

Underwriting Around the World

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Introduction

In June 2012, the Underwriting Sub-Committee of the International Actuarial Association Mortality Working Group (IAAMWG) solicited countries through a questionnaire to provide information on the medical and non-medical (e.g., financial, lifestyle, etc.) individual life underwriting practices for their mortality business. In addition, a completed questionnaire with responses for the USA was sent to provide a better understanding of the types of responses desired. We offered countries to just “cut and paste” the USA response if the particular response was also appropriate for them. Responses received through 2013 are included in this report.

Not all countries answered all questions and it is very possible that, despite the example, not all questions were answered correctly. While the report is as complete as can be, follow up has yet to take place and a few follow up questions are likely needed. These are outlined in the report.

There were three intended outcomes of this research:

- To provide a source of centralized underwriting terminology to enhance communication between practitioners in different regions and between actuaries and underwriters.
- To provide a central source of data that may encourage countries to use methods of underwriting that haven’t previously been considered.
- Because the mortality of portfolios of insured underwritten lives is heavily influenced by the level and type of underwriting, the research was intended to enable actuaries to make more educated evaluations of the various risk evaluation tools on insured mortality and to allow comparisons among countries.

It is important to note that it was **not** the purpose of this project to standardize underwriting loadings for particular medical conditions nor to influence underwriting practices. Each country has unique market conditions which may mean that one method of underwriting may be more viable, practical or sensible than another. The members of the Underwriting Sub-Committee are well aware that the method and level of underwriting is often a commercial decision, based on a cost benefit analysis and local market conditions, made by insurance companies operating in a particular market.

It is the intention to publish these findings at the ICA Conference in 2014. Presentations at other venues can be arranged following this meeting.

The Underwriting Sub-Committee would like to thank the participating countries for their time and effort, for without them this analysis would not be possible. The Underwriting Sub-Committee would also like to thank Gina Ritchie for helping to make this report look like one cohesive document.

Underwriting Sub-Committee

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

Executive Summary

This report is based on information received from 16 countries. As the report is divided into eight sections, a summary of each section will be provided below.

1. General Information

- The complete list of participating countries is shown.

2. Underwriting Types

- Fifteen countries responded to this section.
- Fully underwritten business is underwritten with at least a medical or paramedical exam and a set of medical questions. The volume of fully underwritten business ranged from 3% in Croatia to 95% in Israel.
- Simplified issue business is underwritten without a medical or paramedical exam, but with at least some medical questions. The volume of simplified issue business ranged from 5% in Israel to 97% in Croatia.
- Guaranteed issue business is underwritten without a medical or paramedical exam and without medical questions. Six countries indicated having guaranteed issue business, with the percentage ranging from 6% to 25%.
- A few interesting specific practices include:
 - Australia on guaranteed issue and South Africa on simplified issue have a pre-existing conditions exclusion provision.
 - India uses nonmedical underwriting for cases that get kicked out of the automated rule-based engine for reasons such as build, occupation, etc.
 - Sweden can deny coverage on a nonmedical basis if the rated mortality is greater than 150%.
 - On simplified issue and/or guaranteed issue, some countries limit the death benefit in the first year on natural (non-accidental) causes.
- Business written with a medical exam ranged from 3% in Croatia to 90% in South Africa.
- Countries were queried on a detailed list of questions that could be asked/required in the underwriting process. Eleven countries responded to this. The only questions all twelve indicated they used were:
 - Name
 - Full personal medical history

3. Underwriting Tools

- The application form, used by all countries, ranges from a full/standard application to a shorter form with fewer questions for simplified issue (SI) or rules engine processing or one without medical questions for the guarantee issue market.
 - Rules based engines, not mentioned consistently as an underwriting tool, reflect usage in underwriting cases that have been reduced to numerical values and can be handled under automatic underwriting processes.
- Blood, urine and EKG requirements are utilized in every country that responded, but not on every case.
- Typically higher levels of coverage warrant more thorough investigation for comprehensive evaluation.
- The most common requirements (used by at least 90% of the countries) include:
 - Blood test
 - Urine test
 - Electrocardiogram and/or Exercise Stress Test (EKG/ECG)
 - Statement from an attending physician
 - Financial verification

