



# Policy Research Perspectives

## Medical Liability Claim Frequency: A 2007-2008 Snapshot of Physicians

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### Introduction

This report presents a snapshot of physicians' experiences with medical liability claims, and describes how those experiences differ according to a physician's specialty, age, gender and his or her practice arrangement. The data are from the American Medical Association's 2007-2008 Physician Practice Information (PPI) survey. The PPI survey was implemented for the purpose of updating the practice cost data used to develop practice expense relative value units (RVUs) for the Medicare Physician Fee Schedule, but also collected information on a number of other topics. It was jointly funded by the AMA and over 40 national medical specialty associations.

The PPI survey sample was drawn from the AMA Masterfile. It was a stratified sample across 42 Medicare specialties.<sup>1</sup> The survey, which had a final sample size of 5,825, was limited to non-federal patient care physicians who had completed their graduate medical education and worked at least 20 hours in their most recent week of practice. The data presented here have been weighted to correct for possible non-response bias.<sup>2</sup>

### How is Claim Frequency Measured?

The measures of claim frequency reported here are based on survey questions that asked physicians for the number of malpractice claims filed against them during their career and over the past 12 month period. The terms "claims" and "suits" are used interchangeably in this report to refer to physicians' answers to those questions. This series of questions did not gather information on the outcome of those claims, such as whether they were dropped, settled or tried, how much was spent to defend them, or whether they resulted in indemnity payments to the patient or other plaintiffs in the case.

Data from the Physician Insurers Association of America (PIAA, 2009) suggest the following about those characteristics of the medical liability market in 2008:

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<sup>1</sup> Ninety-eight percent of eligible physicians fell into one of those 42 specialties. Of the 2 percent that did not, most had a self designated practice specialty code of "unspecified" on the Masterfile.

<sup>2</sup> A number of documents available at [www.ama-assn.org/go/ppisurvey](http://www.ama-assn.org/go/ppisurvey) provide additional information about the PPI sample selection, weighting, and response rates.

- Sixty-five percent of claims were dropped, dismissed or withdrawn, 25.7 percent were settled, 4.5 percent were decided by alternative dispute mechanism, and 5.0 percent were resolved by trial, with the defendant prevailing in 90 percent of those tried cases.
- Average defense costs per claim were \$40,649, ranging from a low of \$22,163 among claims that were dropped, dismissed or withdrawn, to a high of over \$100,000 for tried cases.
- Median indemnity payments among paid claims were \$200,000 for settled claims and \$375,000 for tried claims.

Claim frequency should not be used as an estimate of the error rate or malpractice rate in medicine. As noted above, the majority of claims are dropped and an even larger percentage are closed without payment. A review of closed claims showed that no injury had occurred in 3 percent of claims, and that in another 37 percent, there had been no error (Studdert et al., 2006). The same paper showed that in terms of compensation for medical errors, the system “gets it wrong” about equally on both sides. Twenty-seven percent of claims involving errors were uncompensated and, on the flip side, the same percentage of compensated claims did not involve an error. Earlier research that matched claim level data with hospital records also suggested similar inaccuracies (Weiler et al., 1993). In that work, the authors found that less than 15 percent of patients who suffered a negligent injury filed a claim, and that negligence had occurred in only slightly over 15 percent of filed claims.

### **Variation in Claim Frequency by Physician Age and Specialty**

Table 1 shows that 42.2 percent of physicians surveyed over the 2007 to 2008 field period had a medical liability claim filed against them at some point in their career. An average of 95 claims were filed for every 100 physicians, almost one per physician, and more than 20 percent of physicians were sued two or more times. Five percent had been sued in the prior 12 month period.

To look at how claim frequency changed over the duration of a physician’s career, we grouped physicians into three age categories: under age 40, between age 40 and age 54, and age 55 and older. Fifteen percent of the young physicians but 60.5 percent of physicians in the eldest age group reported claims. An average of 161 career claims were filed for every 100 physicians in the eldest age group. That medical liability claims are more common among older physicians is not surprising because they have been in practice for a longer period of time. Using an industry term, older physicians have had greater “exposure” to the possibility of claims.

