procedures.
- Failure to use the most appropriate medication.
- Failure to order medication. Example: Ten days post-op diskectomy and L5-S1 foraminotomy, the patient was admitted to the hospital with complaints of drainage from the surgical wound. The patient alleged that the surgeon’s failure to administer prophylactic antibiotics resulted in wound infection.

12% Communication between patient/family and provider was the fourth most common factor that resulted in patient harm. Communication issues included inadequate informed consent for surgical or other invasive procedures, poor rapport, language barriers, inadequate discharge instructions, inadequate follow-up instructions, and insufficient information regarding the risks of medications.

12% Patient assessment issues were identified as the fifth most common contributing factor. Factors included failure or delay in ordering diagnostic tests, failure to establish a differential diagnosis, misinterpretation of diagnostic studies, failure to respond to a patient’s repeated concerns or symptoms, failure to consider clinical information available in the medical record, and failure to address abnormal findings.

OBSERVATIONS

A significant factor in these orthopedic claims was whether a patient who suffered an injury understood the cause of the outcome. When a patient alleged improper performance of a surgical procedure, it was often due to a complication disclosed prior to surgery.

This finding underlines the importance of helping patients understand the information provided during the informed consent process. It also highlights the importance of engaging the patient and family when a complication occurs to show empathy and to explain what caused the undesirable result. This conversation also enables the physician to link the patient’s experience to information provided during the informed consent discussion. Although the patient may continue to be unhappy with the outcome of care, a patient who feels engaged in his or her care and treatment may be less inclined to attribute the outcome to negligence or to bring a liability claim against the physician.
Inadequate patient assessments and failure to order pre- and post-surgical testing can lead to allegations of missed or failed diagnoses.

**Example:** A surgeon performed a total right knee replacement on a 70-year-old male. One week later, the patient experienced a displaced fracture of the right knee upon standing. Ten days later, no pulses were palpated in the right lower leg. Studies showed abrupt cutoff of the popliteal artery and vein. The patient developed an ankle ulcer followed by muscle necrosis and, ultimately, had to undergo amputation of the right lower leg. Allegations against the surgeon included delay in obtaining post-op vascular studies and failure to diagnose type II diabetes due to inadequate pre-op assessment of a morbidly obese patient.

Patients sometimes fail to comply with physicians’ instructions, and such decisions may cause poor outcomes. Although patient behavior is outside of the physician’s control, documenting the patient’s failure to follow instructions provides a more comprehensive clinical picture and may be useful in defending the care.

**Example:** A patient with a history of several spinal surgeries had Cotrel-Dubousset instrumentation implanted. Several weeks post-op, the CT scan showed the fusion was intact. Contrary to instructions, the patient stopped wearing the back brace and discontinued physical therapy. He then began to experience back pain. The physician’s documentation countered the patient’s claim that the surgery was performed incorrectly.

**RISK MITIGATION STRATEGIES**

The following strategies and additional resources can help orthopedists avoid some issues uncovered in this study:

- As demonstrated in this study, the consequences of patient nonadherence can be serious. When a patient chooses not to follow instructions, clearly outline the possible consequences, and document the conversation. You may be called upon to demonstrate the steps taken to help the patient achieve a good outcome.
- We found there were claims for postoperative thromboembolism when the patient’s risk factors had been recognized but not addressed. There are several assessments to help physicians evaluate a patient for deep venous thrombosis (DVT) or PE so appropriate prophylactic measures can be taken. Document your evaluation, and address any risk factors. Available resources include:
  - Venous Thromboembolism Quality Improvement Implementation Toolkit, Society of Hospital Medicine.
- Teamwork was a factor in some claims. Research has demonstrated that surgical team training can reduce surgical mortality. Encourage implementation of team training programs at the institutions where you operate. Available resources include:
  - U.S. Department of Veterans Affairs, VA National Center for Patient Safety: Clinical Team Training.
  - Peter J. Pronovost, MD, PhD, and Julie A. Freischlag, MD, “Improving Teamwork to Reduce Surgical Mortality.” *JAMA* (October 2010, Vol. 304, No. 15).
- As shown in this study, determining whether a patient is an appropriate candidate for a procedure is an important part of providing good care. Preoperative medical consultations help determine whether the patient has comorbidities that should influence decisions regarding procedure selection, management during and after surgery, and settings where it is safe to perform surgery.
- Infection is one of the most common risks of orthopedic surgery and other invasive procedures. Surgical checklists, like the one developed by the Association of periOperative Registered Nurses (AORN), can help in managing the many steps in the surgical process, including whether an antibiotic is recommended. Available resources include:
  - Association for Professionals in Infection Control and Epidemiology, *Guide to the Elimination of Orthopedic Surgical Site Infections*.

**Infection**

A number of claims in this study could have been avoided if the physicians had used established clinical practice guidelines, such as the following:

- American Academy of Orthopaedic Surgeons, *Evidence-Based Medicine Information*.

For links to the additional resources shown here, go to www.thedoctors.com/orthopedicsstudy.

**LEARN MORE**

We provide extensive online resources, including a self-paced interactive guide and content specifically for orthopedists. Find more information on how we’re helping orthopedists enhance patient safety and avoid claims at www.thedoctors.com/patientsafety.

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 in light of all circumstances prevailing in the individual situation and in accordance with the laws of the jurisdiction in which the care is rendered.