

The MedMal Reporter

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What Determines Malpractice Payments? Part 1.

Main Points:

- Women of childbearing age are especially prone to malpractice injuries.
- The very young and those aged 30-39 receive the highest malpractice payments.
- More severe injuries lead to higher payments.
- Death leads to the same payments as permanent injuries of intermediate severity.
- Controlling for injury severity, women do not receive more than men.

The first article in a series on the fundamental factors that affect payments in malpractice cases.

Dr. David M. Frankel
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Introduction

Over 10,000 medical malpractice payments (settlements or judgments) are made in the U.S. every year. By law, these payments must be recorded in the National Practitioners Data Bank. Analysis of this data shows that malpractice payments are predictable to a large degree.

This article will study the effects of *patient features* on (a) the likelihood of sustaining a malpractice-related injury and (b) the size of the payment received in a settlement or judgment. Subsequent articles will study the role of case venue, allegations, practitioner age, and number of practitioners on these outcomes.



While we study all payments, over 97% of payments in malpractice cases are due to settlements. Hence, our results are most relevant to settlements.

Payment Size

How do patient features affect the size of a malpractice payment, assuming a positive payment is made?

Patient Gender

Overall, patient gender does not matter. The difference between the average payment to male and female patients is less than one tenth of a percent.

This result — along with the rest of the results in this section — is what is called *ceteris paribus*: “all else remaining equal.” In other words, if you take a given case with a given patient outcome and demographics, and a given set of defendants, and you simply change the patient’s gen-

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Main Points:

- CEG’s new web site offers case searches and custom valuation of medical malpractice cases.
- For more information, please visit medmalreports.com

CEG Introduces New Web Site

The site offers Case Searches and Custom Valuation of Medical Malpractice Cases

Public Relations Dept.
Cambridge Economics Group

Cambridge Economics Group today announced a new custom valuation service for medical malpractice lawsuits. The service, **MedMal Reports™**, is provided through the company’s recently launched web site, medmalreports.com. The new service is

targeted at attorneys who are involved in medical malpractice cases.

“A **MedMal Report™** gives an attorney a complete picture of the range of likely settlements and judgments in a medical malpractice lawsuit,” said



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CEG Introduces www.medmalreports.com

“An invaluable tool for an attorney on either side who wants to negotiate a settlement”

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Dr. David M. Frankel, founder and Chief Economist of CEG. “It is an invaluable tool for an attorney on either side who wants to negotiate a settlement. It can also be used to decide on an appropriate budget for a case.” The reports are written simply and clearly, using colorful charts and plain English. The company has been granted a provisional patent on its web site from the U.S. Patent and Trademark Office.

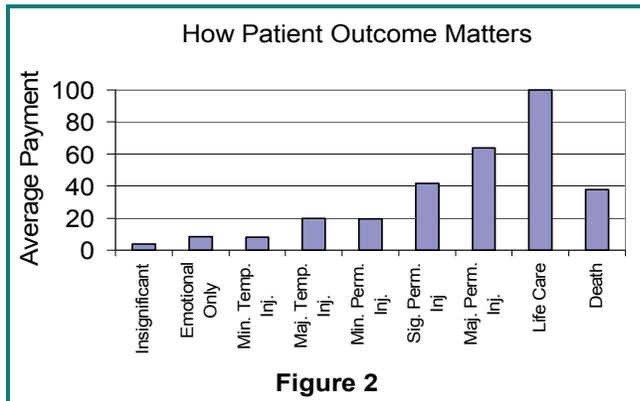
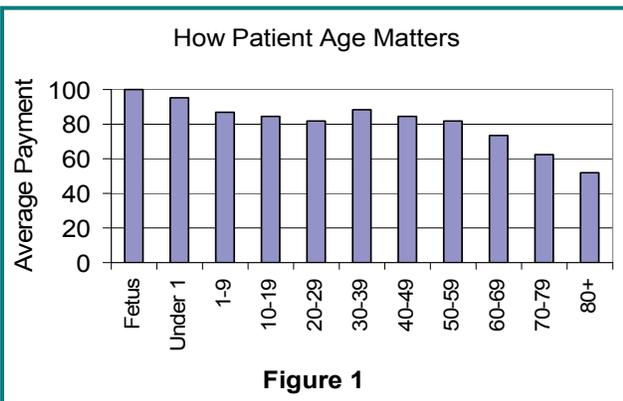
The company’s web site also offers a competitively priced **Case Search** service. This service provides information about all medical malpractice payments (settlements and

judgments) since 1/31/04 for a given medical outcome and state. The following information is provided for each payment:

