Journal of Legal Economics, Fall 2000,
10(2): 55-74

Structured Judgments and Periodic Payments in New York: A Unique and Complex System for Tort Awards

Introduction

In New York, law makers have instituted structured judgment laws concerning the nature of periodic payments that will be received by plaintiffs who have won awards in wrongful death and personal injury actions. Economic experts in New York are being called upon to provide a new type of expertise for post trial hearings. Structured judgment laws often result in testimony by economic experts in post trial hearings held before judges asked to rule on judgment motions made by the litigating parties. This new type of expertise and testimony shares important elements with the skills needed to assess proposals sometimes offered in pretrail settlements. The key differences are that structured judgments are legally mandated for all verdicts not settled before final judgment and the assessment rules are to be spelled out by statute. This system is complex, and the explanation in this paper is designed to make it

***Anthony H. Riccardi, Economic Consultant, Albany, New York**
Thomas R. Ireland, Professor of Economics, University of Missouri-St. Louis, St. Louis, Missouri

possible for practitioners outside New York to understand the New York system. Because other states have adopted similar, but less comprehensive structured judgment or periodic payment laws, an understanding of the system used in New York will be helpful to forensic economists, who may be asked to make calculations under the more limited provisions that exist in other states.[1]

This paper begins by considering the goals implicit in the New York legislation. It then describes the process of tort litigation that was created by New York's structured judgment laws. Finally, it takes the reader step by step through the calculations an economic expert will be called upon to make if a case is not settled between the parties before going to final judgment in a post trial hearing.

The Rationale for Structured Judgment and Periodic Payment Laws

In the broadest sense, a structured judgment is simply a financial scheme which completely distributes a verdict award to a claimant and the claimant's attorney. In the typical structured judgment, at least some of the award is distributed via immediate cash distributions, known as lump sums, with the rest of the award distributed through periodic payments. New York's statutes apply to all personal injury and wrongful death situations, with some special rules for medical malpractice. To understand these laws, one must begin with a consideration of the goals legislators may have had in mind when developing these statutes.

One special focus of structured judgment laws, both in New York and elsewhere, is on the fact that injured claimants may not survive through the term specified by a tort verdict. This is of particular importance when awards include a large sum for long-term life care needed by an injured party. In cases involving catastrophic injuries, future life care costs are often a very large element of damages. Assume, for example, that a jury awards $1 million per year based on a 25-year life expectancy for the injured person, with a total present value of $19 million. If the injured person survives only seven years, approximately $7 million of the $19 million would have been needed to pay for life care. The remainder would become part of the injured person's estate and passed on to heirs in what would amount to a windfall gain to the heirs.

The adversarial process of litigation can increase the probability of such windfall gains. A catastrophic injury can often increase the annual

mortality probabilities of the injury victim. This is often referred to as "reducing the life expectancy" of the injured person, although this can be quite misleading.[2] At trial, plaintiffs will try not to present testimony concerning reduced probabilities of life care needs so that juries will not award smaller damages for life care. Defendants will not want to argue that the plaintiff's claims are too large because the injury has probably significantly increased the annual mortality probabilities of the claimant. Doing so amounts to the defendants claiming they owe less money to the plaintiff because the injury caused by the defendants means that the plaintiff is less likely to live as long. If plaintiffs ignore the impact of increased mortality probabilities while defendants do not introduce that impact, claimants may be awarded recovery amounts far in excess of the actual life care needs of the claimant. In New York, as elsewhere, it appears that legislators were concerned to have defendants pay for life care only as long as it was needed. In New York, legislators apparently believed that life-contingent annuities are in the best economic interests of both injured claimants and defendants.

A second related concern seems to be that a caregiver of a severely injured claimant should not have access to all monies provided for life care at the same time. The New York requirement that awards be paid out in the form of annuities may be in part to protect claimants from themselves and from potentially exploitive caregivers. There seems to be general concern that claimants do not do well with large sums of money and that waste often results, with particular concern in cases of medical malpractice. If individuals waste the proceeds of tort awards for life care, the cost then falls back on states to provide that life care in the future. This provides a special incentive for state legislators to be concerned about distributing amounts awarded for life care only as needed. New York's provisions are designed to insure that claimants receive distributed payments over time for all types of tort damages.

