



MAKING PROGRESS In Life Underwriting

By Hank George, FALU, CLU, FLMI
President, Hank George, Inc.

Life insurers continue to develop and refine new strategies to accomplish senior management priorities and realize favorable mortality outcomes.

Senior life insurer management has three overarching priorities where underwriting is concerned: controlling new business acquisition costs, improving application-to-issue cycle time, and making risk appraisal as customer-friendly as possible.

To satisfy these mandates, chief underwriters are obliged to weigh the pros and cons of a diverse range of resources. This article will review key aspects of those initiatives which attracted the most attention in 2011 and continue to be on our radar going forward.

PREDICTIVE MODELING

This is the hottest topic in risk assessment. Two quite distinct model-based strategies have come into recent prominence, utilizing laboratory tests and personal purchase records, respectively.

According to Betsy Sears, executive vice president at ExamOne, “lab/paramed modeling aims to extract actionable information from familiar and well-accepted data sources.”

To generate these models, lab findings coupled with paramedical measurements on previously-underwritten cases were matched to mortality as reported on the Social Security Database. The output is a risk score flagging “best” and “worst” cases, based on the interplay of these variables.

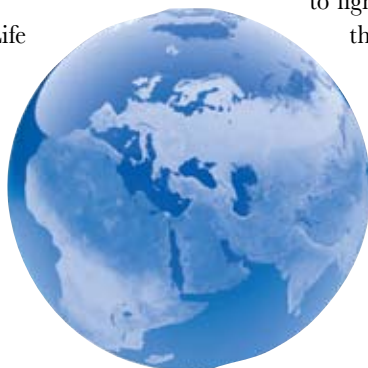
These models present a challenging conundrum for underwriters. The notion that a “normal” test outcome never equates to excess risk goes out the proverbial window because scores can be substantially impacted by the multivariate impact of both “high normal” and “low normal” results.

Applicants satisfying preferred criteria based on conventional assessments may get high (unfavorable) scores; conversely, individuals that would traditionally be disqualified from preferred status can emerge with scores suggesting they are ideal risks.

It is anyone’s guess as to how these realities will play out with producers and reinsurers.

With predictive models based on personal purchase histories, the premise is that how one spends disposable income can be extrapolated to health habit and lifestyle issues bearing on insurability.

Preliminary results from the 2011-2012 Life Underwriting Requirements Survey raise serious questions about the potential adverse implications of this practice. Three of four respondents expressed concerns for basing underwriting decisions “largely upon inferences.” They also believe this type of predictive modeling will be “poorly perceived” by both customers and insurance regulators.



UNDERWRITING ENGINES

It remains to be seen if either of these modeling modalities will gain traction in our increasingly producer-sensitive and customer-centric industry.

Straight-through processing of life applications with some degree of automated decision-making has come to be known as using an underwriting “engine.”

One in five life insurers have an engine up and running. Most of the rest are somewhere between investigating their options and acquiring this technology.

The best evidence for the surge in engine-mediated risk assessment is the proliferation of eager providers. This is predictable, considering that most carriers have or likely will seek out an engine from an external source, rather than build one internally.

When queried as to their reasons for investing in straight through processing capabilities, most chief underwriters cite three motives: reducing cycle time, lowering operating costs, and improving underwriting data.

Prominent underwriting consultant Susie Cour-Palais (SelectX, U.K.) maintains that “system flexibility and business user control are paramount.” She goes on to say that “systems must have design tools that put development and update of the knowledge base in the hands of non-IT savvy business users.”

One of the major challenges with engines is developing underwriting rule sets that allow them to make as many decisions as possible without bouncing too many cases to underwriters for resolution. Some insurers have been taken aback by the productivity and cost implications of having to divert their best underwriters from case work, for an extended interval, to accomplish this essential step.

Another aspect of engine deployment that has major implications for insurers is the quantity and quality of the business data output. A great deal of intelligence should be gleaned from sifting and winnowing these data. Provider offerings that facilitate access to key statistical parameters should enjoy a considerable competitive advantage.

Recognizing the enormous value conferred by human underwriting prowess, most insurers embracing engines seek to lighten the workloads of their underwriters, rather than use engine productivity to reduce their staff. Lighter workloads allow underwriters to spend more time reconciling complex risks and this in turn improves mortality results.

Most mainstream carriers see high volumes of young adult and middle-aged applicants. Because complex, multifactorial medical histories are uncommon under age 50, these are the risks most amenable to engine-



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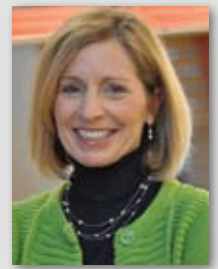
SUSIE COUR-PALAIS



CAROL DINEEN



ERIC HJERPE



BETSY SEARS

driven decisions. No doubt there are many insurers capable of handling 50 percent or more of their new business in this fashion; and then more so as engine proficiency is enhanced.