- Total amount paid
- Year of the payment
- Whether settlement or judgment
- Age and gender of the patient
- Patient’s medical outcome
- Medical practitioner’s age
- Medical practitioner’s license field
- Up to two allegations
- Number of other practitioners involved. ■



What Determines Malpractice Payments? (continued)



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der, the expected payment does not change.

Patient Age

Figure 1 shows the effect of patient age on the average payment, holding other case features constant. The highest payment is indexed to \$100.

For a given injury, the highest payments are made when the patient is a fetus, followed by children under one year of age. This makes sense since these youngest age groups lose the most years of health or life when they suffer permanent injuries or death. For the opposite reason, the lowest payments are made for injuries to persons aged 80 and over.

The third most compensated group is persons aged 30-39. This is probably because these patients are typically at the peak of their earnings potential and often in the process of raising a family.

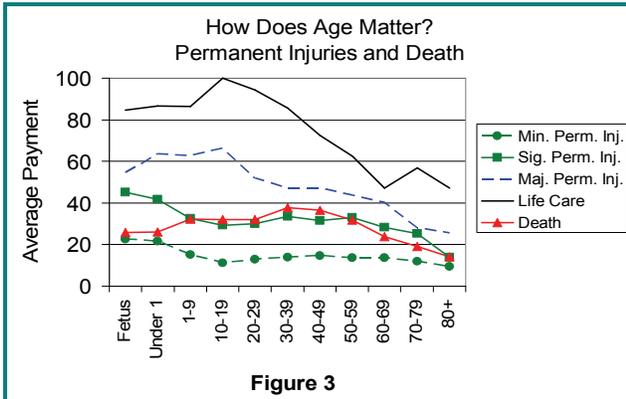
Medical Outcome

Different medical outcomes lead to sharply different payments (again, *ceteris paribus*). This is shown in Figure 2. Once again, the highest payment is indexed to \$100.

Payments are generally higher for more severe injuries. However, death leads to a lower payment than the two most severe permanent injury categories, confirming the adage “cheaper to

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What Determines Malpractice Payments? (continued)



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kill than to maim". (See the sidebar at right for definitions of medical outcomes.)

Age by Outcome

We now consider the effect of age for specific outcomes. Figure 3 shows average payments by age for permanent injuries and death. For the two most severe injury categories, life care and major permanent injury, payments rise throughout childhood as the patient approaches the age she would have entered the labor force. Once again, payments are lowest for the elderly, who lose the fewest healthy years when permanently injured.

"For severe permanent injuries, payments rise throughout childhood."

Payments for death are hump-shaped, reaching a peak at age 30-39. Death payments are lowest for the elderly. One reason they are higher for middle-aged patients than for young adults is likely that the middle-aged are more likely to have a spouse and children who can make claims for lost consortium.

Figure 4 shows payment by age for temporary injuries. Figures 3 and 4 are indexed in the same way so that the payments in the two Figures are comparable.

"Payments for death are highest in the 30-39 age group."

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Medical Outcomes

This article uses the following outcome categories.

Emotional Injury Only: Consist of shocks to the nervous system (upset, fright, psychological trauma) with no physical injury alleged.

Insignificant Injury: Physical injury involving minor treatment or no treatment, where no delay in recovery occurred. Examples include small cuts, etc..

Minor Temporary Injury: Cases in which the physical injury is minor and recovery is complete but delayed. Examples include infections, a fracture set improperly, a fall in the hospital, and minor burns.

Major Temporary Injury: Temporary injuries of a more significant nature. Examples include retained foreign objects, more severe burns, drug side effects, brain damage that resolves, and infection after surgery.