A third consideration is the tax leverage that can be offered by an annuity contract. This is a standard tax advantage related to the periodic payment aspect of a structured judgment and not a unique advantage of New York's structured judgment laws. However, New York's laws insure that this advantage is provided in all cases taken to final judgment. If properly crafted, periodic payments from annuity contracts solely funded by the proceeds of personal injury and wrongful death awards are exempted from taxation. The tax exemption of such payments effectively provides an aftertax increase in the amount which is structured into the annuity contract. Thus, \$1000 structured into a properly qualified structured settlement annuity contract for a claimant who is in a 30% marginal income tax bracket has a taxable equivalent of 1.30 x \$1,000 or \$1,300, assuming that the same structured settlement annuity contract was not exempted from taxation.[3]

An Overview of the Trial and Post Trial Hearing Stages in New York

Structured judgment laws CPLR 50-A & B in New York have applied to personal injury, wrongful death and other similar tort verdicts since 1986. There is some difference in how attorney's fees are handled in medical/dental malpractice cases compared with other tort actions, but the differences are minor. Otherwise, the basis for determining judgment distributions is the same for any tort verdict awarding more than \$250,000 in the awarded amount of future damages. Verdicts awarding less than \$250,000 of future damages are paid as an immediate lump sum. In order to understand how this works, one must recognize that this is a two phase process.

The first phase is the phase forensic economists are familiar with in all other states. If the case is not settled before trial, both sides present evidence, and a trial is held. The jury reaches a verdict and specifies amounts of damages. The way juries do this is unique to New York in some very important ways, but the general process of this first phase is similar to other states. Cases may be settled before trial on the basis of any arrangement satisfactory to the litigating parties, including structured settlements of the types found in other states. If cases are not settled, they proceed to trial before a jury. Both sides present evidence on both issues of liability and damages, possibly including economic experts for both the plaintiff and the defendant, and juries reach a verdict.

If the verdict is for more than \$250,000, the second phase begins. A post trial hearing is automatically scheduled, and the litigating parties may begin negotiations about possible settlement in advance of that hearing. New York's structured judgment laws are quite specific as to how cases will be resolved if they proceed to a post trial hearing, but the litigating parties may settle if a mutually satisfactory arrangement can be found. During this period, that agreement may take the form of lump sum payments or structured settlements of the

sort that might occur in other states. The parties are not required to implement the specific requirements of New York's structured settlement laws if they can reach mutual agreement about alternative resolutions. However, both New York's special damages laws at trial and New York's structured judgment laws relating to post trial hearings do have an important influence on the types of agreements the parties would be willing to reach.

It is important to note that other states do have provisions for post trial hearings, particularly in medical malpractice cases. Therefore, this second phase is not totally unique to New York. Indeed, one important reason why forensic economists should be interested in New York's system is that they may be called upon to play roles in post trial hearings in other states that have some elements in common with New York's procedures. What is completely unique in New York is that post trial hearings are mandated in all cases with verdicts of more than \$250,000 that are not settled by mutual agreement of the parties. In other states, post trial hearings may be requested by the parties, but are not automatic. Verdicts of less than \$250,000 involve lump sum awards as indicated in the jury's verdict to claimants and do not proceed to post trial hearings.

The Trial Phase in New York

New York has unique procedures in the trial phase that make much more sense if understood in the context of the post trial hearing phase. In the trial phase, procedures are similar to other states in that forensic economists are asked to project losses in damage categories as they would in other states but with important differences. Economic experts are asked to project both past and future damages in nominal terms but without reduction for discounting to present value. On the surface this may appear to result in a gross overstatement of damages, but discounting of a sort does take place at the post trial hearing phase of tort resolution. The specific process will be discussed below. However, at the trial state, an economic expert testifies about the total damages over the loss period. This includes future increases in wages or costs, but without making any reductions to present value. It is important to note, however, that an economist testifies both about the total amount of undiscounted future damages *and* the period of time over which those losses take place.

As in other states, both plaintiffs and defendants may present their own economic experts, with juries determining the ultimate amount of damages awarded in those categories. Juries may also award damages in other noneconomic damage categories about which economic experts do not make projections – for pain and suffering, lost enjoyment, lost society and so forth. Based on the evidence presented, juries are asked to assign undiscounted damages for each category of loss, divided into an award for past damages and for future damages. For the future damages, the jury is also expected to determine the future period of time over which the jury feels the loss will occur. It is this latter jury's responsibility that is unique to New York trials. Juries in other states are sometimes asked to divide between past and future damages but not to assign specific future loss periods over which future losses are expected to occur. This is a critical feature of the New York system.

