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The Bulletin Board Reinsurance Section Research Update

By Ronora Stryker

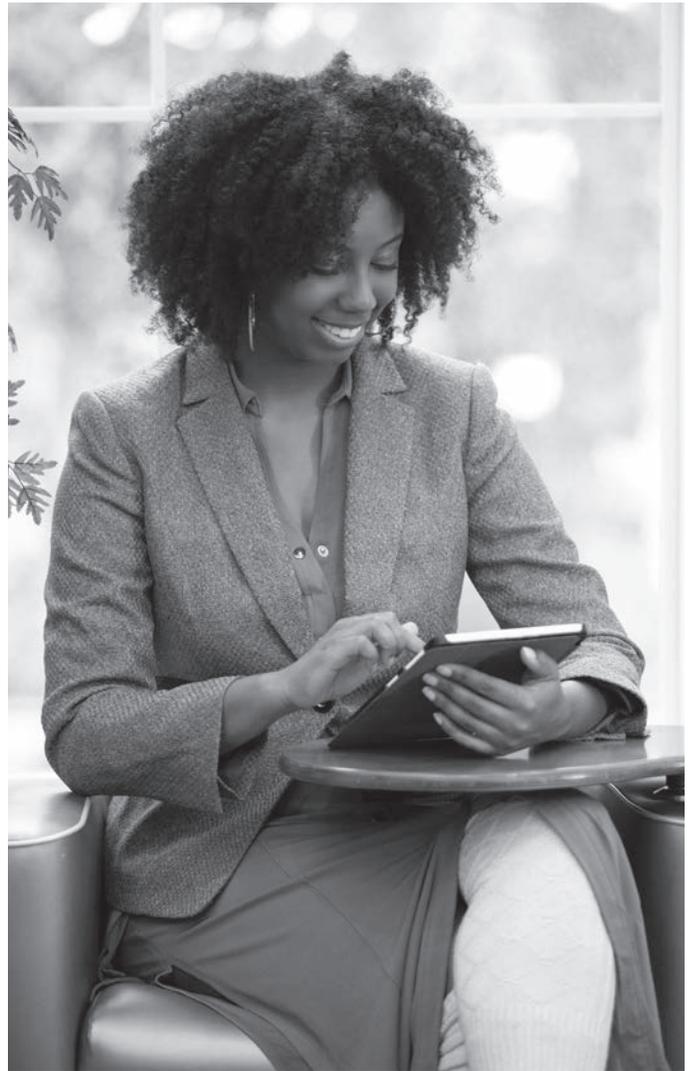
Did you know that each year the Reinsurance Section Council (RSC) allocates a significant amount of Section revenue to research for its members? In fact, the RSC has assembled a dedicated group of volunteers in a research team to oversee the process to ensure relevant and quality studies are produced. Currently the team is developing research project ideas in topic areas such as reinsurance and principle-based reserving, as well as managing and measuring extreme event risk. Here is an update, as of September 2019, on the Reinsurance Section's sponsored research in process and studies recently completed.

CURRENTLY IN PROCESS

“Predictive Modeling in Life Insurance Underwriting.” To promote a deeper understanding of predictive modeling and how it impacts underwriting, this study uses a case study approach to create a resource to help practitioners develop, evaluate, implement and monitor predictive models in underwriting. This project is in the early stages; a request for proposals has been issued to find an individual or consultant to perform the study.

“Mortality Improvement Trend Analysis.” To help actuaries develop and set mortality improvement assumptions, the focus of this project is on better understanding the key drivers of mortality improvement and how they vary. Work has yet to begin on the project; the Reinsurance Section is currently seeking bids from individuals or entities to perform the research.

“Life Reinsurance Treaty Recapture Provisions.” In today's environment recapture provisions are an important industry topic. In this study, recapture provisions from reinsurance treaties are compiled and analyzed, highlighting the reasons each specific provision is of particular importance to direct-writing companies and/or to reinsurers and how current practice differs from the past. Additionally, the researcher(s) will identify the underlying objective each party to the transaction is aiming to achieve with the recapture provision, what obstacles have been



encountered and what solutions have been found. Work is in the late stages; the research report is undergoing final review.

