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# The Road to Acceleration

## A Recap of the Accelerated Underwriting Program Development Seminar

By Anji Li

It is in the news everywhere. It is a trending hot topic. Some argue it is the future of the life insurance industry. The topic so many actuaries are hungry for: accelerated underwriting.

Accelerated underwriting has been in the life insurance space for the past several years, yet the Accelerated Underwriting Program Development seminar held in Tampa, Florida, on May 22, 2019, and sponsored by the Society of Actuaries (SOA) Product Development Section, was the first of its kind.

Underwriters, actuaries, consultants, marketers and data scientists all took turns at the wheel to help navigate the road to developing an accelerated underwriting program. Doug Robbins served as a moderator and kept the event on track throughout the day.

The wide variety of disciplines demonstrated the vast breadth that accelerated underwriting programs span. From project management to regulatory implications, from marketing to monitoring, the seminar served its purpose of outlining best practices and addressing the challenges in the development of accelerated underwriting programs.

This article summarizes key takeaways from the 10 sessions covered in the Accelerated Underwriting Program Development seminar.

### WHAT GOT US HERE

The history of accelerated underwriting, although relatively short, has gone through tremendous shifts. First up at the wheel was Lisa Seeman from Munich Re, who provided a market overview.

In 2010, Seeman told us, the market was dominated by simplified issue programs. Tools in use at the time included the Medical



Information Bureau, motor vehicle records and prescription histories. Premiums were offered at substandard ratings for policies up to \$100,000 in face amount.

Around 2014, a handful of accelerated underwriting programs, as we know them today, appeared in the market. They still offered notably higher premiums than traditional, fully underwritten products, but not to the same degree as simplified issue programs. Simple predictive models were used, and policies up to \$250,000 face amount were offered.

Fast-forward to today, where most carriers now offer an accelerated underwriting program. More sophisticated predictive models, coupled with an increasing variety of data sources, are used. Most carriers issue policies up to \$1 million in face amount, offering the same premiums as the fully underwritten counterparts.

The expansion of accelerated underwriting programs does not stop here. Carriers continue to increase eligibility toward higher face amounts, older issue ages and more risk classes.

With these disruptive changes, the momentum of innovation moved much faster than the standardization of terminology. As such, there is no standard industry definition for accelerated underwriting programs.

However, commonalities across carriers exist. The majority look to accelerate the underwriting process by forgoing invasive techniques and replacing them with data-driven tools. Despite this paradigm shift in underwriting, carriers look to achieve the same mortality outcomes through accelerated underwriting as through traditional, full underwriting techniques.

#### WHAT THE PATH IS

A significant portion of the seminar was dedicated to the path most companies follow to implement an accelerated underwriting program. The sessions ran the gamut, from project management and underwriting process changes to marketing and regulations considerations.

#### Project Management

A road trip begins with a map; a project begins with a plan. After the market overview, Jeffrey R. Huddleston from Deloitte led a project management session.

Huddleston says that first, one must answer the question, what is the business problem that the accelerated underwriting program is looking to solve? Determining the goal of the program is a vital piece that carriers struggle with, and it is often overlooked. The goal serves as a guiding principle throughout the development of the program.

In addition to defining a goal, there are a few other critical success factors in the development of a program:

- **Invest in program management.** The interdisciplinary nature of accelerated underwriting programs presents intricate dependencies and demands technical expertise. Thus, savvy and technically versed project management is crucial to the success of the program.
- **Plan for data issues.** With great power placed in the data comes a great potential for setbacks. More time should be allocated to data issues than would normally be expected.
- **Engage regulators early on.** Regulation is a continuing and growing subject in accelerated underwriting. As such, regulatory and reporting concerns should be addressed as promptly as possible.

#### Underwriting

Following project management, a natural next step in the program development is examining underwriting. Catie Muccigrosso from RGA covered this topic.

The discussion revolved around the effects the program may have on the underwriting workflow, the life insurance application and the underwriting rules. Accelerated underwriting programs challenge the current paradigm, Muccigrosso explained. Not surprisingly, underwriters are deeply involved in the development of the program.

A shift in paradigm calls for new processes and principles. Therefore, training for underwriters and for agents is necessary.

Underwriters will move away from traditional underwriting principles and will shift toward a broader range of expertise, including data analytics and their mortality implications.

Meanwhile, agents will adapt to new communication and marketing materials. The marketing and communication strategy set forth by the insurer impacts the potential misrepresentation of risks.

It is critical for both underwriters and agents to be on board with the program if it is going to achieve success.

#### Data and Models

The most regarded aspect of an accelerated underwriting program, and often seen as the engine, is the tools used, namely the data and the models. Data scientists Niall Maguire and Hareem Naveed from Munich Re examined various data sources and models in the context of accelerated underwriting.

Medical and nonmedical data sources were discussed. Examples included attending physician statements, prescription history, credit-based scores, physical activity, lifestyle data and dental records.

According to Maguire and Naveed, the models then tie the data sources together to generate an outcome related to an underwriting decision. Examples of models used by carriers include smoker predictor models and rules-based automated underwriting.

The tools may present surprising correlations that challenge traditional risk assessment. The discussion covered a study on

physical activity data that suggests active smokers have better mortality than sedentary nonsmokers. The question is still unresolved.

### Pricing

Once the data and models are ready to go in the accelerated underwriting program, the next question is what the price should be. Chris Fioritto from Munich Re and Craig E. Hanford from Swiss Re discussed the development of pricing assumptions, with a focus on mortality risk.

Mortality assessment, the presenters claimed, may begin with identifying the risk triage techniques used. The market is currently dominated by single triage programs that aim to accelerate the best risks, while kicking out poor risks into traditional, full underwriting. The decision to accelerate or kick out is rules-driven for most carriers. Other emerging techniques include double triage or nontrriage programs.