To illustrate how this works, assume that the jury reaches a verdict that awards damages for lost earnings, medical expenses and pain and suffering. The sample case in this paper will be a 60 year old, female claimant[4], who receives a verdict (nonmedical malpractice) damage award of $1,797,620, as itemized in table 1. The reader will note that a total of $197,120 has been awarded in past damages, composed of $33,120 of lost earnings, $64,000 in medical expenses, and $100,000 for pain and suffering. Likewise, a total of $1,600,500 has been awarded for future damages, composed of $150,500 for lost earnings over a 5-year period, $950,000 for medical expenses over a 23 year period, and $500,000 for pain and suffering over a 23-year period. This completes the jury's work.

At this point, the trial is over, the jury goes home and the tort resolution process enters the second phase, though with one immediate adjustment by the judge. If the jury awards future pain and suffering for any period longer than 10 years, the judge is required by law to automatically reduce the loss period for pain and suffering to 10 years. This is done without reducing the amount awarded by the jury for this loss element. Otherwise, the second phase is consistent with the amount of the future award for pain and suffering in the jury's verdict. In this second phase, as indicated earlier, the litigating parties are free to reach agreement, if they can, on terms mutually satisfactory to the parties. If the parties desire to do so, they can agree to lump sum transfers or settlements structured in ways familiar to forensic economists in other states. If done properly, these settlements will have the same annuity contract tax benefits that will be derived from the structured judgment that will be imposed if the

Table 1. New York Structured Judgment Statute – Itemized Verdict Damages

Total Verdict Damages	**$1,797,620**	
Past Damages		
Element of Damages	**Verdict Amount**	
Lost Earnings	$ 33,120	
Medical Expenses	$ 64,000	
Pain & Suffering	$100,000	
Total Past Damages	$197,120	
Future Damages		
Element of Damages	**Verdict Amount**	**Period (Yrs.)**
Lost Earnings	$ 150,500	5.0
Medical Expenses	$ 950,000	23.0
Pain & Suffering	$ 500,000	23.0
Total Future Damages	$1,600,500	

parties cannot reach agreement. In this stage, a good forensic economist who understands the system can be very helpful to the negotiating parties, though that aspect of the role of a forensic economist is not considered in this paper. It is assumed here that the litigating parties do not reach agreement and that the resolution process goes to the post trial hearing stage.[5]

An Overview of How the Attorney's Fee is Determined for Future Damages

At the post trial hearing for a structured judgment in New York, the judge will impose a distribution of the jury's verdict based on the amounts awarded and the periods for which the jury awarded those amounts. The judge will already have reduced the period over which the future pain and suffering award will be paid to no longer than 10 years. The award structure the judge will use will feature a combination of lump sum and periodic annuity payments. All past damages and $250,000 will be awarded immediately in lump sums that will be divided according to the contingency arrangement between the claimant's attorney and the claimant. However, amounts of future damages in excess of $250,000 will be scheduled in ways that are distinctly different for the claimant and the claimant's attorney. The claimant's distributions are determined directly from the award structure and not based in any direct way on present value considerations. How that is done will be described in detail below, but the future damage awards to the claimant will be provided in the form of scheduled annuity payments from a qualified structured settlement annuity contract, purchased by the defendant from an insurance company.[6]

In contrast, the attorney's fee will be based on the present value of the aggregate award structure. How that present value is to be calculated depends on whether the claimant has ordinary mortality probabilities (life expectancy) or mortality probabilities that are higher than would be ordinarily expected for an individual of the claimant's age (while it is bad usage of technical language, "less than normal life expectancy"). For this purpose, it is important to understand that the claimant's increased mortality probabilities may have nothing to do with the injury at hand. The claimant may have increased mortality probabilities for reasons unrelated to the current injury. If so, the claimant's increased mortality probabilities will still have an effect on the attorney's fee, as will be shown below. This will be easier to explain, however, if it is first assumed that the claimant's mortality probabilities are typical for the claimant's sex and age.