The data in Table 2 illustrate the wide variation in claim frequency across specialty. The specialties with the greatest incidence of claims are general surgery and obstetrics/gynecology. Nearly 70 percent of physicians in those specialties were sued, and over 200 career claims were filed for every 100 physicians. In each of those two specialties, more than 50 percent of physicians had at least two claims filed against them, and more than 10 percent had a claim filed in the prior 12 month period.

Pediatricians and psychiatrists had the lowest incidence of claims. Less than 30 percent of physicians in either specialty were sued, with an average of fewer than 40 career claims per 100 physicians. Less than 10 percent were sued two or more times, and almost no pediatricians or psychiatrists had claims filed against them in the prior 12 month period.

Specialty differences in claim frequency have also been found in research based on other physician surveys with questions similar to those on the PPI (Gonzalez, 1998) and that based on claim level data from the Florida Medical Professional Liability Insurance Claims file

(Sloan et al., 1999). That research also showed that surgeons and obstetricians/gynecologists are sued more often than other physicians.

Table 3 looks at specialty specific claim rates for physicians in different age groups. One striking figure from the table is that before they turn 40, more than 50 percent of obstetricians/gynecologists have already been sued. Another is that 90 percent of general surgeons age 55 and older have been sued. Even among pediatricians, by the time they reach the age of 55, over half have been sued.

### **Gender Differences in Claim Frequency**

Returning to Table 1, we see that the incidence of medical liability claims was much higher among men than among women in the PPI data. Twice as many had been sued, 47.5 percent compared to 23.9 percent, and they had more than twice as many career claims per 100 physicians, 111 for men compared to 41 for women. There are a number of observable demographic factors that contribute to this difference.

First, men physicians are concentrated in the specialties with the highest levels of claim incidence, and women in those with the lowest levels. In the PPI data, 23.8 percent of men but only 14.8 percent of women physicians were general surgeons, surgical subspecialists, or obstetricians/gynecologists. To the same point, only 13.2 percent of men but 25.1 percent of women physicians were pediatricians or psychiatrists.

Second, women are newer entrants into the medical workforce. The average male physician in the PPI was in practice for six years longer than the average female physician. Nearly one-third of men but only 15 percent of women in the PPI survey were age 55 or older.<sup>3</sup> The men had a longer time period (exposure) over which to accumulate claims. Although differences in specialty choice and length of work experience clearly contribute to the *overall* gender difference in claim frequency, we still saw the same relative pattern between men and women of similar ages in nearly every specialty.

A third factor that contributes to the gender difference in claims is hours of work. Although the PPI survey was limited to full-time physicians (defined as providing at least 20 hours of direct patient care in typical week), even within that group, men physicians worked an average of five more hours per week than women physicians. This results in greater exposure to medical liability claims.

Fourth, men physicians were also more likely to be practice owners than women. As will be explained in the following section of this report, owners are sued more often than employees.

Finally, there may be other less readily observable differences between men and women physicians that contribute to the gender differences in claim frequency. Hickson et al. explored other pathways in a 2002 paper. They looked at the relationship between a number of factors, including physician gender and level of clinical activity (measured by RVUs), and patient complaints and organization risk management activity. They found that higher numbers of patient

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<sup>3</sup> In the Masterfile data (limiting it to patient care, non-resident physicians who practice in the U.S.), larger percentages of men and women were in the eldest age category than in the PPI, though the percentage for men was still about twice that for women. The reason the Masterfile percentages were higher than the PPI percentages is that the PPI was limited to *full time* physicians, which excluded some older physicians from participation.

complaints and higher levels of clinical activity were associated with a greater amount of risk management activity. They noted that in addition to higher levels of clinical activity being associated with more risk management activity because of greater complexity, that a high number of RVUs might also be indicative of less time per patient and “less attention to interpersonal and/or technical aspects of care,” and affect risk management activity through that avenue as well. Therefore, men physicians (who generally had more RVUs) might be sued more frequently not only because the care they provide includes a more complex group of services, but also because fitting more clinical activity into a finite number of hours has, at some point, negative effects on the interpersonal aspects of care.

