Who Is Most at Risk for Malpractice?

A study on this hot-button topic elicits a firestorm of anxious responses.

45 Deciphering Medical Malpractice Predictors
Misinterpretations of a recent study on malpractice factors in refractive surgery has caused an uproar amongst numerous surgeons. The lead author of the study spoke with Cataract & Refractive Surgery Today to rectify some of the misconstrued conclusions for the refractive surgery arena.

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Selectivity and communication are the keys for the successful comanagement of post-refractive surgery patients.
Authors Abbott, Ou, and Bird are to be commended for their appropriate and pertinent study "Medical Malpractice Predictors and Risk Factors for Ophthalmologists Performing LASIK and Photorefractive Keratectomy Surgery." Since the emergence of this study and its results, many questions and concerns have arisen from the US ophthalmic community. In the study, the investigators conclude that the chances for incurring a malpractice claim or lawsuit for photorefractive keratectomy (PRK) or LASIK rise considerably for clinicians who have higher surgical volumes and a prior claim or lawsuit. Additionally, the study states that risk dynamics that increase in importance with higher surgical volume include the physician’s gender, advertising use, preoperative time spent with the patient, and comanagement with optometrists. Many ophthalmologists are alarmed by what they perceive the implications of this study to be (for example, that they may attract more litigation than other practicing ophthalmologists) and by patients’ potential responses to the study (eg, regarding what type of surgeon they will choose, high- or low-volume, for their refractive procedures).

In response to ophthalmologists who are alarmed about the accuracy of this study, principle investigator Richard L. Abbott, MD, has been doubly concerned with ophthalmologists’ interpretation or misinterpretation of the study’s intentions and results. Dr. Abbott stressed that the study was conducted from the standpoint of a medical malpractice insurance firm versus a patient’s or physician’s viewpoint.

In an effort to ease the minds of those who are apprehensive about the study, Cataract & Refractive Surgery Today has sought answers to several ophthalmologists’ questions. In a recent interview, Dr. Abbott discussed the study, the current malpractice environment, the correct interpretation of the study’s results, and his initial intentions in performing such a study.

**CRSToday:** What prompted you to conduct this study?

**Dr. Abbott:** The study was conducted to better understand the medicolegal risk factors from the insurance perspective, and I think that is the key phrase. This point probably should have been emphasized more in the paper, that the study was undertaken from the insurance perspective and not from a patient’s perspective, or even from the ophthalmologist’s perspective. We were interested in understanding the medicolegal predictors and/or risk factors for performing PRK and LASIK surgery. We wanted to see if we could differentiate among the insured physicians with respect to the number of claims and also the loss amounts.
**CRSToday:** Who initially proposed the concept?

Dr. Abbott: I did.

**CRSToday:** How long did you spend conducting this study?

Dr. Abbott: We looked at data over a 6-year period, but it took me 3 years to complete the study.

**CRSToday:** How did you arrive at what type of data to incorporate into your study, and why was the Ophthalmic Mutual Insurance Company’s (OMIC) data the only data included?

Dr. Abbott: I chose the OMIC data based on its relevancy to refractive surgery and also because of the accessibility of the data. OMIC insures ophthalmologists in 48 states, so it is broadly based. It has what’s thought to be a representative number of ophthalmologists who perform refractive surgery. About one-third of the ophthalmologists who are insured by OMIC perform refractive surgery.

**CRSToday:** What percentage of refractive surgeons does OMIC insure?

Dr. Abbott: They insure about 3,200 ophthalmologists nationwide, and about 33% are endorsed for performing one or more refractive surgery procedures.

**CRSToday:** Are you concerned that your entire study is based on statistics from OMIC, which only insures a minority of all insured refractive surgeons performing LASIK, etc.?

Dr. Abbott: No. I think we have a representative sample because OMIC is the largest single insurer of ophthalmologists. There are multiple other companies in different states; it would almost be impossible to get all these data.

**CRSToday:** Did you consult with other insurance companies during the course of conducting this study to attempt to compare any of OMIC’s raw data? If so, please describe what you found, and, if not, why not?

Dr. Abbott: I didn’t, mainly because of the accessibility issue. We felt that we had a good sample from OMIC. It was very difficult to get all the data even with OMIC, and it took an extraordinary amount of time.

**CRSToday:** In your study, do you believe your results would have differed if data from insurance companies other than OMIC had been included?

