American College of Emergency Physicians®
ADVANCING EMERGENCY CARE

Summary of Malpractice Claim Data & Trends from Three Sources

an Information Paper

Developed by members of the ACEP Medical Legal Committee

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Overview

The malpractice landscape has evolved over the last two decades as states have enacted tort reform and capped non-economic damages. This has led to a change in the total number and indemnity cost of emergency medicine (EM) malpractice cases. While the trends will be discussed below, there has been a paucity of accurate data as to the most common diagnoses that lead to malpractice suits.

Even as there has been stabilization of the malpractice climate in some states, there continues to be a high cost associated with defensive medicine. A recent survey of Massachusetts physicians (MMS "Investigation into Defensive Medicine" 2008) determined that nearly one third of all CTs and MRIs, as well as 10% of hospital admissions, were related to the practice of defensive medicine. The total cost of these tests and admissions was nearly 1.5 billion dollars in Massachusetts alone.

The goal of this project was to locate and evaluate the most current large-scale EM malpractice data and to attempt to determine what diagnoses/presentations lead to the most suits. A secondary goal is to provide evidence for or against the general idea that "missed MIs (myocardial infarction)" continue to make up a substantial number of malpractice claims.

Sources

CRICO (Controlled Risk Insurance Co.) 2006-2011 Report: 647 EM suits involving 90 hospitals
TDC (The Doctor's Company) 2000-2010 Report: 581 EM suits
PIAA (Physician Insurers Association of America) 1985-2011 Report: 6522 EM suits
PIAA (Physician Insurers Association of America) 2011 Report: 409 EM suits

Trends

The PIAA report identified not only recent trends (discussed below) but also demographic data of those involved in EM malpractice cases. Their data (1985-2011) show that 55% of suits involve EM physicians under the age of 44.

The malpractice numbers of 28 medical and surgical specialties were also compared. In total number of cases closed from 1985-2011 EM ranked 13$^{th.}$ EM also ranked 10th in amount paid during the same period.

Years	closed claims	paid claims	% paid to close	indemnity paid (2011 dollars)
1987-1991	608	204	33.55%	$226,341 (average)
1992-1996	1130	289	25.58%	$259,948
1997-2001	1065	339	31.83%	$266,737
2002-2006	1562	391	25.62%	$354,567
2007-2011	1998	475	23.77%	$374,070

