Orthopaedic claims data was reviewed from national sources, such as the Physician Insurers Association of America and the Harvard Risk Management Foundation. The following points are important in understanding the trends of orthopaedic claims frequency and severity nationwide.

- Attending staff and institutions are most at risk for being named, but residents, fellows, and ancillary personnel are not immune from being named in the claim.
- More than half of the claims involved acute trauma and degenerative disease.
- The majority of the lower extremity cases involved the hip or knee joints; the upper extremity cases mostly involved hand traumas.
- Just over half the claims involved events in the operating room. Approximately 25 percent involved management in the outpatient setting.
- Improper performance of surgery and diagnostic error accounted for more than half of all allegations. Improper management or judgment was the next most frequent allegation.

Risk management concerns that are frequently present in closed claims with indemnity payments involved:

- poor rapport with patient
- failure to document H&P and operative note
- improper use of equipment
- diagnostic error
- wrong anatomic site
- surgical/technical error
- inadequate informed consent
- failure to document decision-making process
- poor/delayed follow-up
- poor communication with patient/family
- poor communication between physicians
- monitoring errors by anesthesia
- failure to follow up on diagnostic test
- alteration of medical record
- clinical decision error

Analysis of the orthopaedic closed claims revealed that, when failure to follow sound risk management principles was evident in the claim, the case was less likely to result in a favorable outcome for the defendant. Evidence of risk management concerns also correlates to higher indemnity payments. All claims involving wrong site surgery resulted in favor of the plaintiff. Claims that involved failure to follow up with a patient, or failure to properly obtain informed consent, resulted in a plaintiff verdict. In addition, when it was determined that there was a prior relational problem, or poor communication with the patient or family, the case was more likely to be settled with an indemnity payment to the patient.

Case study
The following closed claim study demonstrates how applying fundamental risk management principles in an orthopaedic group practice may enhance the defensibility of allegations of negligence.

A 28-year-old male presented to his orthopaedic physician appointment with complaints of continued knee pain, which at times he described as severe. The patient was originally seen in the ER two days after a water skiing accident during the previous weekend. The ER x-rays had been forwarded to the patient’s preferred orthopaedic office, where
he had been treated on previous occasions for sports related injuries. The ER physician diagnosed bruised ribs, and possible meniscus tear and knee sprain. He instructed the patient to follow up with the orthopaedic physician in 2-3 days. The patient made an appointment two weeks later.

The orthopaedic physician determined that an MRI was necessary to make an accurate diagnosis, and this was conducted on site in the ambulatory clinic. The MRI showed a torn anterior cruciate ligament with medial meniscus involvement. Outpatient surgery to repair the knee was scheduled for the next afternoon. The surgery went well, and the patient was discharged with his girlfriend as the primary caretaker. Written discharge instructions were reviewed and provided to the patient and girlfriend. The instructions included his post-operative follow up appointment and prescriptions for pain medication and an antibiotic. The patient was told to return in 3 days, and to call the office if he experienced any of the signs or symptoms of infection as reviewed in the discharge instructions.

Three days later the patient did not return for his scheduled appointment, and a phone call was made to his home number. The patient stated that he did not have a ride to his appointment and would come in the next day. The office nurse asked the patient how he was doing, and was told that other than some foot swelling and numbness in his toes, he felt fine. The nurse noted this in the medical chart, and expressed to the patient how important his follow up appointment for the next day was. She also notified the physician of the missed appointment and the swelling and numbness mentioned by the patient. The physician made a decision to contact the patient herself at the end of the day to express her concerns and stress the importance of follow up. This phone call was documented in the chart.

The patient presented to the ER after midnight that same evening with fever, knee and foot pain, swelling, and obvious signs of wound infection. There was substantial dehiscence at the suture line. He told the ER staff that he had stopped taking his antibiotic on the second post op day because it made him nauseated. He also mentioned “banging” his leg around in the boat when he went out with his friends a few days earlier. The patient was admitted and seen by the orthopaedist the next morning. He was taken to the OR for further evaluation and repair of the knee.