Dr. Abbott: I don’t know the answer to that, obviously, but my belief is that the OMIC sampling was adequate for the purpose of the study because over 1,000 refractive surgeons are insured by OMIC in 48 states, so there’s a diffuse geographic and practice mix.

**CRSToday:** If you had had more time, do you think you would have been able to get additional information from different insurance companies?

Dr. Abbott: I don’t think I could have gotten the amount of information that I did with OMIC. The paper that we published only scratched the surface on all the issues that we examined. We actually looked at 47 different data points, including issues related to the physician and to a physician’s practice. We also looked at the demographics of the patients and the characteristics of the different types of patients who were operated upon. We covered very little of that in the paper due to space limitations. We also looked at issues related to the cases themselves, such as where the surgery was performed and types of instrumentation. To go outside of OMIC would have been very difficult.

“Our most significant finding was that high-volume surgeons had more claims. This is an absolute number . . . [and] this is intuitive.”

**CRSToday:** Do you believe this study will affect the malpractice insurance industry in any capacity, and, if so, how?

Dr. Abbott: I really don’t know. It would be impossible for me to speculate on how it would. Our most significant finding was that high-volume surgeons had more claims. This is an absolute number, and so, in a sense, this is intuitive. Anyone will tell you that, “if you do more surgery, you are going to have more risk, just because you are doing higher numbers.” I don’t think you need to be a rocket scientist to figure that out. There were no data to support that, however. The main finding of this study was that, indeed, a higher-volume surgeon does have a higher risk of claims. I have no idea how that finding will impact the industry.

**CRSToday:** Do you believe the study will affect the ability for some to obtain malpractice insurance, and, if so, whom?

Dr. Abbott: I don’t think the study is going to have a major effect. Insurance companies have been seeing these trends for years. I think risk managers wanted to look at [this] more closely and work on improving their ability to defend claims and improve risk-management guidelines. We wanted a physician who is performing high-volume surgery to recognize that he is at higher risk, but that he can also proactively try to reduce that risk. But, how specifically a company will respond to this, I have no idea.
**CRSToday:** Is OMIC planning to remove coverage from the high-risk surgeons identified in this paper?

**Dr. Abbott:** This hasn't been addressed by OMIC, but this has not been a typical OMIC policy. I would hope that OMIC would identify that high-volume surgery is clearly more risky from an underwriting point of view and then would step up risk-management programs to help these doctors lower their risk for incurring a claim or suit.

**CRSToday:** Some ophthalmologists are of the opinion that your statistics are misleading. Do high-volume surgeons have a greater number of lawsuits per number of cases performed, or does your study conclude that high-volume surgeons have an overall higher number of malpractice cases when compared with low-volume surgeons as an absolute number?

**Dr. Abbott:** It is an absolute number. The findings are on an absolute basis and are not a relative measure. A high-volume surgeon may in fact have a lower relative risk than a low-volume surgeon, but we didn’t consider that. We looked at this from the insurance perspective of absolute numbers. If we insure doctor A who performs 1,000 LASIK procedures a year, and if we insure doctor B who does 100 LASIK procedures per year, the difference in their volumes doesn’t matter to us. We only care whether the doctor performing 1,000 cases per year has more claims or suits, because both doctors are paying the same premium (assuming that all other factors are the same). They are rated exactly the same.

I’m sorry that some people mistook this as an implication on quality, that a high-volume surgeon has more risk per patient of attracting a lawsuit. That’s not what we found. We looked at the absolute number.

**CRSToday:** Would you say that surgeons who perform a higher volume of surgery have a higher skill level than those who do it sporadically?

**Dr. Abbott:** I think most surgical outcome studies show that a higher-volume surgeon, a surgeon who performs a specific procedure more than another surgeon, in general, has fewer complications per patient. I think most physicians, when we fall into the role of patient, always look to somebody who does more of a given procedure.

**CRSToday:** Because OMIC is endorsed by the AAO, some ophthalmologists feel that you have an obligation to ensure that you present an accurate picture of the situation, perhaps with a counterpoint, before presenting such a “one-sided” article. Please comment.

**Dr. Abbott:** I don’t feel that I presented such a “one-sided” article. We just looked at the data, and we clearly state that those performing high-volume surgery and those having a history of a prior claim or suit were the two significant findings. I think that, if somebody wanted to do another study or another article and write a counterpoint, I think that would be great.

OMIC is endorsed by the Academy, but it is totally independent and run as a private company. OMIC did not pay me or support me in doing this study, nor did the Academy.

