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Underwriting Around the World

Al Klein, FSA, MAAA, Milliman
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Agenda

- Background of project
- Goals of study
- Findings
 - Underwriting types
 - Underwriting tools
 - Market limits
 - Regulatory issues
 - Potential new approaches to life underwriting
 - Measuring the impact of underwriting on mortality experience
 - Underwriting as a profession



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Background of Project

- Project came out of the International Actuarial Association (IAA) Mortality Working Group (MWG), although members of the Underwriting Subcommittee extend beyond the MWG
 - See end of presentation for list of Subcommittee members
- Sent questionnaire June 2012
- Countries responding through 2013 studied
- Caveats
 - Data from some countries doesn't fit precisely into categories
 - Not all countries responded to all questions
 - Followed up with all countries to make sure we did not mis-interpret their responses, but did not hear back from all



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Goals of Study

- Not to influence or standardize loadings for particular medical conditions
- Three intended outcomes:
 - Provide a centralized source of data on underwriting practices that may encourage countries to use methods of underwriting they had not previously considered
 - Provide a centralized source of underwriting terminology to enhance communication between practitioners in different regions and between actuaries and underwriters
 - Enable actuaries to better understand and assess the life insurance underwriting risk evaluation tools available as they relate to mortality



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16 countries participated

- Australia
- Canada
- Croatia
- India
- Israel
- Italy
- Japan
- Latin America/Caribbean
- Mexico
- Norway
- Russia
- South Africa
- Sweden
- Switzerland
- United Kingdom (UK)
- United States (US)



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Findings



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Underwriting types

- Focus was on three types of underwriting:
 - Fully underwritten: Medical or paramedical exam and medical questions
 - Simplified issue (SI): No medical or paramedical exam, but medical questions
 - Guaranteed issue (GI): No medical or paramedical exam and no medical questions



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Underwriting types

	Fully Underwritten	Simplified Issue	Guaranteed Issue
Australia	35%	25%	40%
Canada	74%	20%	6%
Croatia	3%	97%	
India	80%	20%	
Israel	95%	5%	
Italy	20%	80%	
Japan	30%	50%	20%
Latin America/Caribbean	74%	20%	6%
Mexico	15%	85%	
Norway	N/A	N/A	N/A
Russia	13%	87%	
South Africa	89%	11%	
Sweden	50%	50%	
Switzerland	70%	30%	
United Kingdom	5%	80%	15%
United States	74%	20%	6%



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Underwriting types (cont'd)

- Wide range of usage:
 - Fully underwritten ranged from 3% (Croatia) to 95% (Israel)
 - Simplified issue ranged from 5% (Israel) to 97% (Croatia)
 - Guaranteed issue was offered by six countries, with the percentage ranging from 6% to 40% of all underwritten business



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Underwriting types (cont'd)

- A few interesting practices:
 - On SI and/or GI, some countries limit the first year death benefit to natural causes of death
 - Australia on GI and South Africa on SI have a pre-existing conditions exclusion
 - India uses nonmedical underwriting for cases that get kicked out of the automated rule-based engine
 - Sweden can deny coverage on a nonmedical basis if the rating is greater than 150%



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Underwriting Questions Used

- Most frequently (by all 12 of responding countries)
 - Name
 - Full personal medical history
 - Height
 - Weight
 - Five used by 11 countries:
 - Address
 - Gender
 - Family history
 - Date of birth
 - Occupational details
- Least frequently (by only 1-2 responding countries)
 - Language (South Africa)
 - Marital status (South Africa, UK)
 - Drivers license number (Canada, US)
 - Average distance traveled per year (South Africa)
 - Banking details (Australia, South Africa)
 - Highest educational qualifications (Norway, South Africa)
 - Sexually transmitted disease (UK)
 - Exposure to HIV (Israel, UK)



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Underwriting Tools Used

- Most frequently (by 90%+ of responding countries)
 - Blood test
 - Urine test
 - EKG/EST
 - Statement from an attending physician
 - Financial verification
- Least frequently (by only 1-2 responding countries)
 - Oral fluid (Canada and USA)
 - Motor Vehicle Record (Canada and USA)
 - Pharmacy histories (USA)
 - Ultra Sound Scan (Croatia and Italy)
 - Age verification using electoral database records (India)
 - Passport copy, visa type and entry stamp (Latin America/ Caribbean)
 - Special questions for Politically Exposed Persons who may have a threat of kidnapping or assassination (Canada and Latin America)



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Sample of Some of the Unique Underwriting Requirements

- Norway – NEMNDA
 - Committee for health assessment provides guidelines on how different health conditions affect mortality and future disability and disease risk to ensure equality in treatment of insurance applicants
- South Africa – ASISA (Association of Savings and Investments South Africa) and Astute
 - Two industry registers
 - ASISA keeps track of previous insurance loadings
 - Astute keeps track of previous insurance



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Sample of Some of the Unique Underwriting Requirements (cont'd)

- United Kingdom – GPR (General Practitioners Report) and SAR (Subject Access Request)
 - Two physician's reports
 - GPR requested when extent of disease not clear, but generally takes at least 20-30 days to receive
 - SAR can be requested subject to Data Protection legislation, more detailed history and quicker turnaround time, but more controversial
- United States – Fraud detection
 - Vendors have different offerings, still being refined as fraud evolves



