Frequently Asked Questions Regarding 2013 Underwriting Adjustments

What caused 21st Services to adjust its life settlement tables and underwriting methodology?

The Tables – There were three main drivers of the adjustments to our base tables. Most important was information we collected on settled lives (i.e., insureds that actually sold their policies). Settled lives show significant differences in mortality experience than lives in our overall database, especially in the early durations after a policy is settled initially. We also updated our tables to reflect new mortality improvement studies and to reflect better the more recent mortality experience we have seen (e.g., 2005-2011).

The Underwriting Methodology – We used advanced statistical methods in conjunction with A/E calculations to analyze the data we collected over nearly 15 years on individual conditions. This allowed us to reset debits and credits at that level. In 2008, we made adjustments at the overall impairment level without making changes in underwriting for individual conditions (e.g., cardio vascular disease, dementia).

How could 21st Services say that its A/E was near 100% last year and still make these changes?

We historically calculated our A/E using every underwriting that we completed as is a customary practice in our industry. The expected deaths in the A/E calculations were based on the "Adjusted-to Current Methodology" as defined by the LEPr group in 2011. The results of this calculation suggested that our mortality assumptions were suitable for our overall population. However, we found two significant issues with this approach. Most important, not every underwriting we have completed is related to lives that actually settle their policies. Second, the life settlement population has changed over the years and more recent experience is different from previous years. Therefore, even though our overall population A/E is relatively high, when we looked at more recent underwritings (2005-2011) and focused on settled lives, the A/E was not acceptable. Our new methodology deals with these issues directly.

What about A/E; can one number explain LE performance?

We feel strongly that it cannot. There are many issues:

- A one number A/E is an average so the long LEs offset the short ones. For a population of 1,000 people with an LE of 120 months, some will die in the first few months and some will die well after 200 months. Given this wide distribution of actual deaths, the one number A/E cannot truly measure performance. Other one number approaches are also fraught with this error. We believe breaking the A/E by duration or percentile yields more useful information on the accuracy of LEs.

- A/E is backward looking and does not take into account the future curve yet to be experienced. Some ask why two LE providers can have a similar A/E when their LEs are so different. This is possible if the first part of their mortality curves is similar but not the later durations.

- A/E converges to 100%. Sooner or later everyone dies and at that time A/E will be 100%. This is why a durational A/E is needed. This will show an LE provider's performance at each period, not as a single number.

- A/E can be easily manipulated. By choosing assumptions, for example an inordinately high IBNR, A/E can be moved significantly. We have also seen where the simple choice of calculating the A/E based on the earliest vs. the most recent LE vs. a 1/n methodology incorporating all LEs will produce markedly different results.

Your on-line presentation provides the improvements in your tables and underwriting lead to an average lengthening of median life expectancies by 19%. Why do some of the life expectancy reports I'm receiving reflect increases or decreases in life expectancies by substantially more or less than 19%?

The 19% is an overall average. As we made significant adjustments to credits and debits, the overall percentage of change in life expectancy will be driven by the particular conditions of the insured. For example, insureds with heart impairments that are being treated with proper medication and who demonstrated good exercise tolerance at medical exams and are leading active lifestyles will generally see significantly greater than 19% extensions in life expectancy. On the flip slide, individuals with certain impairments will see a substantial decrease in life expectancy.

In 2008, since our changes were made at overall level of impairment (e.g., multipliers 1 to 3, 3 to 5, 5 to 7), the changes in life expectancies were more consistent. Today, someone that used to be a 4 multiplier may now be a 1.5 multiplier or a 12 multiplier after applying our new credits and debits. Therefore, the change in life expectancy may be dramatic.

I see that there are some significant decreases in the multiplier assigned to a particular case even if the impairments listed are not the ones you have suggested lead to increased longevity. What's up with that?

The initial multiplier on our certificates is not comparable directly with the ones on the old certificates. When we made the adjustments in 2008, we included an additional factor based on the insured's overall level of impairment which would generally have the impact of reducing the effective multiplier. However, we could not consistently reflect that in the multiplier itself because of the nature of our adjustments. For example, the additional factor for multipliers 1-3 was different of that for multipliers 3-5. Accordingly, two insureds with the same condition would be debited differently depending on their overall level of impairment. There was no good way to be consistent in expressing this on the certificate.