Allegations against the orthopaedic physician included:

• improper performance of the initial surgical repair
• failure to instruct and communicate

Expert review of this case included a review of the surgeon’s pre-operative examination and assessment, the operative note, and discharge instructions. Taking the patient’s accountability into consideration, and the fact that the office procedures for pre-operative appointments had been well documented, the plaintiff’s attorney decided not to pursue this case any further because it was without merit.

Fortunately for this physician, her office protocol for pre-operative patients was written and followed. The informed consent discussion was completed in the office prior to outpatient surgery. The discussion was documented and a copy was provided to the patient. In addition, this physician utilized pre-printed consent forms for surgical procedures that included the risks, benefits and alternatives to treatment. She did not rely solely upon the outpatient facility or staff to obtain the patient’s consent on her behalf. She also made a brief note in the chart that the consent discussion was done with the girlfriend present and the patient understood and wished to proceed with the knee surgery.

Most favorable for this physician was the documented office protocol, which was consistently adhered to for all preoperative patients. The fact that discharge instructions provided by the physician to the patient were orally reviewed prior to the surgery day, well documented in the medical chart, and included the importance of medication compliance, follow up appointments, and instructions to call if there were problems, greatly assisted in the quick dismissal of this claim.

Additional risk management recommendations

• Evaluate and enhance communication with patients and family members. Communication is the primary mode of ensuring efficient outpatient management, proper follow-up, effective informed consent, and satisfactory patient rapport. All of these areas have been implicated in claims when a failure in communication arises.
• Conduct training for the proper use and maintenance of surgical equipment. Common misuse of equipment includes use of cast saws that require proper maintenance with sharp blades and preventing saw burns or cuts to patients. Take care to prevent skin irritation, burns, and nerve pressure.
• Keep in mind the most common areas of potential diagnostic difficulties. Diagnostic problems most frequently involve trauma-related issues, including hip fractures, shoulder dislocations (especially posterior), and hand injuries, including nerve and tendon lacerations as well as hand fractures that require extra attention (special splinting or surgery). Failure to diagnose also commonly involves testing techniques; poor quality or inadequate views on x-ray.
• Develop practice protocols to guarantee correct anatomic site/structure. This includes appropriate level for spinal surgery, appropriate digit for hand and foot surgery, and appropriate side (right/left) for extremity surgery.

Analysis of more than 1,000 orthopaedic closed claims reveals that the majority of claims with no clearly identifiable risk management issue had an outcome in favor of the defense. However, when a risk management issue was identified, the majority of plaintiffs prevailed.

Common pitfalls include operating on the wrong anatomic site, improper performance of the procedure, missed or delayed diagnosis, misuse of equipment, and finally, poor communication with patients. By addressing these common pitfalls, appropriate care for patients can be enhanced while the exposure to claims is minimized.

Sources
The orthopaedic specialists have historically been one of the top 10 specialties named in malpractice claims. Currently, 2001 TMLT data show that orthopaedic specialists are sixth in claims frequency (the total number of claims among all TMLT physicians).

Even when a malpractice claim is successfully defended on behalf of the physician, the time, money, and the defendant’s emotional investment is still great. Combining the development of an effective risk management program with an understanding of trends in orthopaedic malpractice claims may reduce claims frequency and severity, which is the ultimate goal of blending risk management principles and protocols into medical practice.

TMLT reviewed 1,034 closed claims involving orthopaedists. Of the total, 177 or 17 percent closed with an indemnity payment, a payment made to the plaintiff. The average indemnity payment was $139,259. The highest indemnity paid was $1 million (diagnostic error) and the lowest amount paid was $200 (medication error).