### **Variation in Claim Frequency by Practice Ownership and Delivery Setting**

Table 4 looks at claim frequency for physicians who deliver patient care in different practice settings, and for physicians who are owners and employees. Although the data showed differences in claim frequency across both of those dimensions, they were much smaller than the differences across physician specialty.

The upper panel of Table 4 shows the claim frequency of physicians in five practice setting categories: solo practice, single specialty group practice, multi-specialty group practice, hospitals, and a catch all other setting category. Approximately 45 percent of physicians who provided most of their patient care in solo or single specialty group practices were sued. Among physicians whose primary settings were hospitals and multi-specialty group practices, the percentages were lower, 40 and 37 percent, respectively.

One contributing factor to the differences across setting is the specialty mix of the physicians who deliver patient care in those settings. For example, surgical sub-specialists and obstetricians/gynecologists accounted for more than 25 percent of physicians who delivered patient care in the single specialty practices, but only six percent of physicians who delivered patient care in the hospital setting. Physicians who provided care in the solo practice setting also tended to be in specialties with high levels of claim frequency.<sup>4</sup>

From the lower panel of Table 4, practice owners were about 14 percentage points more likely to be sued than employees, 47.5 percent compared to 33.4 percent. This is consistent with the legal concept of vicarious liability and the Doctrine of Respondeat Superior. An article in the Southern Medical Journal did a nice job explaining the issue: “Under agency principles, the concept of vicarious liability and the Doctrine of Respondeat Superior occurs when the servant (employee) commits a tort within the scope of employment and the master (employer) is held liable though the master may have done nothing wrong” (Regan and Regan, 2002). What this means in practice is that owner physicians incur claims that stem not only from their own provision of care, but also from that of physicians and other non-physician providers who are employed in their practice.

As was the case for the setting in which patient care was delivered, specialty mix was also a contributing factor to the frequency difference between owners and employees. For example, 27.2 percent of owner physicians in the PPI data were general surgeons, surgical sub-specialists, or obstetricians/gynecologists. In comparison, only 14.2 percent of employees practiced in one of those three high claim frequency specialties.

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<sup>4</sup> This fact notwithstanding, although the large majority (84%) of obstetricians/gynecologists deliver most of their patient care in the solo or single specialty practice setting and are categorized as such in Table 4, claims against them likely stem from care (childbirth) provided in the hospital.

## Conclusion

This report presents a snapshot of physicians' experiences with medical liability claims. The data on claim frequency come from the AMA's Physician Practice Information survey, a survey of patient care physicians that was fielded in 2007 and 2008. Much of the information in this report is not available anywhere else.

A number of key findings emerge from the data. First, in any single year, being sued is a rare event. Only 5 percent of physicians had claims filed against them in that time frame. Over the length of a career, however, claims are much more common. Sixty-one percent of physicians age 55 and older had been sued, with an average of 1.6 claims per physician. The data also revealed large differences across physician specialty. Claim rates varied from 22.2 percent among psychiatrists to 69.2 percent among surgeons and obstetricians/gynecologists. In fact, about half of obstetricians/gynecologists under the age of 40 had already been sued. Ninety percent of surgeons age 55 and older had been sued.

This research finds that physicians who have an ownership interest in a practice are more likely to be sued than those who do not, 47.5 percent for owners compared to 33.4 percent for employees. This is consistent with the legal concept of vicarious liability and the Doctrine of Respondeat Superior, and suggests that some of the claims against owner physicians stem from care provided by employees of their practice.

There were also differences across the settings in which patient care was delivered. Physicians in solo and single specialty practice settings had the highest rates of claim frequency. Approximately 45 percent of that group had been sued. In comparison, that percentage was only 37 percent for physicians who provided care in multi-specialty groups, and 40 percent for those in hospital settings. One contributing factor to the claim frequency differences across practice setting is that the specialty mix of physicians in those settings was not the same. For example, more than 25 percent of physicians in single-specialty practice were obstetricians/gynecologists or surgical sub-specialists, two specialties with high claim frequency levels. In comparison, less than 10 percent of physicians who delivered care in hospitals were in one of those two settings. Specialty mix was also a factor in the owner and employee difference noted above.