Minor Permanent Injury: Permanent injuries that are not disabling - i.e., that have no long term effects on activities of daily living. Examples include loss of fingers, loss or damage to organs, heart damage with recovery, loss of a testicle or ovary, etc.

Significant Permanent Injury: Permanent injuries with long-term effects on daily life. Examples include deafness, complete or partial loss of limb, eye, one kidney or lung, brachial plexus injury, reflex sympathetic dystrophy which is disabling, etc.

Major Permanent Injury: Permanent injuries that are more severe than significant permanent injuries. Examples include paraplegia, blindness, loss of two limbs, brain damage, severe and visible disfigurement, permanent colostomy, aseptic necrosis of a joint, a central nervous system injury which is not totally disabling, etc.

Life Care: The most serious of injuries, in which all aspects of life are significantly compromised, but death has not occurred. Examples include quadriplegia, severe brain damage, lifelong care or fatal prognosis, cerebral palsy, persistent coma, etc.

Death: Cases in which it is alleged that death occurred because of the actions of the defendant(s).

What Determines Malpractice Payments? (continued)

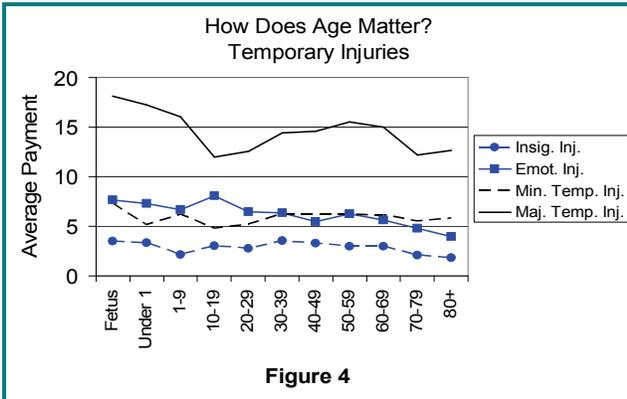


Figure 4

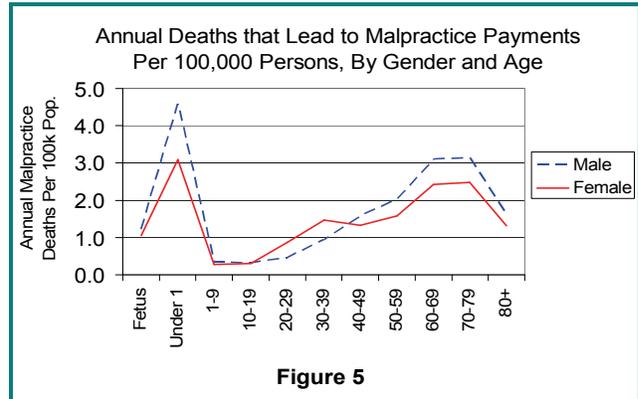


Figure 5

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Payments for major temporary injuries are highest for fetuses, children under 1 year of age, and children aged 1-9, in that order.

“For most temporary injuries, payments are basically unrelated to patient age.”

Aside from this, it is hard to discern any systematic relationship between age and average payment. This is not surprising. The length of time that a patient suffers from a temporary injury does not depend much on that person’s age. Thus, the compensation also does not vary much with age.

This is in sharp contrast to permanent injuries, for which the length of suffering, the present value of lost earnings, and the number of dependents are highly sensitive to the patient’s age.

asymmetry is undoubtedly the greater risk of malpractice-related injury during pregnancy and childbirth.

To shed further light on this issue, Figure 5 shows the annual number of malpractice-related deaths per 100,000 persons, by age and gender.

The chart implies, e.g., that every year, out of every 100,000 girls who are under one year of age, about three will die in a case that leads to a malpractice payment. This malpractice death rate is high among both the elderly and the youngest children. It is lowest among children aged 1-19.



Who Most Suffers Malpractice-Related Injuries?

We now turn to the question of which demographic groups are most likely to be injured or killed under circumstances that lead to a malpractice payment.