- Underwriting tools used by only 1 or 2 countries include:
 - Oral fluid (screens for nicotine, cocaine, GGT and HIV and typically used with SI underwriting) – Canada and USA
 - Motor Vehicle Record (MVR) – Canada and USA
 - Pharmacy check – USA
 - Ultra Sound Scan – Croatia and Italy
 - Age verification using electoral database records – India
 - Passport copy, visa type and entry stamp – Latin America/Caribbean
 - Canada and Latin America have additional questions for Politically Exposed Persons who may have a threat of kidnapping or assassination
 - An echocardiogram can be requested for underwriting evaluation in Russia
- Blood and urine testing primarily focus on liver and kidney function, lipids, blood glucose levels, cotinine detection and presence of HIV.
- Inspections are mostly held directly with the customer; however, additional sources may be contacted depending on the level of coverage.
 - Ten of 15 countries verified income through tax records and rarely through banking, credit or other sources.
 - Some countries follow the reinsurer’s guidelines in determining the investigation level.
- Several countries use market registers
 - The Medical Information Bureau (MIB) is used in Canada, Mexico, the USA and some areas of Latin America – Information is available for 7 years
 - Norway has a national register to identify those previously denied coverage or accepted coverage on special terms (ROFF) – Information is available for 10 years
 - South Africa uses an industry compiled database that collects information on loaded underwriting cases.
 - The UK has a number of services to choose from, of which insurers can select some or all. Since no one register contains all records, it is often prudent to gain membership in each.
- Some unique underwriting requirements include:
 - Canada
 - Attending Physician Statement/Report (APS/R) – Only a summary is provided by the doctor with supporting documentation, unless it is a high net worth case, in which case the insurer can request the full medical file.
 - Inspection Report – The person collecting the information also contacts banking, legal and credit providers for their history with the applicant.
 - Croatia
 - Ultrasound scan – Allows the doctor to look more closely at organs such as the heart or womb to detect problems. It is usually used for large amounts of coverage.
 - Internist examination – Used when the extent of a disease or impairment is not known.
 - Financial Records – Generally drawn by the reinsurers.
 - Israel
 - Personal Medical Attendant’s report (PMAR) – Easy to get and used frequently as specialists’ reports are more difficult to get and often require a lengthy wait.
 - Tele-underwriting – Not widely used, except for two companies and for mortgage business.

- Italy
 - Attending Physician Statement – Additional information from a trusted doctor nominated by the company or from the family doctor.
 - Abdominal Ultrasound – Imaging procedure used to examine the internal organs of the abdomen, including the liver, gallbladder, spleen, pancreas and kidneys and the blood vessels that lead to some of these organs.
 - Financial questionnaire – Different covers (e.g., personal, business) are underwritten with different questionnaires.
- Norway
 - Investigation – Use a full set of medical questions, but no exam except for high sum insureds. Also, applicant cannot be sick at the time of application.
 - NEMNDA
 - The purpose of the committee for health assessment (NEMNDA) is to provide guidelines on how different health conditions affect mortality and future disability and disease risk, and provides insurance recommendations on how this should be dealt with in relation to an insurance application. The purpose is to ensure that insurance applicants shall be treated as equally as possible when buying insurance and that other policyholders should not bear the cost of new policyholders with disproportional high risk.
 - NEMNDA prepares updated guidelines that provide guidance about how different health conditions affect or do not affect mortality, morbidity and disability. The guidelines are regularly updated.
- South Africa
 - ASISA register – The Association of Saving and Investments South Africa (ASISA), an industry body, compiles a register of all lives assured in the market who have been previously loaded for insurance.
 - Astute – A South African company that keeps an industry wide database that checks the existing policies in the market for the life assured. The database is known as Astute.
 - Lipid screen – Generally only total cholesterol and HDL (High Density Lipoproteins) are used.
 - Urine specimen – Used for drug profiling (cannabis, cocaine and other drugs like Ecstasy) and as an indicator for diabetes (glycosuria) or cancer (haematuria).
- Sweden
 - Hepatitis screen A, B, and C used.
- United Kingdom
 - General Practitioners Report (GPR) – Requested when the extent of the disease or impairment is not known, but can be costly and generally takes at least 20-30 days to receive.
 - Subject Access Request (SAR) – Used as an alternative to a GPR, whereby the insurer uses Data Protection legislation to request, on behalf of the applicant, a full copy of the medical records held by the GP. Use is controversial, but this provides a fuller medical history and faster turnaround time.
- United States
 - Fraud detection – Vendors, including MIB, are refining their fraud detection services as fraudulent activity increases.

