Early results from the ASA Closed Claims Project showed that payments in anesthesia lawsuits were related to standard of care and severity of injury. Payment was more likely to be made if care was substandard than if standards of care were met. This was not unexpected because the success of a claim of negligence requires proof of a breach in the standard of care. We also found that payments were largest in lawsuits for permanent and disabling injuries, lower for death and lowest for temporary injuries. These results were not surprising either, as payments for permanent, disabling injuries typically include future nursing and medical care that would not be required in the case of death or temporary injury.

The ASA Closed Claims Project has been collecting data since 1985 and has now accumulated data from 30 years of anesthesia malpractice claims (1970-00). These data show that the profile of injuries in anesthesia malpractice claims has improved substantially over time. In the 1970s, more than half of anesthesia claims were associated with death (41 percent) or permanent brain damage (13 percent). In the 1990s, this decreased to less than one-third of claims (22 percent for death and 9 percent permanent brain damage, p < 0.05) [Figure 1]. The ASA Closed Claims Project database does not have a denominator, so we cannot determine if this trend reflects a lower incidence of poor outcomes or an increase in claims for minor injury. Studies of anesthesia outcomes, however, suggest that poor outcomes are becoming less common in the context of modern anesthesia practices. Meanwhile more than half of all anesthesia malpractice claims met anesthesia standards of care in the 1990s compared to 39 percent in the 1970s [Figure 2]. We hope that these improvements in practice and outcomes will be reflected in payment data.
Figure 1: Trends in Death and Permanent Brain Damage

Claims for death decreased significantly between the 1970s and later decades. The proportion of claims for permanent brain damage was lower in the 1990s compared to the 1970s.

Figure 2: Trends in Standard of Care

The proportion of claims in which care met standards increased, and the proportion of claims in which care did not meet standards decreased over the decades.
Analyzing Payments — Some Data Considerations

The ASA Closed Claims Project includes data collected from anesthesia malpractice insurers throughout the United States. Claims for damage to teeth and dentures are excluded as are claims in which the sequence of events and the nature of the injury cannot be reconstructed from the insurance company files. Most data in the Closed Claims Project database involves lawsuits. We excluded claims from this analysis if no lawsuit was filed. We also excluded claims for events occurring in 1970-74 and 2000 because data from these years in the database are incomplete. This analysis of payment trends included 5,156 lawsuits for events that occurred between 1975-99. Payment amounts were inflation-adjusted to 1999 dollars using the consumer price index.  

Trends in Payment

Overall, fewer claims resulted in payment to the plaintiff in the 1990s compared to the 1970s. In 1975-79, 74 percent of anesthesia lawsuits resulted in payment. In 1990-99, this proportion declined to 58 percent. Much, but not all, of this change may reflect improvements in standards of care. In lawsuits in which standards of care were met, the 1990s saw only a 40-percent result in payment compared to 51 percent in the 1970s. In lawsuits in which standards of care were not met, the 1990s saw payments in 86 percent filed compared to 92 percent in the 1970s [Figure 3].

Figure 3: Trends in Proportion of Payments in Lawsuits

Overall, fewer anesthesia lawsuits resulted in payment in the 1990s compared to the 1970s. This pattern also was seen in the subset of claims in which care met standards and the subset in which care did not meet standards.

If a payment was made in a lawsuit, the average size of the payment declined over time [Table 1]. Overall, payments (adjusted to 1999 dollars) declined from a median
of $284,000 in the 1970s to $153,000 in the 1990s. This decrease in payment size was most pronounced in claims for severe injuries. Payments for permanent and disabling injuries declined from $905,000 in the 1970s to $380,000 in the 1990s. Payments for death declined from $410,000 in the 1970s to $288,000 in the 1990s. Payments for temporary injuries were relatively lower and did not change significantly over time [Table 1].

**Table 1: Payment Trends in Lawsuits (Median Payment Adjusted to 1999 Dollars)**

<table>
<thead>
<tr>
<th></th>
<th>1970s (n=410)</th>
<th>1980s (n=1,597)</th>
<th>1990s (n=1,084)</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Lawsuits</td>
<td>$284,000</td>
<td>$184,000</td>
<td>$153,000*</td>
</tr>
<tr>
<td>Permanent Disabling Injuries</td>
<td>$905,000</td>
<td>$868,000</td>
<td>$380,000*</td>
</tr>
<tr>
<td>Death</td>
<td>$410,000</td>
<td>$348,000</td>
<td>$288,000*</td>
</tr>
<tr>
<td>Temporary Nondisabling Injuries</td>
<td>$38,000</td>
<td>$30,000</td>
<td>$37,000</td>
</tr>
</tbody>
</table>

*p<0.05 compared to 1970s (Mann-Whitney U test)

**Conclusions**

These results suggest an improving liability profile for anesthesiologists over the last 25 years. Improvements in anesthesia patient safety and standards of care seem to be positively reflected in lawsuit payments. There are various additional factors that may contribute to payments in lawsuits, including patient factors such as age and general health, as well as liability factors such as legal jurisdiction and defense strategies. Over the coming months, we will be continuing our analysis of Closed Claims Project data to construct a model of the contribution of different factors to the size and likelihood of an anesthesia malpractice payment.

Improvements in anesthesiology practice, safety and payments between 1975 and the 1990s have probably contributed to the relatively stable anesthesiology
malpractice premiums during this time period. Other insurance industry factors beyond the control of physicians and organizations such as ASA may be contributing significantly to recent premium increases (see related article by Karen B. Domino, M.D., on page 5 of this issue). Unlike other specialties that have not followed the example of anesthesiology in making significant advances in patient safety, however, anesthesiology has the advantage of entering the current liability crisis from a position of historically low risk. The ASA Closed Claims Project will continue to monitor national trends in anesthesia liability.

References

2. Cheney FW. The American Society of Anesthesiologists Closed Claims Project: What have we learned, how has it affected practice and how will it affect practice in the future? *Anesthesiology*. 1999; 91:552-556.