Calculating the Attorney's Fee with Normal Mortality Probabilities

To calculate the present value of the attorney's fee, a life table of mortality probabilities must be used. New York law takes judicial notice of the 1993 *Vital Statistics of the United States*. Other life tables could be used, but the examples below will be based on that life table. In the example in this paper, the contingency fee to the attorney is assumed to be one third. A trial has been held and the jury has awarded both past damages and future damages. One third of those amounts will go to the attorney in a way that is the same as in any other state. New York rules require that $250,000 of the future damages also be paid in a lump sum. Based on the contingency fee arrangement, one third of that amount will also be paid to the attorney, with two thirds going to the claimant. While the $250,000 feature is unique to New York law, the manner in which it affects the distribution of proceeds between the claimant and the attorney is not.

Up to this point, the contingency fee arrangement functions in the same way as in any other state. The nature of the distribution to the

claimant of future damages in excess of $250,000 has not yet been described, but it will result in specific amounts of money to be paid in each loss category for specified periods of time, as described in the next section. For purposes of determining the attorney's contingency fee, a present value needs to be determined for the distributions that will be made to the claimant. The present value calculation will take into account the annual mortality probabilities of the claimant for the life contingent portions of the award over the award periods described above. The attorney's fee will be equal to one third of present value calculated in that manner. Since the claimant's payments are fixed by law (assuming no settlement between the parties prior to the post trial hearing), the mortality probabilities of the claimant must be factored into the calculation of present value for the life contingent portions of the ward.

An economist would refer to a life table, usually the life table from the 1993 *Vital Statistics of the United States*. The economist would use that life table to calculate annual probabilities of survival for each of the life contingent damage elements to obtain mortality probabilities for each of the scheduled payments to the claimant, as specified in the jury award and under the New York payment formula. The lost earnings calculations are not life contingent, so those would be reduced to present value by employing a simple discount rate[7] selected by and argued for by the economist as in other states. The pain and suffering and life care awards are life contingent, so each payment would be multiplied by the probability that payment would be made (one minus the mortality probability = the survival probability in that year) and reduced to present value by the economist's discount rate. The present value of payments scheduled for payment in the future will then be added up to determine a total present value of future payments and the attorney's fee, for this portion of the award is calculated as one third of that amount. The attorney will receive his or her entire fee in the present, while the claimant will have to wait to get future scheduled payments that will have been reduced by one third to account for the attorney's fee.

The key difference between New York and other states is the explicit requirement to take into account mortality probabilities in calculating the present value of the life contingent elements of damages when calculating the future payment component of the attorney's fee.

Calculating the Attorney's Fee with Increased Mortality Probabilities

The previous explanation assumes that the claimant had normal mortality probabilities. It may be, however, that some previously existing condition or the injury itself has resulted in the claimant having increased mortality probabilities (with bad usage, "less than normal life expectancy"). If so, this is likely to be taken into account in the calculation of the attorney's fee. This will happen as follows: For purposes of purchasing annuities to make the periodic payments implied by the jury's verdict and the New York payment distribution formula, the defendant will have contacted one or more qualified insurance companies. The insurance company will offer quotes on the cost of the annuities needed to make those payments. Those quotes will typically be *life rated*, though it should be understood that the life ratings themselves may reflect business decisions of the insurance companies as well as actual facts about the mortality probabilities of the claimant. Nevertheless, the quotes themselves are likely to be based on life ratings that would be expressed in the following manner.

If a person at age 40 is life-rated as if she were 55, it would mean that one would determine her distribution of annual mortalities by starting from age 55 in a standard life table for a female aged 55. This would be done by using the survival number for age 55, divided into the number for age 56, 57, 58, 59 and so forth for the periods over which the periodic payments would be made. These numbers would then be used, along with other business considerations, to determine the price to be charged for the annuity rather than a similar set of probabilities based on age 40. As a result, it is likely that a new life rating age would come into the picture. The result of life-rating is that the present value of the future payments in the payment scheme are reduced relative to a nonrated claimant. As such, the lower present value of the payment scheme reduces the claimant's attorney's fee.[8]

Calculating the Future Damages Payment Scheme

Independent of the division between the claimant's attorney and the claimant, the future damages portion of the award structure will begin with immediate payment of $250,000. This amount will be drawn proportionately from each of the elements in the jury verdict for future damages. The total amount of future damages in the

example above was $1,600,500. Of this amount, lost earnings of $150,500 were 9.4 % of the total, medical expenses of $950,000 were 59.36% of the total and pain and suffering damages of $500,000 were 31.24 % of the total. Thus, the $250,000 lump sum would be allocated by those percentages into $23,508 for lost earnings, $148,391 for medical expenses and $78,101 for pain and suffering. Those amounts come off the top from the jury verdict totals, leaving a net $126,992 for lost earnings to be paid in five annual payments, $801,609 for medical expenses to be paid in 23 annual payments and $421,899 to be paid in 10 annual payments. The next step is a scheduling of those amounts after applying a very important distinction to the three categories of damages.

