Structured Settlement Annuities, Part 1: Overview and the Underwriting Process

Craig J. Schmidt, MD; Richard B. Singer, MD

Methodology Article: 005M4

Structured settlement underwriting is the underwriting of medically impaired lives for the purchase of an annuity to fund the settlement. Other than risk assessment, structured settlement (SS) underwriting has little in common with traditional life insurance underwriting. Most noteworthy of these differences is the relative lack of actuarial data on which to base decisions about mortality and the necessity for prospective thinking about risk assessment. The purpose of this paper is to provide a foundation for understanding the structured settlement business and to contrast the underwriting of structured settlements with that of traditional life insurance. This is the first part of a two-part article on SS annuities. Part 2 deals with the mortality experience in SS annuitants and the life-table methodology used to calculate life expectancy for annuitants at increased mortality risk.

A structured settlement is an agreement, usually legal, between an injured party (plaintiff) and the party responsible for the injury (defendant), or the insurer, whereby damages are paid in cash in a series of payments over time rather than in a lump sum.1 A settlement agreement may be reached before or after trial litigation, and although the defendant may pay damages out of his or her own funds, both parties will usually agree for the defendant to purchase an annuity contract from a life insurance company to fund the agreement. Annuity contracts have advantages such as flexible settlement designs, competitive pricing, and favorable tax treatment due to the periodic payments to the plaintiff.

The settlement is called “structured” because the agreement often calls for a complex schedule of payments to the plaintiff.1

1. An immediate amount to reimburse the claimant for past expenses and lost income.
2. A scheduled periodic payment intended to provide for medical expenses and ongoing replacement of lost income. The payment schedule may be for a specific number of years (period certain), for the remaining life of the claimant (life contingent), or a combination of both. To protect against inflation, the payment schedule may include planned annual increases.
3. Future lump sums for predictable needs.
4. Attorney fees.

HISTORY

As indicated in the Table, there was little growth in the annual number of structured...
Number of Structured Settlement Annuities Issued by Calendar Year, 1967–95, as Reported to the Society of Actuaries

<table>
<thead>
<tr>
<th>Year</th>
<th>No. Issued</th>
<th>Year</th>
<th>No. Issued</th>
<th>Year</th>
<th>No. Issued</th>
</tr>
</thead>
<tbody>
<tr>
<td>1969–70</td>
<td>4</td>
<td>1981</td>
<td>2334</td>
<td>1989</td>
<td>48,009</td>
</tr>
<tr>
<td>1971–72</td>
<td>5</td>
<td>1982</td>
<td>5564</td>
<td>1990</td>
<td>54,506</td>
</tr>
<tr>
<td>1979*</td>
<td>211</td>
<td>1987</td>
<td>36,044</td>
<td>1995</td>
<td>77,347</td>
</tr>
</tbody>
</table>

* 450% increase (1979–80) coincides with change in tax law. Total 769,507 annuities issued 1967–95, average size $114,000. Annual increase 1990–95 was 7.3% (geometric mean).

Settlement annuities until 1979. In that year, the Internal Revenue Service issued a revenue ruling that clarified the federal tax treatment of settlement payments. The ruling established that if the annuity was not owned or controlled by the payee, all payments, including future investment income, would be received tax free. This tax advantage, plus rapid growth in the number and size of personal injury awards, set the stage for a rapid expansion in the number of annual settlement annuities issued from 1980 to 1995.1

ADVANTAGES

Structured settlement annuities have other advantages besides favorable tax treatment.1 Historically, plaintiffs have often mismanaged lump-sum settlements and found themselves without money to pay future injury-related expenses. With a structured settlement, plaintiffs receive a guaranteed stream of payments, tailored to their needs and wishes; and a substantial life insurance company will manage and invest the settlement award money.