- There are many challenges, including:
 - Complying with European Union (EU) unisex underwriting standards starting 21 December 2012.
 - Information and documentation for the risk assessment process is often difficult to collect in some markets because it is often neither systematically retained nor detailed.
 - India rarely seeks records due to record keeping concerns.
 - There are no Attending Physician Statement (APS) retrieval services in any of the Latin American/Caribbean countries.
 - In a few countries, there is no vendor support, standardized paramedical services, testing centers for medical examinations, financial paper trails nor trustworthy sources.
 - Laboratory services vary widely between countries from tight quality controlled state of the art environments to questionable handwritten reports reflecting results that may not have been properly analyzed.
 - A majority of the countries in Latin America do not have access to an insurance laboratory and have to make do with lab reports that may not be of the best quality.
 - Motor vehicle recordkeeping is not available in every market so this type of hazard data is not always able to be captured.
 - Not all countries experience success with the telephone application model as 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.

4. Market Limits

- This section focused on market limits as they pertained to Body Mass Index (BMI).
- BMI is measured as $\text{weight}/(\text{height})^2$ and, according to the World Health Organization, obesity is defined as a BMI of 30 and higher.
- The International Diabetes Institute (IDI) modified this for the smaller Asian population, considering a BMI of 25 and higher as obese.
- By region, East Asia, including Southeast Asia, has the lightest population and the USA (males and females) and South Africa (males) have the heaviest population.
- Regarding insurance:
 - Mortality is higher with increasing BMI, except at the older ages where low BMI has the highest mortality and morbidity risk.
 - Disability is higher in overweight and obese people at all ages.

5. Regulatory Issues

- Countries were asked about any anticipated regulatory issues and whether genetic testing was allowed and done.
- Regulatory issue highlights:
 - EU – Equal treatment between men and women in pricing, premiums and underwriting.
 - 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.
- Genetic testing:
 - Prohibited – Israel, Mexico, Norway
 - Prohibited unless applicant provides – Italy
 - Cannot require genetic test, but if applicant has taken one can request it – Australia, Canada, Sweden (only above certain sum insured limits), 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

6. Potential New Approaches to Life Underwriting

- New approaches to life insurance underwriting could be summarized by the following. Note that some of these new approaches may be new for some countries but have been around for years in other countries.
 - Preferred underwriting
 - Tele-interviewing and tele-underwriting
 - Electronic submission of forms
 - Expert underwriting systems
 - Use of national databases (e.g., prescription histories)
 - Special “older age” underwriting (e.g., cognitive and functional testing)
 - Use of social media
- Specific country “new approaches” include:
 - India
 - Increased use of tele-underwriting
 - Increased use of social media information
 - Latin America/Caribbean and USA
 - Continued evolution of preferred underwriting (e.g., number of risk classes, debit/credit vs. knockout approach, allowance of exceptions)
 - Older age underwriting including use of cognitive and functional tests, a supplemental questionnaire and changes to the traditional underwriting levels of acceptance
 - South Africa
 - Shift from product innovation to process innovation
 - Increased use of tele-interviewing and tele-underwriting
 - United Kingdom
 - Increase rating on some individuals in order to lower pricing for others in independent market
 - Applications with limited underwriting questions to support certain distribution channels
 - Increased use of electronic underwriting systems

7. Measuring the Impact on Mortality Experience

- While some comprehensive studies measuring the impact of underwriting on mortality experience have been completed, very little of this work is typically available to the public.
- Mortality experience studies could be used to help determine the impact of various underwriting tools as underwriting requirements change by issue age and sum assured; however, this is not an easy task as other confounding factors come into play (e.g., age and whether income/health/amount applied for are related).
- Protective value studies (i.e., cost-benefit analysis) are completed more at the company level than the country level.
 - One exception to this is the USA where the Society of Actuaries commissioned a protective value study on potential new medical tests. Within this report, a methodology for establishing a cost-benefit analysis was provided.

8. Underwriting as a Profession

- All countries indicated the underwriter does the underwriting. While actuaries and doctors may be involved in some aspects of the underwriting process in some countries, neither actuaries nor doctors “underwrite” life insurance applicants.
- Countries that have a formal underwriting profession include Australia (ALUCA), Canada (CIU), India (AIU), Mexico (AMS), United Kingdom (IUA), USA (AHOU).
- Countries that do not have a formal underwriting profession include Croatia, Israel, Italy, Japan, Latin America/Caribbean (although some may belong to the AHOU in the USA), Norway, South Africa, Sweden, and Switzerland).
- Australia has formal continuing education requirements for two of the three membership levels within ALUCA.
- An underwriting designation is available through the Academy of Life Underwriting with the designation being a Fellow of the Academy of Life Underwriting (FALU). Study materials are currently only available in English.
- A diploma in underwriting is available from Ariel University in Israel.
- In the UK the Chartered Insurance Institute operates an examination and a diploma in Medical Underwriting requiring successful completion of a number of insurance examinations. For those who hold the relevant insurance examinations there is a requirement to undertake a specified and verified level of continuing professional development.
- Other than the above, there are no formal continuing education requirements for underwriters, but several third party providers and individual companies offer formal education programs and webinars for underwriters.