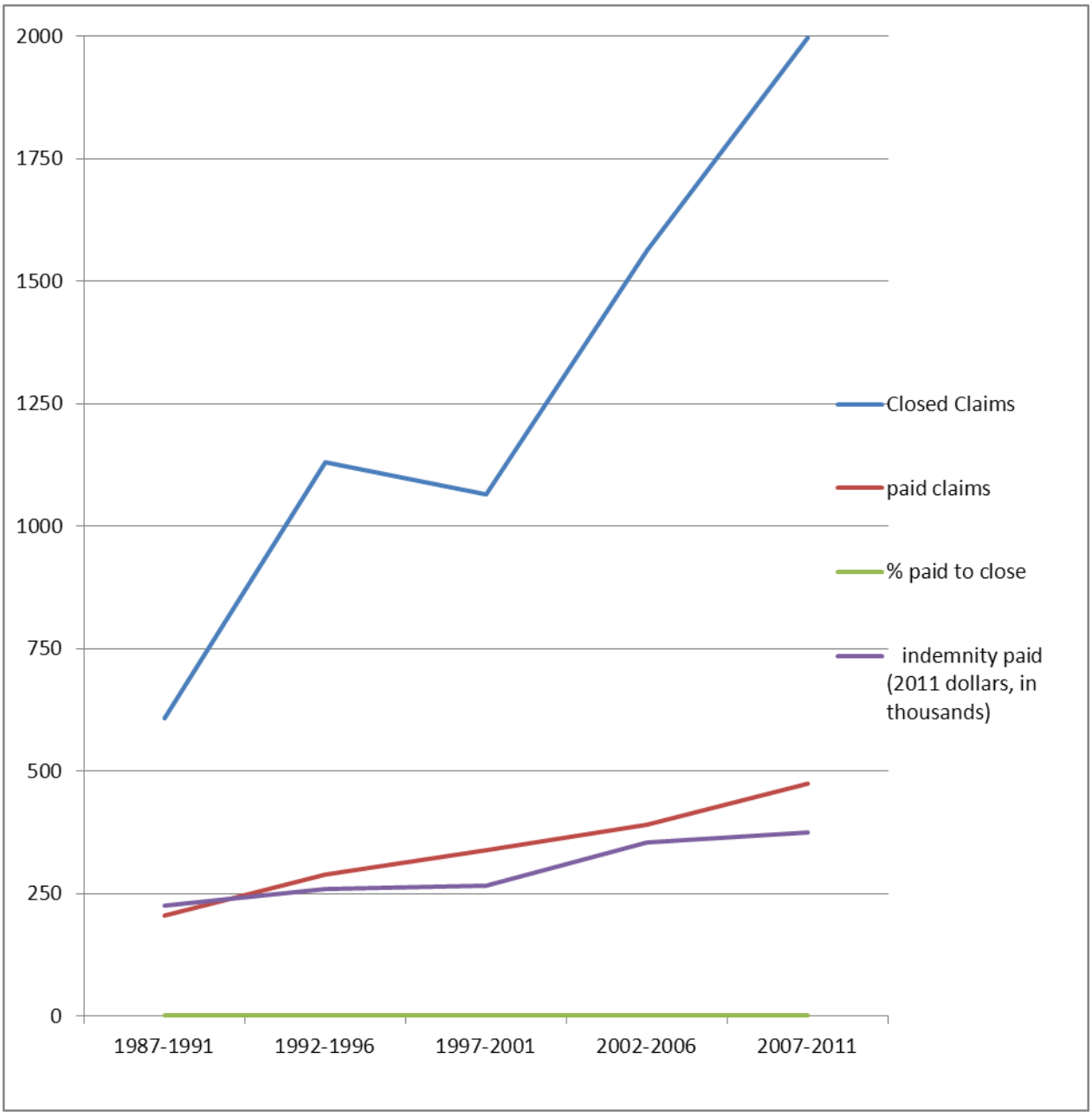

Figure 1
Source: PIAA 1985-2011 Report

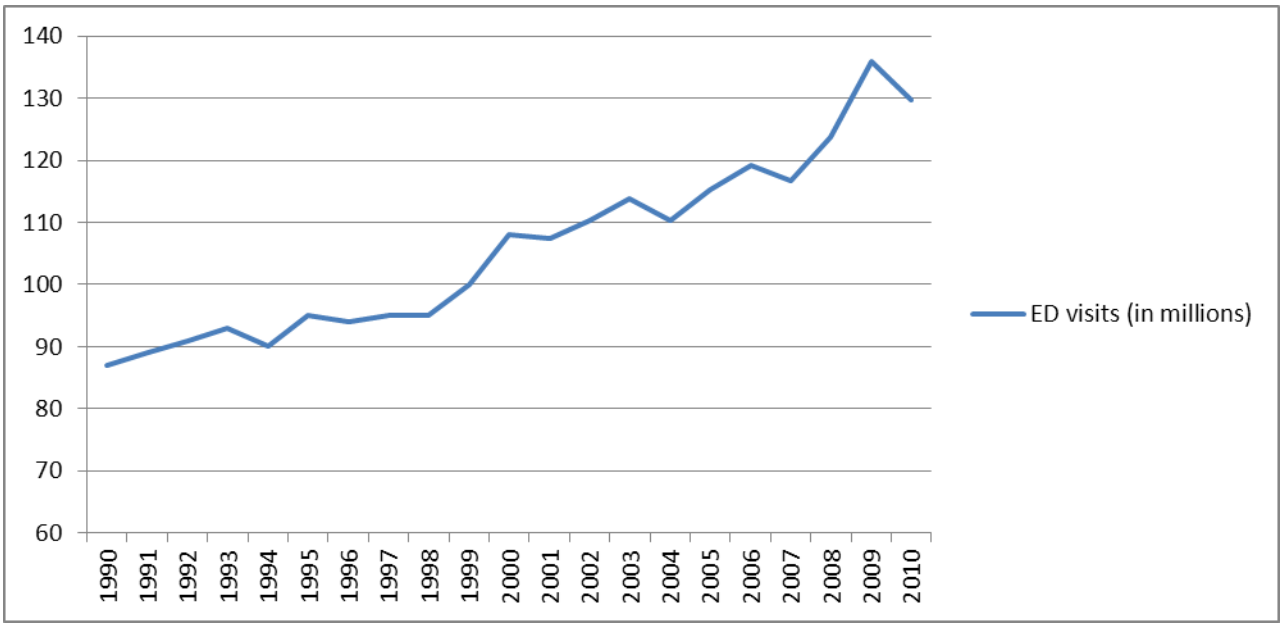

Figure 2
Source: CDC, ACEP

Figures 1 and 2 show that even as ED volume has increased and the number of total claims has increased the paid claims and indemnity paid have not risen as sharply.

Complaint Specific Data

Concern over discharging chest pain patients and "missing" a MI remains high among many EM providers. Despite the advancement in the ultrasensitive troponin assays and the falling out of favor of other biomarkers, many low risk chest pain patients are still admitted for inpatient evaluation. Furthermore the multitudes of papers concerning "low risk chest pain" have been unable to satiate risk-conscious physicians with a bullet proof algorithm.

The review of these malpractice insurers' reports will help to determine if and how much there is a factual basis for this concern. While EM physicians must always have the worst case scenario and the patient's best interest in mind, we must also be aware of up to date literature with a goal of a practice that is both safe and cost effective.

The insurers whose reports were evaluated hold their data closely, thereby somewhat limiting the ability to extract the exact diagnosis associated with each claim. However by evaluating the categories they do define, determination of diagnosis trends can be obtained.

The CRICO report (2006-2011) lists the top five final diagnoses in EM malpractice cases. MI is number four representing just 7% of cases. Orthopedic injuries are number one with this diagnosis being present in 14% of cases. The indemnity for MI cases is higher than orthopedic cases due to the increased harm associated with a missed MI and the higher likelihood that the missed diagnosis leads to permanent injury or death.