Men and woman are not equally affected by malpractice. Most malpractice payments (57.6%) are made to female patients. Only 42.3% are made to male patients. One reason for this

Age and Gender

Men and woman are not equally affected by malpractice. Most malpractice payments (57.6%) are made to female patients. Only 42.3% are made to male patients. One reason for this

One reason there are more malpractice-related deaths among the old and the very young is that the overall death rate is high for these groups. This is shown in Figure 6, which shows the number of deaths from all causes per 100,000 persons. For instance, in a one year period, about 10% of fetuses and 10% of persons aged 80+ will die.

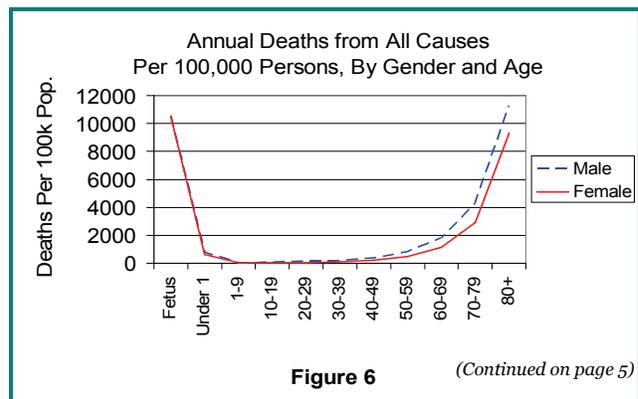


Figure 6

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What Determines Malpractice Payments? (continued)

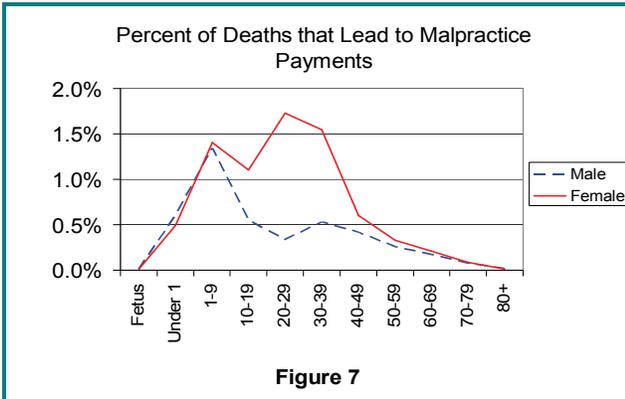


Figure 7

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We now ask a different question: are the deaths of any demographic group especially likely to be malpractice-related? To check this, we divide the malpractice-related death rates in Figure 5 by the total death rates in Figure 6. This yields the number of malpractice-related deaths as a *percent* of all deaths for a given gender and age.

“1.7% of deaths of women aged 20-29 are malpractice-related.”

This ratio appears in Figure 7. Strikingly, it is the *intermediate* age groups whose deaths disproportionately involve malpractice. The most exposed group is 20 to 29 year old women, for whom 1.7% of deaths are malpractice-related.

The rates of men and women in Figure 7 are strikingly different. Both rates rise during the first 9 years of life, but at this

point they diverge. The rate for males falls sharply in the teenage years and remains relatively low for the remainder of their lives. In contrast, the rate for females falls only slightly in the teenage years and then rises considerably during the peak childbearing years of 20-39. This suggests that pregnancy exposes a woman to conditions that can be fatal if not properly diagnosed and/or that require a high degree of medical skill to treat.

“Pregnancy exposes a woman to conditions that can be fatal if not properly diagnosed.”

Conclusions

This article has studied the effects of patient features on the likelihood of sustaining a malpractice-related injury and on the average payment when such an injury is suffered. We find that gender has no effect on payment size. Medical outcome has a large effect, with more severe injuries leading to higher payments. Death leads to lower payments than the two most severe permanent injury categories.

The highest damage payments are made when the patient is a fetus, followed by children under one year of age. The third most compensated group is persons aged 30-39. The lowest payments are made for injuries to persons aged 80 and over.

Women are more likely than men to suffer a malpractice-related injury. The percentage of female deaths that are malpractice-related is especially high during the peak childbearing years of 20-39. ■

ABOUT CAMBRIDGE ECONOMICS GROUP

Cambridge Economics Group was founded in 2004 to provide economic and statistical analysis in complex litigation settings, including antitrust, intellectual property, regulation, and personal injury. Its offices are located in West Des Moines, Iowa.

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