The following will provide the detailed results of each section in the survey.

1. General Information

Sixteen reports were received. One included multiple countries. The reports received include:

1. Australia
2. Canada
3. Croatia
4. India
5. Israel
6. Italy
7. Japan
8. Latin America/Caribbean
9. Mexico
10. Norway
11. Russia
12. South Africa
13. Sweden
14. Switzerland
15. United Kingdom
16. United States

2. Underwriting Types

We asked about the type of underwriting done in each country. We have broken down the responses by fully underwritten, simplified issue, guaranteed issue and other. The business for those indicating “non-medical” underwriting was placed in “simplified issue” in Figure 1. The definitions of all terms are provided in the Appendix to this report.

For this question, some countries provided percentages that added to less than 100%. For these countries, we proportionally increased the percentage for each category so that the percentages totaled 100%.

Figure 1 shows the usage of the various underwriting types by country. All responding countries (Norway does not have statistics for this information) write some fully underwritten business, but the percentage of this business varies greatly, from 3% in Croatia to 95% in Israel. All countries write simplified issue business, with the percentages again varying greatly. Six countries indicated that they wrote guaranteed issue business.

Figure 1 – Underwriting Types

	Fully Underwritten	Simplified Issue	Guaranteed Issue	Total
Australia	35%	25%	40%	100%
Canada	74%	20%	6%	100%
Croatia	3%	97%		100%
India	80%	20%		100%
Israel	95%	5%		100%
Italy	20%	80%		100%
Japan	30%	50%	20%	100%
Latin America/Caribbean	74%	20%	6%	100%
Mexico	15%	85%		100%
Norway	N/A	N/A	N/A	N/A
Russia	13%	87%		100%
South Africa	89%	11%		100%
Sweden	50%	50%		100%
Switzerland	70%	30%		100%
United Kingdom	5%	80%	15%	100%
United States	74%	20%	6%	100%

The following provides more details on some of the underwriting programs summarized in Figure 1.

Australia

- Fully, paramedical and nonmedical underwritten
 - Up to a 21 page personal statement is completed by the life to be insured.
 - All aspects of the life to be insured are considered depending on the type of cover being requested and sum insured.
 - Occupation, income, pastimes, financial and medical considerations are reviewed for covers like income protection and total and permanent disability (TPD), while pastimes, financial and medical only need to be considered in most cases for Death cover and Trauma/Critical Illness
 - High sums insured, for example over \$2.5 million for 45 year olds, will result in additional medical requirements such a HIV, MBA20 (fasting blood test) and Hepatitis B & C blood testing plus a brief medical exam – blood pressure, urine and height/weight check.

- Simplified Issue
 - Can range from 3 to 20 questions.
 - For employers and superannuation (retirement fund) schemes who offer insurance, a reduced number of questions are asked.
 - There is a limit to the amount of cover that can be accepted via simplified issue (\$1 million for Death & TPD, \$8,000 per month for income protection).
 - This member must answer all questions “no” to be able to be accepted under simplified issue. If they cannot, then they move onto a more detailed personal statement, as detailed above.
- Guaranteed Issue
 - This is mainly funeral insurance
 - First year is accident only cover and the full death benefit is paid thereafter
 - Sum assured is \$15,000 or less
 - It also includes other policies without underwriting. For these:
 - There is no personal statement, meaning that there are no questions referred to an underwriter to consider.
 - The cover includes a pre-existing clause, so any medical condition known (usually 5 years) prior to the commencement of the policy is not covered for the lifetime of the policy.
 - Coverage is often provided to protect loans.