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Challenges with Underwriting Tools

- Compliance with EU unisex requirements
- Laboratory services vary widely from tight quality controlled state of the art environments to questionable handwritten reports
- Uneven quality of data
 - India doesn't even seek medical records
 - There is no APS retrieval service for any Latin American/Caribbean countries
- Telephone application success varies considerably
 - Huge success for some with respect to time and cost, however, for others customers can be reluctant to share personal, medical and financial data to a person on the phone fearing future personal risk of extortion or kidnapping



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Market Limits on BMI

Body Mass Index Limits		
Obesity class	Current (WHO)	Proposed Asian (IDI)
Underweight	< 18.5	< 18.5
Normal	18.5 – 24.9	18.5 – 22.9
Overweight	25.0 – 29.9	23.0 – 24.9
Obesity class:		
I	30.0 – 34.9	25.0 – 29.9
II	35.0 – 39.9	> 30.0
III (Morbid obesity)	> 40.0	



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Rank of Geographic Areas by BMI

Group	BMI region
5 (Lightest)	East Asia, including Southeast Asia
4	Indian subcontinent
3	Switzerland, Europe (low risk), Middle East, Rest of Africa
2	United Kingdom, Canada, Ireland, North & Eastern Europe, Australia, New Zealand, Rest of the Americas, South Africa (females)
1 (Heaviest)	USA (males and females), South Africa (males)

Source: Swiss Re



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Insurance Findings with BMI

- Mortality is higher with the highest BMIs, except at the older ages where both mortality and morbidity are highest with the lowest BMIs
- Disability is higher at all ages with overweight and obese people



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Regulatory Issues

- EU – Equal treatment between men and women in pricing, premiums and underwriting effective 21 December 2012
- India – Minimum insurance amount available increased 1 October 2013
- Israel – Potential legislation regarding equal opportunities for disabled applicants
- Mexico – Discrimination law regarding disability approved in 2012



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Genetic Testing

- Prohibited – Israel, Mexico
- Prohibited unless applicant provides – Italy
- Cannot require genetic test, but if applicant has taken one, it can be requested
 - Australia, Canada,
 - Sweden and Switzerland (only above certain sum insured limits),
 - UK (only above certain sum insured limits or if Huntington's disease found)
- Not used, but not prohibited
 - Japan, Latin America/Caribbean, Russia, USA



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Potential New Approaches to Life Underwriting

- Preferred underwriting
- Tele-interviewing and tele-underwriting
- Electronic submission of forms
- Expert underwriting systems
- Use of national databases (e.g., prescription databases)
- Special “older age” underwriting (e.g., cognitive and functional testing)
- Use of social media



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Measuring the Impact of Underwriting on Mortality Experience

- Experience studies
- Protective value studies



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Underwriting as a Profession

- Countries that have a formal profession include:
 - Australia – The Australian Life Underwriters and Claims Association (ALUCA)
 - Canada – The Canadian Institute of Underwriters (CIU)
 - India – The Association of Insurance Underwriters (AIU)
 - Mexico – Asociacion Mexicana de Seleccionadores (AMS)
 - United Kingdom – The International Underwriting Association (IUA)
 - USA – The Association of Home Office Underwriters (AHOU)



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Underwriting Subcommittee

- Al Klein, Chair (US) – Actuary, MWG
- Michael Eves (Switzerland) – Actuary, MWG
- Cynthia French-Poteet (US) – Underwriter
- Dieter Gaubatz (US) – Actuary, MWG
- Paul Lewis (South Africa) – Actuary, MWG
- James Louw (Australia) – Actuary
- Val Munchez-van der Wagt (US) – Underwriter
- Brian Ridsdale (UK) – Actuary, MWG
- Rafael Shabetai (US) – Underwriter



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Thank you!



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Bio – Al Klein

- Consulting actuary with Milliman's Bannockburn / Chicago office since 2009.
- Primary responsibilities include performing industry experience studies and helping clients with mortality- and underwriting-related issues, including older age, simplified issue, and preferred.
- Also worked for a large stock life insurance company where responsible for experience studies across all lines of business and other life insurance companies, a reinsurer, and consultant, where responsible for strategic planning, product development, and traditional reinsurance aspects of the business.
- Bachelor of Science degree in Actuarial Science and Finance, University of Illinois, Urbana.
- Frequent speaker at industry meetings and currently involved with a number of industry activities, including:
 - Co-Vice Chair and SOA representative for the Mortality Working Group (MWG) of the International Actuarial Association (IAA)
 - MWG Underwriting Sub-group chair
 - SOA Mortality and Underwriting Survey Committee
 - Joint American Academy of Actuaries (AAA) / Society of Actuaries (SOA) Preferred Mortality Oversight Group
 - Joint AAA / SOA Underwriting Criteria Team
 - 2014 SOA Valuation Basic Table (VBT) Team
 - SOA Longevity Game Development Team
 - Longer Life Foundation Advisory Board



Contact information: (312) 499-5731, al.klein@milliman.com

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Questions

(For Any of the Presentations)



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