The important distinction between categories of damages is that lost earnings must be provided to the claimant in the form of an annuity for a period of five years certain, while the medical expenses and pain and suffering amounts must be provided to the claimant in the form of life contingent annuities. Some writers have ignored the important distinction between payments for a period certain and life contingent payments. (For a clear explanation of the difference, *see* Riccardi 1996 or Ben-Zion and Reddall 1985). As suggested in the previous section, the life contingent features of all nonearnings damages can make a significant difference in the cost of annuities necessary to satisfy the jury's verdict. Lost earnings must be paid in full over the time period provided in the jury's verdict, but medical costs and *noneconomic* damages payments can be terminated by the annuity provider if the injured person dies during the loss periods provided in the jury's verdict. (In a death case, the same is true of survivors of the decedent who are bringing claims of their own damages.)

The payments required to fulfill the jury's verdict (modified for *pain and suffering* damages to a 10-year period) are calculated by dividing each damages element by the number of years in the jury verdict for that element. Thus, if the earnings loss amount remaining in the case being discussed is $126,992 for a five-year period, the first calculation is to divide $126,992 by 5 to obtain an annual damages amount of $25,398.34 per year. By law, after the first year this amount will be increased at a 4% annual rate for each year until the payment for that year is made. The amounts are shown in table 2, which is separated into individual parts for each loss element. Thus, in part A for lost earnings, $25,398.34 would be paid in the first installment at the end of the first year, with the amount increasing by

4% in the second year to $26,414.27 and so forth. In part B, the medical expense remainder of $801,609 would be divided by 23 years, with a first year payment of $34,852.56, increasing in the second year by 4 % to $36,246.66 and so forth. In part C, the pain and suffering remainder of $421,899 would be divided by the statutory reduction to 10 years, for a starting annual value of $42,890, again with 4% annual increases thereafter. After being calculated on an annual basis, these amounts will be converted into 12 monthly payments, as will be discussed below.

Table 2. Undistributed Annuity – Present Value Computations
I = 6.00%

Part A: Lost Earnings

Period (Years)	Annual Payment	Discount Factor	Unadjusted Present Value	Survivors	Survival Rate	Mortality Adjusted Present Value
1	$25,398.34	1	$25,398.34	89317	1.000000	$25,398.34
2	$26,414.27	0.943396	$24,919.12	88479	0.990618	$24,685.32
3	$27,470.84	0.889996	$24,448.94	87571	0.980452	$23,971.01
4	$28,569.68	0.839619	$23,987.64	86594	0.969513	$23,256.34
5	$29,712.47	0.792094	$23,535.07	85548	0.957802	$22,541.93
Totals	$137,565.60		$122,289.11			$119,852.93

Part B: Medical Expenses

Period (Years)	Annual Payment	Discount Factor	Unadjusted Present Value	Survivors	Survival Rate	Mortality Adjusted Present Value
1	$34,852.56	1.000000	$34,852.56	89317	1.000000	$34,852.56
2	$36,246.66	0.943396	$34,194.96	88479	0.990618	$33,874.14
3	$37,696.53	0.889996	$33,549.78	87571	0.980452	$32,893.93
4	$39,204.39	0.839619	$32,916.76	86594	0.969513	$31,913.23
5	$40,772.57	0.792094	$32,295.69	85548	0.957802	$30,932.88
6	$42,403.47	0.747258	$31,686.34	84434	0.945330	$29,954.03
7	$44,099.61	0.704961	$31,088.48	83249	0.932062	$28,976.40
8	$45,863.59	0.665057	$30,501.91	81986	0.917922	$27,998.36
9	$47,698.13	0.627412	$29,926.40	80637	0.902818	$27,018.09
10	$49,606.06	0.591898	$29,361.75	79189	0.886606	$26,032.31
11	$51,590.30	0.558395	$28,807.76	77633	0.869185	$25,039.27
12	$53,653.91	0.526788	$28,264.21	75963	0.850488	$24,038.36
13	$55,800.07	0.496969	$27,730.93	74175	0.830469	$23,029.67
14	$58,032.07	0.468839	$27,207.70	72268	0.809118	$22,014.24
15	$60,353.36	0.442301	$26,694.35	70240	0.786412	$20,992.77
16	$62,767.49	0.417265	$26,190.68	68088	0.762318	$19,965.64
17	$65,278.19	0.393646	$25,696.52	65810	0.736814	$18,933.55
18	$67,889.32	0.371364	$25,211.68	63400	0.709831	$17,896.04
19	$70,604.89	0.350344	$24,735.99	60852	0.681304	$16,852.72
20	$73,429.09	0.330513	$24,269.27	58160	0.651164	$15,803.27
21	$76,366.25	0.311805	$23,811.36	55320	0.619367	$14,747.97
22	$79,420.90	0.294155	$23,362.09	52326	0.585846	$13,686.58
23	$82,597.74	0.277505	$22,921.29	49176	0.550578	$12,619.97
Totals	$1,276,227.16		$655,278.45			$550,065.98