Canada and United States

- Guaranteed Issue – The characteristics of guaranteed issue life underwriting include:
 - No or a few medical questions.
 - No medical or paramedical exam, no blood or urine specimen.
 - The applicant cannot be turned down for coverage, with a few exceptions. Generally the only circumstances where one can be turned down are:
 - The proposed insured doesn’t meet specific age requirements for the plan, or
 - The proposed insured currently is living in a nursing home or Long Term Care facility.
 - Small face amounts.
 - Return of premium for death in first two years (or one year in certain states).
- Guaranteed-to-Issue
 - Guaranteed-to-issue is sometimes referred to as guaranteed acceptance.
 - This type of underwriting is similar to guaranteed issue; however, the person cannot be turned down for coverage. Instead, rating of the individual is allowed.
 - Guaranteed-to-issue also has relatively small benefits, sometimes return of premium with interest.

India

- Automatic/Clear case underwriting
 - Cases screened through an automated rule-based engine.
 - May include medical exam as well.
- Non-medical underwriting
 - Cases kicked out by the automated rule-based engine for reasons such as build, occupation, etc.
 - Underwritten by a junior underwriter.
 - No medical reports.

Japan

- Fully underwritten
 - Blood is drawn by the doctor only when there is also a medical exam.

South Africa

- Simplified issue
 - This is essentially limited underwriting.
 - The application form would consist of between 3 and 5 questions with regard to general health, HIV testing and whether the life assured had ever been loaded, declined, had an exclusion on prior policies or claimed a benefit.
 - There is a limit to the amount of cover that can be taken up on this policy and the underwriting decision is usually to accept or decline.
 - The use of pre-existing conditions clauses are applied at claim stage.
 - There is often a 'phased in' waiting period for deaths due to natural causes; this means that, if the life insured claims, he will only be entitled to a % of the benefit amount which is linked to the time since policy inception (for example 50% of the benefit will be paid between 6 and 12 months; 75% between 12 and 18 months etc.). Claims due to unnatural causes will always be paid at 100%.
 - There are generally no medical requirements (examinations or blood tests) on these policies.
- Group or pension fund underwriting
 - This is the same as for medical underwriting, the exception being that there is no financial underwriting as the benefit is linked to the individual's salary.
 - Some companies writing group business do not underwrite for hazardous pursuits or travel risks.
 - Some companies also price the base rate in order that loadings of up to a certain extra-mortality or extra-morbidity are waived to standard rates.
 - Group underwriting is more lenient than individual underwriting due to the reduced risk of anti-selection as the cover is compulsory.

Sweden

- Non-medical
 - A few medical questions.
 - No medical or paramedical exam, no blood or urine specimen.
 - The applicant cannot be turned down for coverage, with a few exceptions. Generally the only circumstances where one can be turned down are:
 - The proposed insured doesn't meet specific age requirements for the plan, or
 - The proposed insured is rated with total mortality >150%.
 - Small face amounts.
 - Mainly voluntary group business.

United Kingdom

- Guaranteed issue
 - Generally limited to older life applicants.
 - No medical questions other than possibly tobacco use.
 - Cover guaranteed.
 - Low sum assured.
 - Benefit limited to accidental death or return of premiums in the first 1 to 2 years.

International Comparisons

Figure 2 shows the percentages of business written on a fully underwritten and simplified issue basis in rank order. As above, you can see that the fully underwritten business ranges from 3% for Croatia to 95% for Israel.