**CRSToday:** After your presentation at the AAO, Eric Donnenfeld, MD, asked you about which doctors had the least amount of lawsuits per patient encounter. Dr. Donnenfeld asked this question in response to data in your paper that demonstrated that the risk was lower for high-volume surgeons. Can you please comment on this and explain what is the risk per case for high-volume surgeons? Why was this information not included in the discussion or conclusion of the paper?

**Dr. Abbott:** We didn’t look at that data. I don’t think we had data of per case per high-volume surgeon. We examined two separate banks of data: the 100 claims or suits for the surgeons and a survey. The survey had estimates. Surgeons insured by OMIC estimated their volume. And then, we compared these two groups. But, I couldn’t say, for those that specifically had a claim or suit, exactly what their volume was in order to give per case statistics.

I don’t know this for sure, but, with the high-volume cases, just because of the sheer volume, the relative risk is probably lower. But, because this was written from an insurance perspective, we were not interested in the relative risk. We were interested in the absolute risk. If I were a patient planning to undergo LASIK, and I compared Dr. Donnenfeld, who maybe performs 1,000 cases per year, with another physician who performs 100 cases per year, Dr. Donnenfeld’s complication rate would probably be lower, simply because of his volume and experience.

**CRSToday:** This study was conducted from an insurer’s standpoint. If it had been done from that of a patient, would the resulting data be reversed?

**Dr. Abbott:** Just think of those two doctors, from the insurance standpoint. What the insurance company cares about is that everybody pays the same rate to be insured, depending on the state they work in. So, let’s say we were
talking about New York state where LASIK surgeon X does 5,000 cases a year. Because he performs so many cases, he incurs an absolute volume number of three claims or suits for those 5,000 cases. A similar doctor in the same state does only 150 cases per year and gets one claim or suit. He pays the same premium amount as Dr. X pays to the insurance company. But, the insurance company’s cost in defending one claim or suit is much less than three claims or suits. From an insurance point of view, Dr. X is a greater risk for us because of the higher claims. Plus, if he had a prior claim or suit, and as that number of prior claims or suits increases, he is at even more risk of incurring more claims or suits, which our study showed. The focus was purely the cost of those claims or suits. Now, from a patient’s perspective, Dr. X has only three claims or suits out of 5,000 cases performed, whereas the other doctor who has one claim or suit in 150 cases is at a higher risk.

CRSToday: In the published study, there is a chart entitled “Physician Predictors for Incurring a Claim or Lawsuit,” where in column one (Table 1) you list a range of surgeries performed. Would your results differ if an average number had been used instead? Why weren’t averages used?

Dr. Abbott: You can see on that chart, surgeons who perform over 1,000 procedures per year rise up to 31.6% in claims. From an insurer’s point of view, Dr. X is a greater risk for us because of the higher claims. Plus, if he had a prior claim or suit, and as that number of prior claims or suits increases, he is at even more risk of incurring more claims or suits, which our study showed. The focus was purely the cost of those claims or suits. Now, from a patient’s perspective, Dr. X has only three claims or suits out of 5,000 cases performed, whereas the other doctor who has one claim or suit in 150 cases is at a higher risk.

We did this study, however, from an insurance perspective, which is also how I wrote the paper.

CRSToday: Regarding the comanagement parameter of your study (Table 2), can you briefly explain how you controlled for patients per year?

Dr. Abbott: The statisticians did that. The odds ratio is related to volume. Comanagement as an independent variable is not. There is a misinterpretation or misunderstanding in the statement that comanagement in and of itself is a risk factor. It is not. We have other reasons why comanagement is a risk factor; it’s not an independent variable, and it’s just purely related to volume.

CRSToday: Additionally, according to your data, isn’t it true that there was no difference in doctors’ being sued per patient encounter whether they comanaged or not? Can you please comment?

Dr. Abbott: There may not have been a difference between doctors’ being sued per patient encounter, but we didn’t get data on that. I can’t answer that question specifically, but I think that, when we controlled for volume, because volume was such a powerful predictor, the comanagement issue diminished.

CRSToday: Was comanagement an independent variable or simply associated with higher-volume surgeons?