Defendants, or their insurers, are pleased to close a claim, shift financial liability to a third party, and free up money that would otherwise have to be reserved. In addition, defendants purchase an annuity for the present value of future payments, in effect discounting the settlement amount. For example, $1 million in future benefits might be purchased for about half that amount, resulting in significant savings (to the defendant) over a lump-sum payment.

Of course, life insurance companies benefit from the profitable sale of annuities. And society sees an overall benefit because injured parties are compensated in a financially responsible manner that protects them from dependence on tax-supported social programs.

DISADVANTAGES

The one serious disadvantage of structured settlements is that once the annuity contract is finalized, the annuitant has no further control over the payment schedule. Some annuitants have experienced emergency financial needs (or wants) that were not anticipated by the original payment schedule. To address this need, so-called “factor” companies have recently been created by private entrepreneurs to offer annuitants immediate cash in return for the right to receive future payments. This controversial practice would seem to defeat the purpose of a structured settlement and has led to conflict among insurers, “factor” companies, annuitants, and the federal government. The latter is interested in this practice because it appears to violate the original provisions that granted tax-favored status to structured settlement payments. The outcome of this conflict is uncertain, and it will take some time to resolve this issue in the legal arena.

MARKET

In contrast to the large number of insurers active in the life insurance industry, only about a dozen insurers are major participants in the settlement market. This is an intensely competitive market.1 Typically, a settlement agent will broker one case to more than a dozen insurers, looking for the best annuity price. Therefore, the number of average sales
per case underwritten by an individual insurer are very low, which tends to discourage insurers to enter this market, unless they are willing to take substantial financial risk to gain market share.

Structured settlements are also long-term liabilities, so insurer financial strength is an important consideration in the settlement market. Settlement agents, and plaintiffs, have been sensitized by the well-publicized solvency failures of several major settlement insurers. So an A+, or better, rating by AM Best is almost a requirement to do business.

Finally, structured settlements are large dollar liabilities and thus require substantial commitment of insurer surplus and resources. The average case structured for an annuity is for several hundred thousand dollars, but many exceed one million dollars. Insurers may be unwilling or unable to make the necessary long-term reserves from surplus or to commit other resources to participate.

**AGENCY SYSTEM**

As the settlement industry grew, an agency system gradually evolved to unite defendants, plaintiffs, and life insurance companies. Typically, negotiating attorneys will contact one or more settlement agencies, who will then broker the medical records of the injured plaintiff, for the purpose of medical underwriting, to various settlement insurers. This agency system is now quite extensive with dozens of independent agencies with branch offices in all major cities.

Settlement agents are highly specialized and often actively participate in settlement negotiations. Using personal computers and insurer-supplied rate software, they can design various settlement options at different prices to facilitate a settlement agreement. Agents are compensated by commission from the insurer selling the settlement annuity.

**SETTLEMENT INJURIES**

The three most common settlement categories are personal injuries, particularly brain and spinal injuries from accidents, workers' compensation injuries, and injuries from medical malpractice. The most frequent settlements (and sizable amounts) are related to "bad baby" cases, in which brain injury occurs at the time of birth, resulting in cerebral palsy. In addition to injuries, many of these claimants have serious coincidental health problems, often severe enough to merit a decline in life insurance underwriting, but still requiring underwriting and actuarial consideration in settlement underwriting.

**PRICING**

A single premium immediate annuity is typically used to fund the structured settlement. Because of intense insurer competition, annuity pricing is very important for sales. The most important factor in determining price is the assumption of future earnings on the invested reserves. If the insurer is optimistic about future earnings, annuity price rates will be lower. If the insurer is pessimistic, price rates will be higher. Bonds are a common investment vehicle for reserves, so rising interest rates in the financial markets tend to lower annuity price rates, whereas falling interest rates tend to raise them.