Figure 2 – Rank Order of Use of Fully Underwritten and Simplified Issue Business

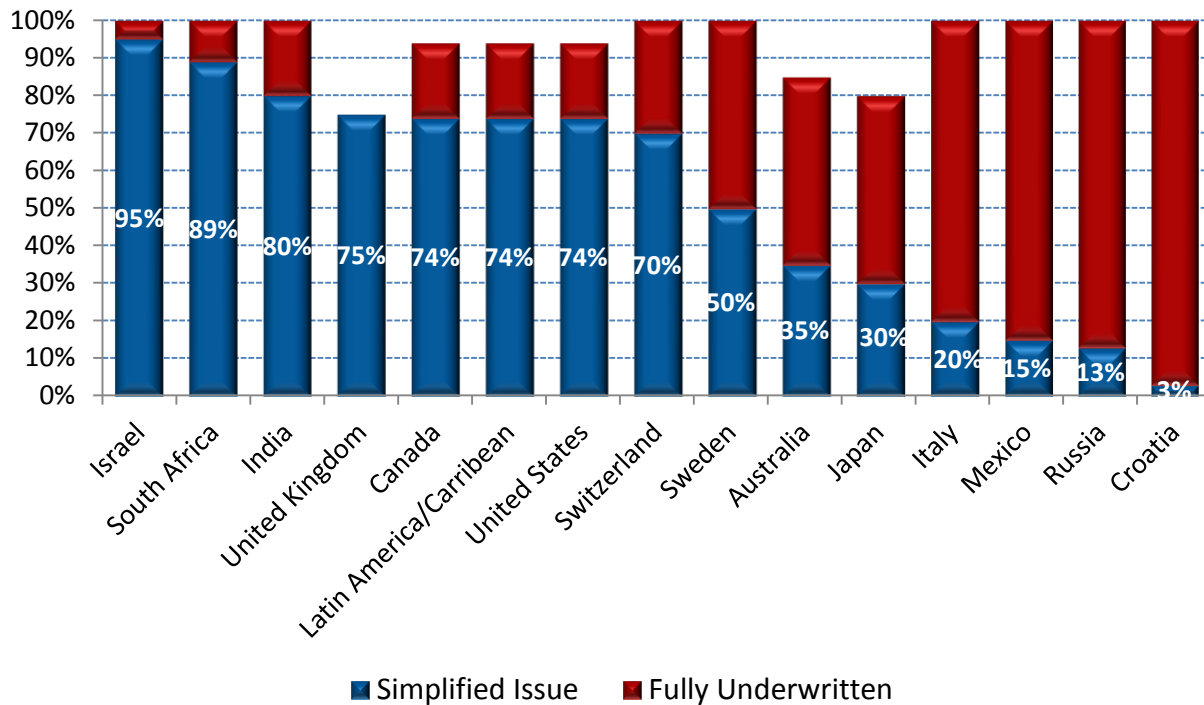


Figure 3 shows the percentage of business written for each country with and without a medical exam. It also shows the percentage of business written without medical questions. The percentage of business written with a medical exam ranged from 3% in Croatia to 90% in South Africa. The reason for the high percentage in South Africa is due to the high prevalence of HIV. Five countries indicated writing a certain percentage of their business without medical questions. These countries were Canada, Japan, South Africa, UK, and USA.

Figure 3 – Use of Medical Exams and Questions

Country	Exams		Questions
	Medical/Paramedical Exam	No Exam	No medical questions
Australia	35%	65%	40%
Canada	49%	51%	6%
Croatia	3%	97%	0%
India	80%	20%	0%
Israel	40%	60%	0%
Italy	20%	80%	0%
Japan	30%	70%	20%
Latin America/Caribbean	49%	51%	6%
Mexico	15%	85%	0%
Norway	N/A	N/A	N/A
Russia	13%	87%	0%
South Africa	89%	11%	0%
Sweden	15%	85%	0%
Switzerland	70%	30%	0%
United Kingdom	20%	80%	25%
United States	49%	51%	6%

Figure 4 shows the use of a large number of underwriting questions. The questions are summarized in the following broad categories. The sub-bullets show the questions used by at least 9 of the 11 countries.

- General
 - Name
 - Address
 - Gender
 - Occupational details
- Habits
 - Smoking habits
 - Alcohol consumption habits
 - Drug use
 - Criminal history
 - Pastimes, hazardous pursuits
- Plan Details
 - Signature
- Medical Details – General
 - Full medical history
 - Family history
- Medical Exams
 - Blood sample
 - Urine sample
- Medical Vitals
 - Height
 - Weight
- Performer of Exam

The questions used by all 12 countries were:

- Name
- Full medical history
- Height
- Weight

Figure 4 shows the country by country detail.

Figure 4 – Underwriting Questions

Category	Indicator	Australia	Canada	Croatia	Israel	Italy	Japan	Norway	South Africa	Switzerland	Sweden	USA	UK	TOTAL
General	Name	X	X	X	X	X	X	X	X	X	X	X	X	12
General	Address	X	X	X	X	X		X	X	X	X	X	X	11
General	Gender	X	X	X	X	X	X	X	X	X		X	X	11
General	Date of birth	X	X	X	X	X	X	X	X	X		X	X	11
General	Occupational details*	X	X	X	X	X	X		X	X	X	X	X	11
General	Phone number	X	X	X	X			X	X			X	X	8
General	Residency Status/ Citizenship	X	X	X		X			X	X		X	X	8
General	Financial information, including at least income (bankruptcy)	X	X		X	X		X	X	X		X		8
General	Identity/Social Security number		X	X	X			X	X		X	X		7
General	Email	X							X				X	3
General	Marital Status								X				X	2
General	Drivers license number for Motor Vehicle Report (MVR) check		X									X		2
General	Highest Educational Qualification							X	X					2
General	GP details	X											X	2
General	Banking details and Premium payer details	X							X					2
General	Language								X					1
General	Purpose of Insurance								X					1
Habits	Smoking habits	X	X	X	X			X	X	X	X	X	X	10
Habits	Drinking/alcohol consumption habits	X	X	X	X			X	X	X	X	X	X	10
Habits	Travel (future)	X							X				X	3
Habits	Average Distance Travelled per annum								X					1
Habits	Pastimes/hazardous pursuits (e.g., aviation, avocations, scuba diving)	X	X	X	X	X			X	X	X	X	X	10
Plan Details	Signature	X	X	X	X	X		X	X	X	X	X		10
Plan Details	Other coverage, including whether it is going to be replaced	X	X		X	X		X	X	X		X	X	9
Plan Details	Owner	X	X	X	X	X			X	X	X	X		9
Plan Details	Beneficiary	X	X	X	X	X			X	X	X	X		9
Plan Details	Authorization to collect additional information	X	X	X	X			X	X	X	X	X		9