The PIAA report (1985-2011) breaks down diagnosis into "MI" and "chest pain NOS." There is no way to fully determine what percent of the "chest pain NOS" did actually have a MI or NSTEMI and therefore these diagnoses were added together when calculating the missed MI numbers. The addition of these two categories gives a more conservative estimate of the number of missed MIs.

The PIAA 2011 report shows 29/409 cases (7.1%) involved either CP or MI. 13% (11/85) of these cases closed with a payment.

PIAA 1985-2011 data show the percent of "missed" CP/MI follows the 2011 data. 7.4% of the total cases were MI/CP related with 12% of these cases paying out to the plaintiff.

The TDC report lists the top five injury types (ie, death, infection, infarction) but does not break down their data into the exact diagnosis leading to the injury type.

Top Patient Conditions Resulting in Malpractice Claim

1985-2011 (PIAA n= 6522)

		Number of cases	Percent
1.	Symptoms involving abdomen/pelvis	291	4.5%
2.	**Chest Pain, not further defined**	**254**	**3.9%**
3.	**MI, acute**	**231**	**3.5%**
4.	Appendicitis	171	2.6%
5.	Injury to multiple parts of the body	131	2.0%
6.	Meningitis	106	1.6%
7.	Fingers alone, open wound	102	1.6%
8.	Headache	101	1.5%
9.	Disorders of soft tissue	101	1.5%
10.	Dyspnea and other respiratory abnormalities	95	1.5%

2006-2011 (CRICO n=647)

		Percent of Cases	Avg. Indemnity
1.	Orthopedic Injuries	14%	$150,000
2.	Stroke	9%	$550,000
3.	Aneurysm, embolism, thrombosis	8%	$500,000
4.	**MI**	**7%**	**$600,000**
5.	Infection, blood	7%	$910,000

The data presented above show that while malpractice claims related to MIs still transpire, these cases are neither the most common nor pay the largest average indemnity. Understanding what clinical diagnoses and presentations drive malpractice claims will help physicians to consider implementing more robust risk reduction strategies.

Looking at the more recent CRICO data, missed appendicitis is no longer in the top five causes of EM malpractice. This is likely due to the more common use of CT scans in patients who present with abdominal pain, but may also be partially related to prior colloquial concern over missing this diagnosis.