Also important is the underwriting assessment of mortality. As with life insurance, most annuitants have standard mortality and straightforward annuity pricing. However, if an underwriter's review of the medical records suggests substandard mortality and the contract has a life contingent element, there is less risk of future payments, and the price will be lower. This situation is exactly opposite from life insurance, so settlement agents tend to emphasize poor client health. As noted above, there is no "decline" category in settlement underwriting, and settlement underwriters must address specific mortality in this high-risk category.

Compared to that of life insurance, the margin for error is less in settlement mortality assessment. Although the life insurer has the future option of reclassifying (lower) a substandard mortality risk and can depend
on policy lapse rates for progressive lessening of the benefit at risk over time, the substandard annuity remains in force with no change in the initial estimate of mortality risk. And most settlement contracts include an inflationary element to protect against erosion of future buying power, a situation that can compound an inappropriate underwriting decision. Thus, the initial assessment of mortality risk is very important for settlement underwriting.

Finally, after financial and underwriting considerations, a margin for expenses and profit is then added to determine the final price.1

EXPECTED STANDARD MORTALITY RATES

There is a wealth of experience data for setting standard mortality rates in life insurance, but this is not the case for structured settlements, particularly at industry outset when there was no experience. Clearly, this heterogeneous group of injured and unhealthy individuals, with many seriously ill under the age of 20, has little in common with traditional life insurance populations or the relatively long-lived annuity population. Thus, most insurers have used average population mortality data to approximate mortality expectancies for this group, until such time as experience studies have accumulated enough data to use the group's mortality experience to set expected mortality rates. Part 2 of this article contains data on recent structured settlement annuitant mortality and a critique of life-table methodology for the calculation of life expectancy.4

UNDERWRITING PROCEDURE

Medical Records

While the life insurance underwriter usually has the opportunity to obtain as much information as needed to make a decision, the settlement underwriter must make good often inadequate, incomplete, and even obsolete information.1 This is because plaintiff attorneys control the flow of medical information, and if certain material might be prejudicial to their client's case, the settlement underwriter will not be able to obtain it. Also, when opposing attorneys do agree to meet with a settlement agent, it is generally at the last minute, and not infrequently on the courthouse steps before the trial. At that time, any available medical records are sent by facsimile to the settlement underwriter. Because delays in response can disrupt negotiations, settlement underwriters often need to make a quick decision on less than ideal medical information.

In addition, settlement underwriters have to be prepared to deal with information that has been specifically selected by plaintiff attorneys to portray their clients favorably, hoping to maximize the claim.1 Thus, plaintiff expert witnesses tend to emphasize morbidity and downplay mortality. Any medical reports from defendant expert witnesses tend to take the opposite tack. The settlement underwriter must remain objective and consider the bias of the medical examiner, or whoever chose the medical reports submitted for appraisal.

With this in mind, it would seem logical to just offer standard, or conservative, ratings for all. However, the competitive nature of the settlement business prevents this. Because other companies will be bidding for the same case, the settlement underwriter must make a reasonable and aggressive mortality assumption, from the available information, in order to sell the annuity.

Risk Assessment

As with life insurance, the settlement underwriter looks for anything in the medical record that might affect mortality. Obviously this includes the basic injury and associated complications, as well as coincidental medical impairments, such as heart disease, diabetes, cancer, etc, or risk behaviors such as smoking. But because the mortality risk of settlement annuities is exactly the opposite of that of life insurance—that the annuitant may live too long, rather than die too soon—the settlement
underwriter needs to consider two additional factors that are, unfortunately, intangible and subjective.

The first is a consideration of future reductions in mortality due to advances in medical science and technology.1 An important example, relevant to settlement underwriting, is the marked improvement in treatment strategies for spinal cord injuries in recent decades. Rehabilitation efforts and timely treatment and prevention of complications have significantly reduced mortality for spinal cord injuries and should continue to do so. Improving annuitant survival can have negative financial repercussions, so settlement underwriters need to be prospective, rather than retrospective, about risk assessment for medical impairments and injuries.