When reviewing this data, please note that frequency does not necessarily, and often does not, correlate with the indemnity payment as evidenced by the frequency of the "No Medical Misadventure" claims filed against physicians. However, the expenses incurred in defending these non-meritorious claims totaled more than $1 million.

TMLT risk managers reviewed 650 orthopaedic closed claims that occurred between 1996-2001. The top 10 allegations made against the defendant physicians are listed in Figure 2. This shows misadventures by claims frequency over a five year period.

### Misadventures Relevant to Frequency and Indemnity

<table>
<thead>
<tr>
<th>Misadventure</th>
<th>Number</th>
<th>Indemnity</th>
<th>% Paid</th>
<th>Total Expense</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improper Performance</td>
<td>444</td>
<td>$11,826,249</td>
<td>18%</td>
<td>$17,524,364</td>
</tr>
<tr>
<td>No Medical Misadventure</td>
<td>249</td>
<td>$35,600</td>
<td>1%</td>
<td>$1,104,314</td>
</tr>
<tr>
<td>Diagnostic Error</td>
<td>115</td>
<td>$6,106,917</td>
<td>27%</td>
<td>$8,669,262</td>
</tr>
<tr>
<td>Failure to Recognize a Complication</td>
<td>45</td>
<td>$1,636,500</td>
<td>24%</td>
<td>$2,402,706</td>
</tr>
<tr>
<td>Wrong Patient or Body Part</td>
<td>33</td>
<td>$2,300,738</td>
<td>70%</td>
<td>$2,873,520</td>
</tr>
<tr>
<td>Failure to Instruct/communicate</td>
<td>31</td>
<td>$295,000</td>
<td>1%</td>
<td>$475,600</td>
</tr>
<tr>
<td>Medication Error</td>
<td>27</td>
<td>$906,200</td>
<td>26%</td>
<td>$1,435,109</td>
</tr>
<tr>
<td>Delay in Performing Procedure</td>
<td>24</td>
<td>$596,250</td>
<td>25%</td>
<td>$928,425</td>
</tr>
<tr>
<td>Not Indicated/contraindicated</td>
<td>16</td>
<td>$512,500</td>
<td>31%</td>
<td>$1,137,054</td>
</tr>
<tr>
<td>Surgical Foreign Body Retained</td>
<td>15</td>
<td>$80,000</td>
<td>13%</td>
<td>$224,846</td>
</tr>
<tr>
<td>Failure to Supervise or Monitor</td>
<td>11</td>
<td>$161,429</td>
<td>11%</td>
<td>$364,831</td>
</tr>
<tr>
<td>Delay in Referral/consultation</td>
<td>2</td>
<td>$97,500</td>
<td>100%</td>
<td>$381,580</td>
</tr>
</tbody>
</table>

* includes medication errors, mass litigation, improper supervision of resident or other staff and failure to properly respond

### Top 10 Specialties by Claims Frequency (2001 TMLT Closed Claims)

<table>
<thead>
<tr>
<th>Specialty</th>
<th>Claims</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family Practice (includes GP)</td>
<td>279</td>
</tr>
<tr>
<td>Obstetrics and Gynecology</td>
<td>238</td>
</tr>
<tr>
<td>General Surgery</td>
<td>210</td>
</tr>
<tr>
<td>Internal Medicine</td>
<td>161</td>
</tr>
<tr>
<td>Radiology</td>
<td>154</td>
</tr>
<tr>
<td>Orthopaedics</td>
<td>129</td>
</tr>
<tr>
<td>Neurology (includes surgery)</td>
<td>117</td>
</tr>
<tr>
<td>Plastic Surgery</td>
<td>106</td>
</tr>
<tr>
<td>Cardiology (including Cath)</td>
<td>73</td>
</tr>
<tr>
<td>Nephrology</td>
<td>60</td>
</tr>
</tbody>
</table>

### Orthopaedic Medical Misadventures (Ranked by Frequency, 1996-2001)
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- Medical Records Handbook for the Physician’s Office
- Streetwise

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