Category	Indicator	Australia	Canada	Croatia	Israel	Italy	Japan	Norway	South Africa	Switzerland	Sweden	USA	UK	TOTAL
Plan Details	Whether the applicant has ever been denied coverage	X	X		X				X	X	X	X	X	8
Plan Details	Plan information, including riders	X	X	X	X				X	X		X		7
Medical Details – General	Full medical history	X	X	X	X	X	X	X	X	X	X	X	X	12
Medical Details – General	Family history	X	X	X	X	X		X	X	X	X	X	X	11
Medical Details – General	Alcohol/Drug consumption	X	X			X			X				X	5
Medical Details – General	Positive test for HIV, Hepatitis B or C.	X			X				X				X	4
Medical Details – General	Exposure to HIV	X			X								X	3
Medical Details – General	Sexually transmitted disease	X											X	2
Medical Exams	Blood sample	X	X	X	X	X	X		X	X	X	X		10
Medical Exams	Urine sample	X	X	X	X	X	X		X	X	X	X		10
Medical Exams	HIV test	X			X				X					3
Medical Exams	Serum cotinine test for non-smokers				X				X					2
Medical Vitals	Height	X	X	X	X	X	X	X	X	X	X	X	X	12
Medical Vitals	Weight	X	X	X	X	X	X	X	X	X	X	X	X	12
Medical Vitals	Blood pressure	X	X	X	X		X		X	X	X	X		9
Medical Vitals	Pulse	X	X	X	X				X	X	X	X		8
Medical Vitals	Random cholesterol	X			X				X					3
Medical Vitals	Gamma GT	X			X				X					3
Medical Vitals	Random blood sugar	X			X				X					3
Medical Vitals	ECG				X		X							2
Performer of Medical Exam	Doctor	X	X	X	X				X	X	X	X	X	9
Performer of Medical Exam	Paramedical	X	X						X			X	X	5
	TOTAL	40	31	25	35	19	11	15	44	26	21	30	26	49

3. Underwriting Tools

There are many potential underwriting tools available as can be seen by the summary and more detailed explanation below. Rules based engines, not mentioned consistently as an underwriting tool, reflect usage in underwriting cases that have been reduced to numerical values and can be handled under automatic underwriting processes.

In addition to an application, which is a staple for all countries, additional investigative tools are requested either regularly or based on plan, issue age and amount or incident of profile. Blood, urine and EKG requirements are utilized in every country that responded, but not on every case. Typically higher levels of coverage warrant more thorough investigation for comprehensive evaluation. Norway did not respond to this question.

Depending on the type of coverage, the application or proposal requirement may range from a full/standard application, to a shorter form with fewer questions for simplified issue or rules engine processing, to a short application without medical questions for the guarantee issue market.

Figure 5 summarizes the underwriting tools used in each country.

The most common requirements (90% or more utilization) include:

- Blood test
- Urine test
- Electrocardiogram and/or Exercise Stress Test (EKG/EST)
- Statement from an attending physician
- Financial verification

Canada and the USA have very similar underwriting approaches.

Tools used by only 1 to 2 countries include:

- Oral fluid – Canada and USA
- Motor Vehicle Record (MVR) – Canada and USA
- Pharmacy check – USA
- Ultra Sound Scan – Croatia and Italy
- Age verification using electoral database records - India
- Passport copy, visa type and entry stamp – Latin America/Caribbean
- Canada and Latin America have additional questions for Politically Exposed Persons who may have a threat of kidnapping or assassination
- An echocardiogram can be requested for underwriting evaluation in Russia.