Part C: Pain and Suffering

Period (Years)	Annual Payment	Discount Factor	Unadjusted Present Value	Survivors	Survival Rate	Mortality Adjusted Present Value
1	$42,189.94	1.000000	$42,189.94	89317	1.000000	$42,189.94
2	$43,877.54	0.943396	$41,393.90	88479	0.990618	$41,005.53
3	$45,632.64	0.889996	$40,612.89	87571	0.980452	$39,818.97
4	$47,457.94	0.839619	$39,846.61	86594	0.969513	$38,631.81

Period (Years)	Annual Payment	Discount Factor	Unadjusted Present Value	Survivors	Survival Rate	Mortality Adjusted Present Value
5	$49,356.26	0.792094	$39,094.78	85548	0.957802	$37,445.06
6	$51,330.51	0.747258	$38,357.15	84434	0.945330	$36,260.14
7	$53,383.73	0.704961	$37,633.43	83249	0.932062	$35,076.69
8	$55,519.08	0.665057	$36,923.36	81986	0.917922	$33,892.75
9	$57,739.85	0.627412	$36,226.69	80637	0.902818	$32,706.11
10	$60,049.44	0.591898	$35,543.17	79189	0.886606	$31,512.79
Totals	$506,536.94		$387,821.91			$368,539.8

After these payments are scheduled, the next step is to determine the present value of the entire payment schedule. This is done only to determine the attorney's contingency fee, as was discussed above. The process is shown in table 2, which provides separate calculations for lost future earnings, future medical expenses and future pain and suffering awards. All calculations in this paper assume a gross discount rate of 6.0 %, but the size of the rate is a judgment issue for an economist and is not fixed by statute. In the table 2, no discount is applied to the first year payment because monthly payments begin immediately, but payments in subsequent years are reduced at an annual rate of 6.0 % per year without regard to the life contingent aspects of the payments. These discounted results are shown in the "Unadjusted Present Value" column, with a total present value over five years of $122,289.13. For this element of damages, the attorney's one third contingency fee would be applied to that amount to determine the attorney's portion of this part of the award. Thus, that amount would be $40,763.04.

Part A of table 2 continues for the purpose of developing an expository point. The next column is labeled "Survivors." That figure is taken from the 1993 standard life tables suggested by the New York Pattern Jury Instruction (1993) and shows the number of surviving persons out of 100,000 left at the claimant's age at the time of the first payment. In that table, the starting number of survivors for a female at age 60 is shown as 89317. Since the claimant is still alive, her survival probability is fixed at 89317 out of 89317, or 1.000000. After one year and the beginning of the second year, it has fallen to 88479, which is 0.990618 of the number of survivors at the time of the first year. At two years and the beginning of the third year of

payments, the number of survivors has fallen to 87571, which is 0.980452 of the number alive at the time of the beginning of the payment period. The same process is used to calculate the survival rates at the beginning of the fourth and fifth years. These survival ratios are multiplied by the unadjusted present values to calculate mortality adjusted present values. Under New York law, these payments for lost earnings are not life contingent payments and thus these mortality adjusted values are irrelevant to this damage element. They are included here for the purpose of showing what the present value would be if lost earnings were mortality adjusted in the same way that medical expenses and pain and suffering values will be mortality adjusted, as described below. For this element of damages, the present value is $122,289, not $119,853, and the attorney's fee for this portion of damages is $40,763.