The second consideration is even more subjective: the impact on mortality of quality medical care. As a result of structured settlement resources, these individuals will have better access to medical care than most of the general population, and optimal medical care should have beneficial effects on mortality. Cerebral palsy is a condition whereby supportive medical care is absolutely essential treatment. To date, mortality studies for this group have been done on individuals who have not had optimal access to medical care. Thus, the settlement underwriter should exercise caution in applying reported mortality to cerebral palsy or any other injury or health impairment that might be favorably impacted by quality medical care.

### Adjusted Age

Because of the manner in which pricing must be done for various complex payment schedules, any rating for mortality must be presented in a form that can be quickly applied in a pricing formula by the agent. To do this, most settlement insurers use a single “adjusted age” or “rated age,” which is rather like a biological age.1 For example, a 30-year-old annuitant, given an adjusted age of 40, is assumed to have about the same life expectancy as a 40 year old. In this example, an adjusted age of 40 indicates a reduced life expectancy compared to a standard 30 year old and would be considered a substandard offer with a reduced annuity price.

Actuaries create tables for settlement underwriters that can be used to convert mortality assumptions into an adjusted age. Typically, there are separate tables for males and females, with actual annuitant age along the vertical axis, mortality assumption across the horizontal axis, and adjusted ages in the body of the table. Mortality assumptions include mortality ratio (MR), excess death rate (EDR), or simply estimated life expectancy, with separate tables for calculating an adjusted age from the chosen form of mortality assumption. The intercept of actual age and the degree of selected excess mortality yields a specific adjusted age generally related to MR and not EDR. The relationship between mortality and adjusted age is directly proportional, and the relationship between adjusted age and annuity price is inversely proportional.

As has been pointed out in a previous article,5 there are reasons to prefer EDR over a constant MR for calculating life expectancies and annuity reserves. Applying a constant MR multiple to estimated future mortality tends to underestimate life expectancy, particularly at the older entry ages. And underestimating life expectancy and premium reserves can have serious financial repercussions to the issuing company. This topic is examined in Part 2 of this paper.4

### Assigning Mortality

Another difficult task for the settlement underwriter is determining mortality assumptions, or “ratings,” for specific injuries and health impairments of a severity that precludes life insurance. As noted above, there is a lack of settlement population mortality, and life insurance ratings are insufficient (“decline”) and clearly inappropriate for this very different population. Again, the settlement underwriter must look to the general population for mortality data—in this case, pub-
lished biomedical literature. Here again, there are problems in application. Data tend to be scarce and based on limited numbers of impaired individuals. And, most important, the mortality experience described often extends well into the past and is not reflective of future expectations in this age of medical advancement.

For those injuries and impairments of a degree that might qualify for life insurance, such as mild diabetes mellitus or heart disease, the settlement underwriter can look to life insurance MR values to delineate risk. However, any rating for a settlement annuitant, based on insurance data, needs to be adjusted downward because of the greater mortality inherent in the settlement population, as compared to the insurance population.

Agent Communication

Once the settlement underwriter has determined an appropriate adjusted age, it is transmitted, by telephone or facsimile, to the requesting agency, where it is incorporated into insurer-provided software for pricing various payment schedules.

CONCLUSION

Other than medical assessment of risk, structured settlement underwriting has very little in common with life insurance underwriting. The relative lack of actuarial data and the need to be prospective about risk assessment require the settlement underwriter to have an extensive knowledge of medical matters and no shortage of good judgement and instincts in order to be successful. It will take many years to determine whether underwriting decisions and actuarial planning have been successful in terms of profit or loss.

We would like to acknowledge Roger H. Butz, MD, for providing a foundation for this paper with his lecture on Medical Underwriting of Structured Settlements, given at the 1994 Board of Insurance Medicine Course, and his presentation of a workshop on structured settlements at the 1989 meeting of the Association of Life Insurance Medical Directors of America.

REFERENCES