Dr. Abbott: It was just an association. Comanagement maybe isn’t a risk factor, although it came out as such. When we analyzed the data again, comanagement didn’t stand out independently. But, one of the points I was going to make about comanagement is the possibility

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**TABLE 1. SURGICAL VOLUME AND MALPRACTICE CLAIMS***

<table>
<thead>
<tr>
<th>Predictor (Surgeries per year)</th>
<th>Claims/N (%)</th>
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</thead>
<tbody>
<tr>
<td>5 to 20</td>
<td>4/276 (1.4)</td>
</tr>
<tr>
<td>21 to 100</td>
<td>8/243 (3.3)</td>
</tr>
<tr>
<td>101 to 300</td>
<td>20/102 (19.6)</td>
</tr>
<tr>
<td>301 to 1,000</td>
<td>20/68 (29.4)</td>
</tr>
<tr>
<td>More than 1,000</td>
<td>6/19 (31.6)</td>
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</tbody>
</table>

N = number of doctors, study data from 708 surveys.

* Data from Table 3 of study by Abbott et al.1
† Total number of 58 claims within the practice survey group.

**TABLE 2. COMANAGEMENT** AND MALPRACTICE CLAIMS††

<table>
<thead>
<tr>
<th>Predictor (Comanagement)</th>
<th>Claims/N (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>26/470 (5.5)</td>
</tr>
<tr>
<td>Yes</td>
<td>32/186 (17.2)</td>
</tr>
</tbody>
</table>

* Data from Table 3 of study by Abbott et al.1
† Total number of 58 claims within the practice survey group.
†† Preoperative and postoperative comanagement with optometrists.
that, although comanagement does not seem to increase the chances of a liability claim, it really could increase a surgeon’s chances of losing a lawsuit and owing a higher payment to the plaintiff, due to the complexity of comanagement. What we are saying is, OMIC is not planning to cancel coverage to people who comanage to those that perform high-volume surgery. A lot of the high-volume surgeons are comanaging. Because of the risk that we see in defending cases that have been comanaged, and because of the risk associated with high-volume surgery, which we showed in our study, these physicians really need to pay attention. We want to make this a positive thing and not point fingers and say, “you can’t do it.” But, if you do it, let’s recognize that comanagement is a risk, and let’s try to figure out all the ways you can protect yourself. I’m trying to put a positive spin on this.

“Although comanagement does not seem to increase the chances of a liability claim, it really could increase a surgeon’s chances of losing a lawsuit.”

**CRSToday:** Is there a conflict of interest that should be declared with this paper? You are employed by the AAO, which owns OMIC. Both of these organizations have made it clear that they do not support comanagement. Is this study truly an independent, unbiased assessment?

**Dr. Abbott:** I don’t believe there is a conflict of interest. I’m not employed by the AAO. I am a volunteer. Physicians who are committee chairs and so forth receive a very small stipend, but we are not employees of the AAO. Second, the AAO does not own OMIC. OMIC is an independent company that is endorsed by the AAO. Third, OMIC has not published nor participated in the publication of a position paper on comanagement. OMIC has nothing to do with that position paper by the AAO and ASCRS. Furthermore, if you read the position paper, it does not say that the AAO is against comanagement. It simply offers guidelines about when the practice is ethical and proper and when it is unethical and illegal. OMIC insures many ophthalmologists who comanage, quite a lot. And, there is no policy against comanagement at all. I strongly object to that accusation.

**CRSToday:** Can you explain why this issue has become a hot topic with LASIK and not cataract surgery?

**Dr. Abbott:** LASIK is elective, and the PIAA, which is the umbrella organization for all physician-owned malpractice liability carriers, is very concerned about refractive surgery because of the volume of suits. At OMIC, we saw the claims and suits triple between 1998 and 2001. I think that explains the interest in looking at LASIK in particular.

**CRSToday:** Do you know who was responsible for performing the reviews for your paper before it was published in *Ophthalmology*?

**Dr. Abbott:** It was submitted to *Ophthalmology* and then went through the usual peer-review process. I have no idea who reviewed the paper.

**CRSToday:** Was any attempt made to determine whether the lawsuits, which occurred with ophthalmologists who comanaged, actually occurred during a comanaged case?

**Dr. Abbott:** No, that was difficult to do, although it probably could be done with a lot more effort.

**CRSToday:** In the August 1999 issue of *Ophthalmology*, Doyle Stulting, MD, published a study entitled “Complications in LASIK for the Correction of Myopia,” which concluded that low-volume surgeons had a higher incidence of complications. Can you comment on his results and explain why you have reached a different conclusion?

**Dr. Abbott:** We really didn’t reach a different conclusion from Dr. Stulting. Moreover, having a complication in LASIK doesn’t equal a lawsuit. We all know that complications occur with both excellent surgeons and not-so-excellent surgeons, and, when a lawsuit or claim is filed, it’s not always due to the complication. We know that some lawsuits are frivolous, some are justified, and some are not justified but result from recognized complications of the surgery. It’s how the doctor handles that complication that is most important, and this concern may be complicated in some cases by issues around comanagement.