We also observed gender differences in claim rates. Men physicians were twice as likely as women physicians to report that they had ever been sued, 47.5 percent compared to 23.9 percent. There are a number of observable demographic factors that contribute to this difference. Compared to women, men physicians are older, work more hours, practice in specialties with higher claim frequencies, and are more likely to be practice owners. Each of these four factors is associated with a greater risk of claims. However, that the same relative pattern was evident between men and women of similar ages in nearly every specialty suggests that there are other less readily observable factors that contribute to the gender differences in claim frequency.

**References**

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**Table 1. Medical Liability Claim Frequency by Physician Age and Gender, 2007-2008**

	Percentage of Physicians			Number Of Claims per 100 Physicians
	Ever Sued	Sued 2+ Times	Sued in Last 12 Months	
All physicians	42.2%	22.4%	5.1%	95
<u>Age category</u>				
Under age 40	15.3%	4.2%	2.9%	21
Age 40-54	45.3%	22.3%	5.6%	97
Age 55 and over	60.5%	39.2%	6.1%	161
<u>Gender</u>				
Men	47.5%	26.3%	5.7%	111
Women	23.9%	9.4%	3.1%	41
N	4793	4738	4776	4738

Source: Author's tabulation of the AMA's 2007-2008 Physician Practice Information survey.

**Table 2. Medical Liability Claim Frequency by Physician Specialty, 2007-2008**

	Percentage of Physicians			Number Of Claims per 100 Physicians
	Ever Sued	Sued 2+ Times	Sued in Last 12 Months	
General & family practice	38.9%	22.2%	3.1%	80
General internal medicine	34.0%	12.5%	4.4%	58
Internal medicine sub-specialties	40.2%	21.3%	3.6%	86
General surgery	69.2%	52.0%	14.3%	213
Surgical sub-specialties	57.0%	36.5%	9.1%	170
Pediatrics	27.3%	5.4%	0.0%	36
Obstetrics/gynecology	69.2%	52.1%	9.5%	215
Radiology	47.4%	29.0%	10.5%	116
Psychiatry	22.2%	8.1%	2.0%	39
Anesthesiology	42.4%	14.8%	2.3%	67
Pathology	34.9%	9.5%	3.4%	55
Emergency medicine	49.8%	30.9%	8.7%	109
Other specialties	35.0%	15.8%	3.5%	66
N	4793	4738	4776	4738

Source: Author's tabulation of the AMA's 2007-2008 Physician Practice Information survey.

**Table 3. Percentage of Physicians Ever Sued by Age and Specialty, 2007-2008**

	Under Age 40	Age 40 to 54	Age 55+
General & family practice	14.3%	46.3%	58.2%
General internal medicine	14.6%	39.2%	58.3%
Internal medicine sub-specialties	11.2%	40.0%	57.6%
General surgery	28.9%	69.1%	89.8%
Surgical sub-specialties	21.3%	59.2%	73.1%
Pediatrics	0.0%	28.9%	55.1%
Obstetrics/gynecology	51.0%	75.2%	77.1%
Radiology	12.4%	54.3%	63.4%
Psychiatry	13.0%	12.9%	34.8%
Anesthesiology	13.2%	45.5%	55.3%
Pathology	0.0%	25.0%	55.4%
Emergency medicine	16.5%	54.9%	75.1%
Other specialties	9.9%	38.6%	52.9%
N	847	2476	1468

Source: Author's tabulation of the AMA's 2007-2008 Physician Practice Information survey.

**Table 4. Percentage of Physicians Ever Sued by Patient Care Delivery Setting and Practice Ownership Status, 2007-2008**

	Percentage of Physicians Ever Sued	N
<u>Patient care delivery setting</u>		
Solo practice	45.6%	1288
Single specialty group	44.5%	1557
Multi-specialty group	37.0%	541
Hospital	39.8%	1210
Other <sup>1</sup>	34.3%	167
<u>Practice ownership status</u>		
Owner	47.5%	3365
Employee <sup>2</sup>	33.4%	1424

Source: Author's tabulation of the AMA's 2007-2008 Physician Practice Information survey.

Notes: <sup>1</sup> The other category includes hospices, home health agencies, skilled nursing facilities, ambulatory surgical centers, and urgent care facilities. <sup>2</sup> The employee category also includes independent contractors.