Engines are particularly well-suited to the triage of life business acquired through alternative distribution channels such as banks, direct mail, Internet sales and so on. With the advent of super-simplified products, insurers are poised to (finally) make considerable headway with banks. This is because the vast majority of decisions can be made within the time frame tolerances of other banking transactions.

SUPER-SIMPLIFIED LIFE

A recent informal survey of leading life insurers found that over 60 percent either already have or are in the process of developing what we call “super-simplified” life products. Their use is intrinsic to carriers’ oft-spoken intentions of doing more business in the middle market, because they allow for more competitive pricing than traditional simplified issue.

There are four generally-accepted benchmarks for super-simplified:

- Not more than 7 to 14 risk-related questions, as compared to upwards of 60 for fully-underwritten business
- Assessments based largely or wholly on rapid-acquisition assets such as pharmacy records, MIB and motor vehicle reports, plus teleinterviews that are ideally completed at point of sale
- Three classes: preferred risk, standard and (typically) one aggregate substandard class
- Six figure amounts of coverage to age 40, progressively lesser amounts thereafter

One obstacle in super-simplified is that underwriting manuals are designed for fully-underwritten business, making it difficult for underwriters to use them when appraising these cases. We will undoubtedly soon have manuals written specifically for super-simplified to avoid bogging down the underwriting process.

PHARMACY RECORDS

At present, nearly 80 percent of life carriers deploy pharmacy records in life underwriting. Virtually all the others are at some stage of vetting this asset.

Rx data use has skyrocketed because of its relatively low cost, instant accessibility and demonstrated protective value. Undoubtedly, the absence of significant consumer pushback has emboldened previously-reluctant carriers to add Rx profiles to their underwriting armamentaria.

The most obvious payoff from prescription-filling histories is pinpointing an individual who experienced a transient “memory lapse” on the insurance application as regards his use of a drug for a serious disorder. Another major contribution is identifying nonadherent individuals. This refers to those who do not faithfully take their medications as instructed by their physicians.

The leading cause of “therapy-resistant” high blood pressure is failure of patients to be compliant with medical treatment. Thus, it is easy to see why blatant evidence of noncompliance on Rx histories will impact our appraisal of hypertensive applicants.

Now that pharmaceutical reports have emerged as a major routine screening requirement, efforts are underway to embellish their value. One way this is accomplished is by integrating prescription histories into rule sets for engines.

Angela Bolduc, director of marketing and strategic accounts at Milliman Intellicript, advises that “rule sets interpreting Rx data are now being used to bring consistent decisions to straight-through processing.”

In this context, the medication selected by the attending physician, the dose prescribed and other variables increase underwriters’ capacity to make the best decisions. These factors mesh with other risk aspects and are a perfect fit for automated resolution of less complex cases.

Pharmacology is a complex science. Prior to the advent of Rx profiles, underwriters did not need an in-depth understanding of the intricacies of specific pharmaceuticals. Now

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they must grapple with such matters as off-label (unapproved) prescribing, medication effects on tests and so on.

Off-label medication use accounts for nearly one in every four prescriptions written and is most prevalent with psychiatric drugs. In many cases, the real reason a physician opts to prescribe a given drug has little to do with the fact that the drug happens to be classed as an antidepressant or antipsychotic.

Innocuous medication effects on laboratory tests that have no risk implications may lead underwriters to order unnecessary requirements. At the same time, some Rx-altered laboratory results are associated with serious underlying pathology.

Fortunately, adjuvant resources for underwriters are now at hand to address these and other knotty issues arising in the wake of widespread pharmacy record use.

ELDER MARKET

Having just turned 65, this underwriter is relieved that the industry's definition of an "elderly applicant" has been nudged back to age 70 and over!

It was once considered courageous to insure individuals over retirement age. Today, many carriers expect their underwriters to ascertain what constitutes an insurable nonagenarian.

Many basic insurability risk factors for younger applicants literally invert when attention shifts to elders:

- Underweight matters more than obesity
- Low blood pressure is more important than moderately elevated readings
- Low, rather than high, cholesterol impacts survival

■ Current cigarette smoking pales by comparison with the applicant's aggregate exposure (defined as "pack-years" of consumption)

Landmark epidemiological studies show us that the two most insidious factors associated with premature demise after age 70 are cognitive dysfunction and frailty.

Properly structured and capably executed, teleinterviews provide far more risk information than traditional modes of history-taking. A major teleinterview provider, Carol Dineen, president, MRS, Inc., says "teleinterviewers need to be on the lookout for clues to poor memory or recall, as well as indicators of physical decline."

Over 70 percent of insurers writing elder business use tests to screen applicants for cognitive and frailty limitations.