Our approach now is to apply debits and credits at the individual condition level wherever possible and to explicitly recognize co-morbidity. This way, a 1.0 multiplier represents our view of an individual whose health is average for their age. This was not the case before.

After 21st Services announced its changes to the methodology and tables, it began issuing new LE reports on the 2013 Tables. Then, certain clients received an email stating that additional changes were necessary. Was there as second change to the methodology and tables?

No. When we began issuing LEs using our new 2013 Tables and underwriting methodology we identified three programming errors that caused LEs to be incorrectly generated. One error impacted all certificates issued. The other two only impacted some certificates. We promptly notified any clients who received incorrect certificates and re-issued corrected versions. All LEs issued after the correction have a "Form" number at the bottom of the LE. LEs issued on the 2013 Table that do not have a "Form" number were issued prior to the errors being corrected and should be discarded.

What is the difference between Tertiary and Standard LEs?

We recognized in the past through our Down-the-Curve LE product that anti-selection exists when an insured sells their policy. The Tertiary LE is a more explicit and complete recognition of that anti-selection. We first built our 2013 base mortality table reflecting the experience of all insureds in our database who had considered settling their policies. Since our experience data shows clear and significant differences in mortality between our overall database and settled lives (people who actually sold their policies), we adjusted our mortality table to reflect the differences between those two cohorts. The adjustments are quite steep (start at a low % and grade to 100%). The Standard LE reflects our base table with full adjustments for anti-selection. In the case of a Tertiary LE, we use the same adjustments but they are less severe as we take into account the time that has passed from the initial settlement date to the current LE request date. After three to six years (depending on age and gender), the effects of the anti-selection adjustments are gone and the mortality rates for the two LEs are identical.

Copies of a sample Tertiary LE and corresponding Standard LE for the same insured can be found at the links below.

https://www.21stservices.com/articles/SampleTertiary.pdf

https://www.21stservices.com/articles/SampleStandard.pdf

Why isn't there a greater difference between the actual life expectancy on a Tertiary vs. Standard LE?

Most of the mortality table is the same for Tertiary and Standard LEs. The only difference occurs in the earliest durations due to the effects of anti-selection. Therefore, for most insureds, the numerical representation of the life expectancy estimate may not be dramatically different between a Tertiary and Standard LE. However, the expected deaths in early durations are markedly different. These differences are very important to note when pricing or valuing a policy. Simply inserting the mean or median life expectancy into a standard pricing model (using a back-solving approach that does not reflect the difference in mortality curves for Tertiary vs. Standard LEs) will not capture the true difference in the LEs. We suggest clients look at the difference in mortality curves and expected deaths per annum chart on our LE certificates to see the true difference. Each LE we issue has the full mortality curve for the life printed on the LE certificate and the curve is provided in .xml format so clients can price policies using the actual curve vs. using some adjustment to the 2008 Valuation Basic Table.

What "Settlement Date" should be provided to 21st Services when ordering Tertiary LEs?

If you have knowledge that an insured has sold multiple policies, we suggest using the settlement date of the most recently sold policy to reflect the anti-selection that occurs when an insured or a representative thereof decides to sell a policy. If the policy was premium financed and foreclosed upon or otherwise not subject to a traditional life settlement transaction, we suggest using the date when the insured or a representative thereof no longer had control of the policy as the settled date. Please note, your Tertiary LE will include the settled date that you provided to 21st Services, even if other clients may have provided different settlement dates for the same insured.

Why do you also provide a Standard LE with a Tertiary LE order?

Clients generally do not know if insureds are currently selling policies in the secondary market. If the insured is selling policies, a Standard LE with full anti-selection may be more appropriate. Thus, clients expressed an interest in receiving both LEs so they could assess the potential impact if the insured is currently settling policies even though the client may own a policy on the life of the insured that settled many years ago. The Standard LE is provided for no additional charge.

Will 21st Services provide more data and information on regarding the 2013 adjustments?

Yes. On the date the changes were announced, we uploaded a presentation discussing the changes on our website. That presentation will remain on the site. We are also in the process of aggregating more data and information to make available to clients on our website in the coming days and weeks. Please check our website periodically for any updates.