In part B of table 2, medical expenses were awarded in the form of 23 annual payments. The columns are calculated in the same way, dividing net award for future medical expenses of $801,609 by 23 to obtain the starting value of $34,852.56, with 4% annual increases thereafter through a period of 23 years. This time, however, the present value that is relevant to the calculation of the attorney's fee is now the mortality adjusted present value, not the unadjusted present value. The result of mortality adjustments is that the present value for this damage element is $550,065.98, not the $655,278.45 it would have been without mortality adjustment. The portion of the attorney's fee for this element is one third of $550,065.98, or $183,355.32.

In part C of table 2, pain and suffering is calculated in the same way as for medical expenses. Because of the 10-year time frame, the differences between mortality adjusted and unadjusted present values is much smaller than for medical expenses, but it is still the $368,539.80 present value and not the $387,821.91 that is used to calculate the attorney's fee for this element. One third of $368,539.80 is $122,846.60.

At this point, the attorney's payments are added up to determine the attorney's fee, which will be paid in a lump sum to the attorney. It includes one third of $197,120 of past damages, which is $65,706.67, plus one third of the $250,000 lump sum, or $83,333.33, plus $40,763 for future lost earnings, plus $183,355.32 for future medical expenses, plus $122,846.60. That total is $496,005. The remaining obligations of the defendants are (1) to make a lump sum payment to the claimant equaling two thirds of the verdict amount for past damages and two thirds of the $250,000 lump sum, and to purchase annuities that will make the scheduled future payments, reduced by one third from the payment schedules shown in table 2.

The final feature of the award process is the purchase of a set of annuities by the defendant that will provide for the scheduled payments in the jury verdict, reduced by the percentage of the attorney's contingency fee. Only a small number of insurance companies are able to offer structured settlement annuity contracts under New York's structured judgment law, but the defendant is obligated to purchase an annuity contract for the payments in each category described above. While the calculations of present value are based on annual values as if paid on the first day of the year, as in the table 2, the annuity arrangements are actually made on a monthly basis in terms of the claimants receipt of payments. Thus, the claimant gets twelve equal monthly payments for one year, increasing by 4 % in the first month of the second contract year and in each subsequent year, on the anniversary date of the first payment.

The stream of actual payments received by the claimant is shown in table 3. In table 3, one third has now been subtracted from the annual values shown in table 2 to adjust for attorney's fees, and the two thirds residuals have been divided by 12 to provide monthly payment amounts. The totals shown in the lost earnings column will be paid to the estate of the claimant even if the claimant dies, but the payments shown in medical expenses and pain and suffering columns will only be made by the insurance company if the claimant remains alive.

Table 3. Claimant's Monthly Annuity Distribution by Damage Element

Monthly Annuity Contract Payments

Period (Years)	Lost Earnings	Medical Expenses	Pain & Suffering	Monthly Cum. Total
1	$1,411.02	$1,936.25	$2,343.89	$5,691.16
2	$1,467.46	$2,013.70	$2,437.65	$5,918.81
3	$1,526.16	$2,094.25	$2,535.15	$6,155.56
4	$1,587.21	$2,178.02	$2,636.56	$6,401.78
5	$1,650.69	$2,265.14	$2,742.02	$6,657.85
6		$2,355.74	$2,851.70	$5,207.44
7		$2,449.97	$2,965.77	$5,415.74
8		$2,547.97	$3,084.40	$5,632.37
9		$2,649.89	$3,207.78	$5,857.67
10		$2,755.89	$3,336.09	$6,091.97
11		$2,866.12		$2,866.12
12		$2,980.77		$2,980.77
13		$3,100.00		$3,100.00
14		$3,224.00		$3,224.00
15		$3,352.96		$3,352.96
16		$3,487.08		$3,487.08
17		$3,626.56		$3,626.56
18		$3,771.62		$3,771.62
19		$3,922.49		$3,922.49
20		$4,079.39		$4,079.39
21		$4,242.56		$4,242.56
22		$4,412.26		$4,412.26
23		$4,588.76		$4,588.76

Conclusion and Directions of Future Research

This paper has taken the reader through the complex set of calculations required for tort resolutions in the state of New York to the final post trial hearing phase. It should be understood that many cases are settled either before trial or in the period between the trial and the post trial hearing and do not go through the entire procedure. Nevertheless, aspects of this procedure are used in many other states, particularly with respect to medical malpractice cases. The authors have a separate paper that considers periodic payment procedures in Missouri and they anticipate working on the nature of such procedures in other states in the future. The authors also plan to explore further issues relating to *rent seeking* aspects of New York's legislation.