The most widely-used cognitive screening tools are the Delayed-Word Recall and Clock Drawing tests. A newer option dubbed MCAS (Minnesota Cognitive Acuity Screen) may be the most productive option readily available for this purpose. MCAS testing has been done on hundreds of thousands of long-term care (LTC) insurance applicants and reports from LTC insurers speak highly of its efficacy.

Approximately 90 percent of insurers screening for premature physical decline

[Predictive modeling] is the hottest topic in risk assessment.

rely upon TUG (TimedGet-Upand Go) to identify frail applicants. Clinical studies have demonstrated that abnormally slow TUG performance closely correlates with functional limitations and foreshortened survival.

The other two prominent frailty markers involve questioning applicants about their capacity to perform basic and

instrument activities of daily living, abbreviated ADLs and IADLs respectively. These can be covered both over the telephone and paramedically.

There are other considerations associated with increased mortality at older ages. It is likely some insurers will see them as enhancements in teleinterview-based screening.

Social isolation has attained RED FLAG status for adversity in the gerontology literature. The same is true for average hours of nightly sleep, frequency of nocturia (getting up at night to urinate) and even the number of teeth an elderly person has managed to retain!

UNDERWRITING TOOLS

In a December point/counterpoint essay in *On the Risk*, a leading chief reinsurance underwriter argued that insurers should

OUTSOURCED UNDERWRITING

continue using the treadmill stress test (TST). That is, he said, unless a viable alternative should happen upon the scene.

All other medical underwriting tests pale by comparison with the TST in terms of out-of-pocket cost. Insurers pay in excess of US\$ 750 per test and even so they struggle to get treadmill ECGs done on a timely basis.

Based on early data from the 2011-2012 Underwriting Requirements Survey accessible at this writing, over 70 percent of chief underwriters concur on four points where treadmill stress test is concerned:

- It can be replaced by less costly options
- It is too risky over age 70
- Brokers take their business to insurers not requiring TSTs
- All TST screening will stop within the next five years

If we expect to realize our mandate for customer-friendly underwriting, treadmill tests, chest x-rays and resting ECGs as well must no longer be routine requirements at any age.

Fortunately, their demise is perfectly time because we now have the essential alternative alluded to above. It is a blood test called NT-proBNP that reflects the effects of pathological stretching of the heart muscle. Countless medical studies affirm the link between NT-proBNP elevation and circulatory disease. And an insurer can do 30 of these tests for the cost of one treadmill stress test!

Eric Hjerpe, director of risk management for Allstate Life, has conducted countless studies aimed at reconciling the pros and cons of underwriting requirements. He does not mince words in his

assessment of NT-proBNP: “NT-proBNP enables us to identify potentially significant heart disease before symptoms become apparent. Conversely, a favorable

NT-proBNP reading allows us to improve our underwriting offers on many cases.”

Screening for cotinine (a nicotine component, detecting tobacco use) and cocaine via urine and oral fluid remain staples in risk assessment.

A handful of companies test for marijuana despite the fact that there is no substantial evidence occasional

Cannabis sativa indulgence by adults confers significant excess mortality risk. With the advent of medicinal marijuana use, the rationale for this screening becomes even more dubious.

Despite recent controversy over PSA screening, the majority of insurers continue to use this test routinely, mainly at age 55 and over. Given the potential for antiselection by someone recently discovered to have significantly-elevated PSA, the merits of insurer screening are indisputable, at least up to age 70.

Insurers need to share PSA test results with either the insured or his physician. The main reason is that the threshold for an elevated test used by insurance laboratories is significantly higher than the point at which many urologists would do a prostate biopsy. Therefore, applicants' physicians should have access to our findings to properly care for these individuals.

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The substantial majority of insurers using teleunderwriting have their interviews done by service firms. This trend is explained primarily by the formidable obstacles to developing an in-house program.

Outsourced underwriting is expanding in terms of number of providers and volume of business being done. Insurers use these services during periods of peak business flow and to deal with large quantities of informal “quick quotes” requested by brokers.

Just a few years ago, the prospects for outsourcing APS (medical record) summaries showed promise. Unfortunately, this has not caught on to the extent it might have.

One stymieing factor is that some providers hastened to compete solely on price, resulting in per-case fees too low for them to do thorough summaries and still make a profit.

In all the areas reviewed here, we see that the pace of change in 21st century underwriting continues unabated.

For insurers, one thing is clear: “ya snooze, ya lose!” ♦



HANK GEORGE

Hank George is self-employed as a mortality/morbidity risk author, educator and consultant. He has 40 years of underwriting experience, has written some 400 articles, papers and books, publishes a free monthly e-newsletter called Hot Notes (1,700 readers in 55 countries) and remains, as ever, a die-hard “Cheesehead.” For more information, visit www.hankgeorgeinc.com.