“Company Practice Survey of Individual Life Insurance Accelerated Underwriting.” A company practice survey was administered to both direct writers and reinsurers in early 2019. Among the areas addressed were the structure of accelerated underwriting programs, how programs are monitored, how accelerated underwritten business is performing relative to expectations and how companies are considering accelerated underwriting cohorts in the context of VM-20 assumption setting. The survey is closed, and the aggregation and analysis of the responses complete. Currently the report is being drafted and is targeted to be released by the end of the year. Preliminary

survey results are available. <https://www.soa.org/resources/research-reports/2019/accelerated-underwriting/>

RECENT PUBLICATIONS

“A Machine Learning Approach to Incorporating Industry Mortality Table Features in Mortality Analysis.” This research applies a machine learning approach that enables a practicing actuary to incorporate key industry mortality table features into insured mortality analysis. <https://www.soa.org/resources/research-reports/2019/2019-machine-learning-approach/>

“Considerations for Predictive Modeling in Insurance Applications.” This study examines how best to implement predictive modeling into relevant areas of actuarial practice. <https://www.soa.org/resources/research-reports/2019/considerations-predictions-insurance-applications/>

“Earnings Emergence Insurance Accounting under Multiple Financial Reporting Bases.” This expands a 2015 research report on earnings emergence under multiple financial reporting bases. The original report looked at deferred annuities and term life insurance under U.S. SAP, U.S. GAAP, IFRS, CALM and market-consistent balance sheet approaches. This expanded report adds universal life and includes updates for principle-based U.S. statutory reserves, targeted changes to U.S. GAAP and the new IFRS for insurance products. <https://www.soa.org/resources/research-reports/2018/earnings-emergence/>

“Mortality Analysis for 1898–1902 Birth Cohort.” This report examines the old-age mortality trajectories for the five extinct (or nearly extinct) U.S. cohorts. <https://www.soa.org/resources/research-reports/2018/birth-cohort/>

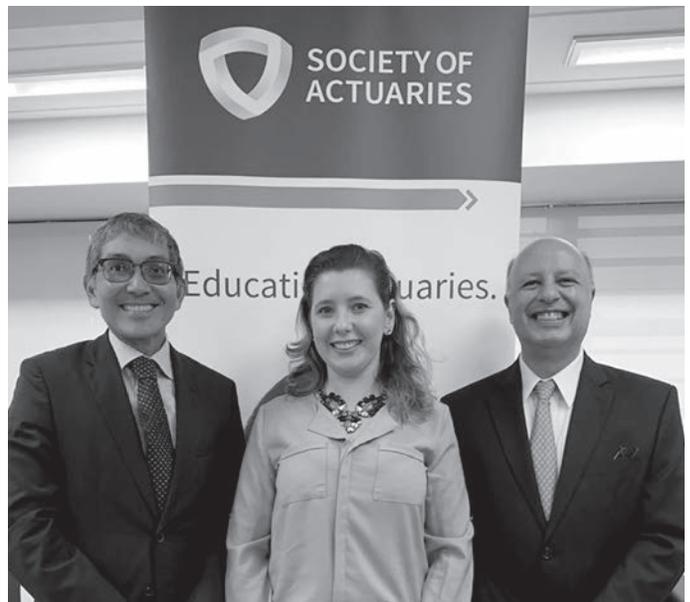
“The Impact of Genetic Testing on Life Insurance Mortality.” This study develops a tool for insurers to examine the potential impact of a ban on using genetic testing in life insurance underwriting. <https://www.soa.org/resources/research-reports/2018/impact-genetic-testing/>

REQUEST FOR RESEARCH IDEAS

Do you have an idea for a research topic you would like to see the Reinsurance Section consider for funding? If so, we want to hear from you! For more information, please contact Jean-Marc Fix, chair of the Reinsurance Section’s research team, or Ronora Stryker. ■



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The SOA, in partnership with the Brazilian Insurance Association, held a three-day conference on IFRS17 & Solvency II in Sao Paulo, Brazil, July 15–17 2019. From left to right: Ronald Poon-Affat, FSA (co-editor of *Reinsurance News*), Maris Gosmann, MIBA (co-presenter & University Lecturer), and Carlos Arocha, FSA (lead presenter at the event).