Endnotes

1. Currently, 17 states have binding statutory provisions requiring periodic payment of verdict damages for at least medical malpractice cases and 12 other states have statutes which address the issue of periodic payment of damages. (See Health Care Liability Alliance and American Tort Reform Association web sites.)

2. Forensic economists and lawyers often use the term *life expectancy* in a casual manner. Courts will typically provide instructions to jurors which require that the claimant's preinjury life expectancy be considered in the period over which injury-related encumbrances, such as life care, are to be paid. However, a life expectancy is a single, point-in-time, estimate of the number of years to an individual's age of death, subject to an underlying distribution of annual probabilities of survival, which may be substantially altered after a personal injury. As such, this paper will avoid use of the term life expectancy, referring instead to *increased mortality probabilities*.

3. Providing certain conditions are satisfied, Internal Revenue Code #130 allows a personal injury or wrongful death claimant a federal exemption for distributions paid from a periodic payment annuity contract. Individual state statutes normally grant an exemption to the claimant, as well. However, this advantage exists for structured settlement annuity contracts in all states, whether or not they have structured judgment laws.

4. The claimant is assumed to have a standard mortality rating for a female at age 60. The methodology used here is consistent with *Rohring v. City of Niagara Falls*, 638 N.E.2d 62 (N.Y. 1994), *Schultz v. Harrison Radiator Div. Gen. Motors Corp.*, 90 N.Y.2d 311, 317-318, 660 N.Y.S.2d 685, 683 N.E.2d 30, and *Troy Bryant, & c., Respondent, New York City Health and Hospitals Corporation, Appellant. and Kurt Depradine, & c., et al., Respondents, v. New York City Health & Hospitals Corporation, Appellant.*, July 1, 1999.

5. Lawrence M. Spizman and Elizabeth Dunne Schmitt (2000) have argued that the plaintiff bar has engaged in rent-seeking under the New York structured judgment statutes. That issue is not addressed in this paper but will be addressed in a future paper. While there are circumstances in which a plaintiff's attorney's fee may be increased somewhat by the New York structured judgment laws, much of the argument in favor of rent-seeking appears to hinge on a misunderstanding of the actuarial implications of the New York statutes.

6. How insurance companies function under New York's structured judgment laws is an issue the authors intend to take up in a future paper. Of some 30 life insurance companies currently selling structured settlement annuity contracts, less than six offer a contract which satisfies New York's structured judgment statute. Thus, a limited number of companies have a vested interest in maintaining the system in its current form and may be able to obtain higher prices for their products than would be the case in an open competitive environment.

7. The Society of Actuaries publishes mortality adjusted discount rates and these data could be used directly for the life contingent elements of damages.

8. The process of adjustment might take the form of a motion to take judicial notice or an agreement between the parties to accept the life-rating of the insurance company for purposes of determining the attorney's fee. It is subject to legal determination if the claimant's attorney wants to oppose the life-rating classification, and this can even be challenged after the post trial hearing that sets the payment structure. It is, however, a process in which it is particularly important that the parties have access to qualified experts who understand the nature of actuarial adjustments.

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*Penelope Caragonne, Thomas R. Ireland, and Keith Sofka**

Comment: An Examination of Historical Net Discount Rates Relative to Medical Care Costs

Johnson and Gelles provide quite interesting data in their examination of historical net discount rates based on various elements in the MCPI. However, they make an assertion that is fundamentally flawed about the way the data they have compiled can be used to predict the future. The data they have developed indicates that net discount rates based on different components of the MCPA have varied widely in the past. On that basis, they argue that it would be in error not to base a calculation of future loss on the specific components of the MCPI that are required for "individual care."[1] This presumes that past trends in prices are reliable indicators of future trends in prices. Implicitly, Johnson and Gelles assume that what was true in the past will be true in the future. However, it does not follow that because rates of increase were different in the past, they will be reliable predictors of the future. Normal economic patterns would

***Penelope Caragonne, Cragonne & Associates, St. Louis, Missouri**
Thomas R. Ireland, Department of Economics, University of Missouri at St. Louis, St. Louis, Missouri
Keith Sofka, Caragonne & Associates, St. Louis Missouri