Accelerated underwriting challenges actuaries to assess risks through a different lens. In addition to the risk triage technique, a number of other factors impact mortality. These include shifts in the sentinel effect of the applicant and the strength of application and data sources used.

To quantify or assess the mortality risk of a program, a misclassification approach has been widely adopted. For each given applicant or policyholder, the accelerated risk class is compared with its full underwriting risk class. The results are summarized in a misclassification matrix by risk class.

Three misclassification approaches were discussed. Although the aggregate mortality risk is the same, each approach results in different mortality assumption by risk class. Hence, careful consideration must be used when selecting an approach to price accelerated underwriting programs.

Even if traditional full underwriting mortality outcomes are achieved, mortality neutral does not mean profit neutral. Pricing a program must also take into account how distribution shifts may lower premiums collected and, thus, profit margins.

Another consideration for profit margins is expenses. A cost-benefit analysis may be used to weight underwriting expense savings against mortality costs. Since expense savings are on a case count basis and costs on an amount basis, a cost-benefit analysis is particularly useful to define age and amount limits for accelerated underwriting.

### Monitoring

Contrary to its property and casualty (P&C) counterpart, life insurance claims experience takes years to emerge—a driving reason why life insurance has lagged P&C in the use of innovative data and models. Therefore, other mechanisms needed to be developed to monitor the accelerated underwriting programs before claims experience emerged.

Joseph Taylor Pickett from RGA discussed auditing approaches. He explained these approaches can be broadly categorized as pre- and post-issue.

The monitoring gold standard is random holdouts, conducted pre-issue and considered the only true comparison between accelerated and full underwriting. Post-issue reviews pose a less invasive but also less accurate approach. Commonly used tools include attending physician statements, MIB Plan F and Rx Recheck.

Auditing results are often summarized in a misclassification matrix. Similar to the approach used in pricing, it compares the assigned risk class between accelerated underwriting with that assigned by the auditing approach.

Mortality slippage, commonly stated as a percentage load relative to fully underwritten mortality, may be quantified based on the various degrees of misclassification.

Monitoring results can be used in a wide variety of applications. They can be used to validate assumptions, to inform course corrections in the program, to enable prudent expansion or to identify additional data elements to capture.

### Marketing

As with other life insurance products, sales and marketing fuels the drive into the market. A session on marketing was covered by Nathan E. Eshelman from Protective Life and Laura Morrison from Sagacor.

To develop a successful program, Eshelman and Morrison argued, it is imperative to see accelerated underwriting through the eyes of the agency, the agents and the consumers. Although each group has its own priorities and considerations, a commonality across all is the goal to reduce cycle time, a fundamental benefit of accelerated underwriting programs.

Accelerated underwriting is typically positioned in the market as quick, less invasive to client and cost saving. However, one must keep in mind that the back-end development will shape the messaging of the product sold in the market.

## Regulation

Throughout the road to acceleration, regulatory considerations play a critical role in swerving the direction of accelerated underwriting programs. Susan K. Bartholf from Milliman Intellicript and Mary J. Bahna-Nolan addressed this topic.

Principal-based reserving (PBR) has been on the minds of actuaries for a long time. The regulation was developed years before the recent rise of accelerated underwriting programs. Hence, before the Valuation Manual Amendment Proposal Form (APF) 2018-17, accelerated underwriting programs in the PBR landscape were left ambiguous, Bartholf and Bahna-Nolan explained.

APF 2018-17 provides guidance on developing a valuation mortality assumption for accelerated underwriting programs. Insurers shall rely on third-party or retrospective studies to demonstrate support for the valuation assumption.

A recent regulatory development is the New York Circular Letter, issued in January of 2019. The letter, which is based on data collected since 2017, is addressed to all life insurers and outlines the regulatory requirements of uses of external data.

The principles set by New York regulators had profound implications in the development of accelerated underwriting, with many questions left unanswered. For instance, regulators may consider triage to full underwriting as adverse action needing disclosure to the policyholder. If this is the case, how can random holdouts be properly explained to the applicants?

The story does not end here, Bartholf and Bahna-Nolan said. Other states outside of New York are closely following these issues. At the same time, the current regulatory boundaries continue to be pushed with the increasing availability of new data sources, such as wearables and other tracking devices, along with increasing reliance on algorithms.

## WHAT LIES AHEAD

What will the future hold for accelerated underwriting? To answer this, Ron Schaber from Munich Re and Joseph Taylor Pickett from RGA peered down the road ahead.

According to Schaber and Pickett, increasing data availability can be expected. New sources of data continue to emerge, while data currently in use moves toward higher hit rates. Digital

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health data, such as electronic health records (EHRs), is of particular interest to life insurers. EHRs are a highly anticipated technology that may enable acceleration for a broader range of ages.

The tools and the science behind them will continue to evolve and expand; and as consumers become more engaged, sales through nontraditional channels will increase. The result: optimization and expansion of accelerated underwriting programs.

## THE NEXT STEP

The road to acceleration has been both swift and windy. With a history dating back fewer than 10 years, accelerated underwriting programs have already disrupted the life insurance industry and will continue to do so.

Nearly seven hours of discussion in the Accelerated Underwriting Program Development seminar confirmed the need for an interdisciplinary approach in setting a program. As evidenced throughout this summary of the seminar, accelerated underwriting programs have a far-reaching scope and impact, making it imperative for experts of all areas to be part of the journey.

Although the next stopover for accelerated underwriting is uncertain, one thing is clear: Cross-functional collaboration is crucial to navigate the continually changing and expanding ground of accelerated underwriting. ■



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