**CRSToday:** Why did you include the terms claims and lawsuits, as opposed to only lawsuits, in your study, since claims constitute only written demands and are not the equivalent of an actual lawsuit? The two concepts are truly distinct, and many claims often do not become lawsuits. Claims typically involve no cost to a claimant (simply writing a letter) as opposed to actually filing a lawsuit.

**Dr. Abbott:** From the perspective of the professional liability insurance company, claims and lawsuits both cost money in terms of staff time and money spent on handling all the matters of the claim or suit. When a claim or suit is filed, money is reserved for expenses and indemnity related to it, and at times an indemnity is paid to the plaintiff without the claim arising to a lawsuit. Many of the elements and dynamics that give rise to a lawsuit also give rise to a claim, which makes claims very relevant to the overall goals of the study. When we look at the costs, the
average cost for a claim or suit is about $23,000 to our company, and that is why that absolute number was and is important. Claims and suits, as I said before, are both legitimate issues.

**CRSToday:** With regard to your data on claims and lawsuits, was any attempt made to distinguish between legitimate claims and lawsuits versus frivolous claims and lawsuits, and, if not, why not?

**Dr. Abbott:** We didn’t, again because both types of cases have elements that cost the company. If they are costing the company, then that makes it relevant to include them in the study (again emphasizing that we did this from an insurance perspective).

**CRSToday:** Would you agree that, if a significant number of the claims and lawsuits on which your data and conclusions are based in your study are frivolous, then that would significantly affect your conclusions, because a frivolous lawsuit and/or claim is not due to any negligence on the part of the physician, but often is the result of a disgruntled and/or lawsuit-prone patient.

**Dr. Abbott:** We certainly recognize that there are frivolous claims and suits; nevertheless, going through the process of defending a doctor costs money. Even if we win 90% of the cases, we still incur costs for discovering expert witnesses, staff, time dealing with attorneys, getting the claim dismissed, etc. Our study wasn’t set up to analyze the merit of any one individual case. Also, the study did not analyze the negligence on the part of the physician, but rather the predictors for incurring a claim or suit in performing PRK and LASIK surgery.

**CRSToday:** Did you make any attempt to determine the type of claims/lawsuits filed in order to examine their basis and determine any similarity or pattern among them that would rule out physician negligence, for example, faulty equipment?

**Dr. Abbott:** We didn’t specifically study or examine causes of negligence. We did look at patient characteristics, laser issues, and the types of microkeratomes used, although we didn’t report those data.

**CRSToday:** Have you received any feedback from any major insurers (positive or negative), and, if so, can you elaborate?

**Dr. Abbott:** I haven’t received any feedback.

**CRSToday:** If you had to change anything regarding the way you approached or conducted your study, what would it be?

**Dr. Abbott:** First, I’d clarify that the study was presented from the insurance perspective and not from the physician’s or patient’s perspective. Also, it would be nice to have had larger numbers so we wouldn’t have such wide ranges. Despite these shortcomings, however, ours was the largest study conducted to date. The bigger the better, and the more data, the better. It is just very difficult to collect these data.

**CRSToday:** You stated in your study that “by identifying some of the risk factors associated with potential malpractice litigation in this study we hope that a change in physician practice patterns will occur.” Please comment.

**Dr. Abbott:** All the PIAA companies, including OMIC, are trying to determine ways to improve risk management in order to decrease potential litigation. So, when you look at the factors and all the different practice patterns that doctors follow, there are certain things that stand out. For instance, something we found that I don’t think was published in the study was that informed consent was given on the day of surgery in a significant number of cases where there was malpractice litigation, and this presented a problem in defending the case because of the nature of the informed consent. When we see certain areas, or if we identify certain characteristics that are risky to the doctor, what we want to do is point those out and then see if we can change that practice pattern to lower the risk, maybe not so much as to lower the risk of incurring the claim or lawsuit, but to lower the risk of losing the case. Those are the types of things we are referring to.

**CRSToday:** Do you have any closing comments?

**Dr. Abbott:** I think some physicians who have read this study have unfortunately jumped to conclusions too quickly. I think many interpreted it as an attack on high-volume surgeons, and that isn’t what it was meant to be. I would like my higher-volume refractive surgery colleagues to know that I appreciate their concerns and hope that I have clarified many of the issues they raised in this interview.

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