This more recent data may also focus individual and institutions to better evaluate stroke evaluation and the treatment of sepsis and to create risk reduction strategies specific to these diagnoses.

Emergency Medicine High Yield Tips

All three insurers share "missed diagnosis" as the most common error that leads to a malpractice case. Intellectually this is apparent as an undiagnosed condition, rather than an improperly treated one, is more likely to result in patient harm.

CRICO lists 47% of cases from 2006-2011 involving an alleged missed/delayed diagnosis. 67% of cases in TDC 2000-2010 database involved failure to diagnose as did 55% of PIAA's paid claims. The CRICO report also includes data that these cases are more likely to lead to an indemnity payment.

Top Allegations	Cases Filed	Indemnity Incurred
Missed/Delayed Diagnosis	47%	62%
Management of Medical Treatment	28%	24%
Medication Related	7%	4%
Safety or Security	6%	2%
Surgical Treatment	3%	3%

Figure 3
Source: CRICO 2011 Report

Often this failure in diagnosis results from an error in ordering a test or from an inadequate assessment. This leads to a missed opportunity to provide the correct treatment or obtain the proper consultation. Without the proper information at the proper time, a physician is more likely to make a diagnostic error.

The malpractice claims that stem from a failure of diagnosis also carry with them a higher indemnity. CRICO data show that these diagnoses-related claims average more than double the indemnity when compared to claims that do not involve missed/delayed diagnoses ($508,000 vs. $213,000). The same data show that errors committed in the history and physical, the performance of diagnostic tests, and the ongoing monitoring of the patient lead to the highest indemnity.

Diagnosis Related Claims	Percent of Cases	Average Indemnity
History and Physical Exam	11%	$816,000
Performance of Diagnostic Tests	5%	$670,000
Ongoing Monitoring of Clinical Status	30%	$653,000
Transmittal of Test Results to ED Provider	7%	$576,000
Consultation Management	26%	$566,000
Patient Notes Problem and Seeks Care	6%	$529,000
Ordering Diagnostic Tests	65%	$525,000

The TDC report further evaluates their cases that involve a patient assessment issue. Of these cases 40% had a failure to establish a differential diagnosis, 34% had a delay or failure of ordering a diagnostic test and 20% had a premature discharge.

CRICO reports that 50% of their cases that involved a missed/delayed diagnosis lead to a patient's death, and the most common issue in these claims was poor MD/RN communication. Often there was a change in a patient's condition, vital signs, or response to ED treatment that was not communicated between the nurse and the physician.

The CRICO report dives into this communication issue as it relates to malpractice cases. They determined that there are several times during a patient's stay where good communication is profoundly important:

1. Team communication among physician, nurse, and other providers.
2. Discharge communication/instructions to the patient (and patient's family) as to what is the next stage of care as well as robust, diagnosis specific, discharge instructions.

3. Handoff/sign out communication among providers to allow for maintaining a broad differential diagnosis and continuing synthesis of data.
4. Communication between provider and patient during ED stay.
5. Timely disclosure and apology for error (if appropriate).
6. Real time hazard reporting (upstream safety).

Summary

While malpractice and defensive medicine continue to be a major issue in the practice of emergency medicine, recent data show that the indemnities paid and the percent of cases closed with payment are not increasing at the same rate as closed claims.

This review also shows that "missed MIs" make up less than 10% of claims. While there is room for improvement in this number, especially due to the morbidity and mortality missing this diagnosis can cause, the data also show that other diagnoses (stroke, sepsis) may require higher vigilance given the possibility of litigation associated with them.

Lastly all reports spoke to missed diagnoses and communication as problems leading to malpractice cases. These claims also resulted in the highest indemnity costs for EPs. While connecting a missed diagnosis to a potential malpractice claim is obvious, the role of communication in the breakdown that leads to the suit and the effort to reduce risk is something that deserves attention.

In the age of the electronic medical record (EMR) where all information is "on the computer," face-to-face communication among physicians and patients and physicians and nurses is likely to suffer. Given the paramount importance of communication in providing quality care, protocols for face-to-face interaction at the time of patient handoff, when abnormal vital signs occur, and when a patient decompensate should be considered.

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