Abbreviations used in Figure 5, not already defined, include:

- APS/R – Attending Physician Statement/Report
- PMAR – Personal Medical Attendant's Report
- Tele App – Application completed by telephone Part 1 or 2 or both
- PFT – Pulmonary Function Test
- KFT – Kidney Function test
- TMT/EST – Treadmill Test/Exercise Stress Test

Market Registers

The Medical Information Bureau (MIB) is used exclusively in Canada, Mexico, the USA and some areas of Latin America. Canada and USA searches are limited to seven years. Norway has a national register to identify those

previously denied coverage (ROFF); the information is available for 10 years. The UK has a number of services to choose from, insurers can select some or all. Since no one register may contain all records it is prudent to gain membership in each.

Predictive Modeling

There were no comments on the newly developed predictive underwriting models that are starting to gain ground in the USA.

Challenges

The insurance industry can sometimes collect a significant level of data in order to complete the risk assessment; however collection of information and documentation can be challenging to obtain. Still a staple in the risk assessment toolkit, comprehensive medical records can be difficult to obtain in some markets because record keeping is neither systematic nor detailed. In many instances an attending physician will provide only a handwritten narrative with scant detail. (Latin America); India rarely seeks records due to record keeping concerns. There are no APS retrieval services in any of the Latin American/Caribbean countries.

In a few countries, there is no outside third party support for underwriting services, standardized paramedical services, testing centers for medical examinations, financial paper trails nor trustworthy sources. In India, getting tax returns for self-employed individuals is challenging; the life insurance industry will accept reports from surrogates who provide financial and net worth documentation.

Laboratory services can vary widely between countries, from tight quality controlled state of the art environments to questionable handwritten reports reflecting results that may not have been properly analyzed. A majority of countries in Latin America do not have access to an insurance laboratory and have to make do with dubious lab reports. These labs are usually for clinical use and lack reflexive testing and the facilities to house specimens for retests. USA kits are used where permitted; some countries ban the kits or impose high custom duties.

Motor Vehicle recordkeeping is not available in every market, so there is no way to capture this type of hazard data; where available, the reports can be costly and do not represent an attractive cost-benefit model.

Not all countries experience success with the telephone application model; 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.

Unisex underwriting standards became sanctioned in the EU beginning 21 December 2012. Companies that fall under the EU regulation are reexamining their requirements to meet the standard while providing protective value.

Figure 5 – Underwriting Tools

For a better explanation of any of these tools, please see the Appendix.

	Blood	Urine	EKG	Full Exam or vitals	TMT, EST	Chest X-Ray	PFT	Oral Fluid	Ultra Sound Scan	APS or PMR	Financial	Tele App/ Tele UW	Inspection Interview	Pharmacy Check	MVR
Australia	X	X	X	X	X					X	X	X			
Canada	X	X	X	X	X	X		X		X	X	X	X		X
Croatia	X	X	X	X					X	X	X				
India	X	X	X	X	X	X					X	X	X		
Israel	X	X	X	X	X					X	X	X			
Italy	X	X	X		X	X			X	X	X				
Japan	X	X	X	X	X	X				X	X				
Latin America/ Caribbean	X	X	X	X						X	X		X	Used for customers in US market only	
Mexico	X	X	X							X	X		X		
Norway										X		X			
Russia	X	X	X	X	X	X				X	X				
South Africa	X	X	X	X			X			X	X	X			
Sweden	X	X	X		X	X	X			X	X	X			
Switzerland	X	X	X		X		X			X	X	X			
UK	X	X	X	X			X			X	X	X			
USA	X	X	X	X	X		X	X		X	X	X	X	X	X
Percentage using	100%	100%	100%	73%	67%	40%	33%	13%	13%	93%	93%	60%	33%	13%	13%

Testing Protocols

Specific testing by country is shown in Figures 6-8. Certain tests are used by all countries except Norway, which asks for the medical history. The tests used by all (except Norway) are shown below and all are from Figure 6.

- Serum Glucose/Diabetes
- Kidney Function
- Lipid Panel
- Liver Function
- Detect tobacco usage

A few tests and examinations not widely used include:

- eGFR, a test for renal function, ordered as a screening requirement – South Africa and Australia;
- Screening breast exam ordered in certain age/amount groups – Australia
- Thyroid T3, T4 and TSH tests – Russia
- Internist Examination. When the extent of a disease or impairment is not known, an underwriter can request an examination by an internal medicine specialist; paramedical exams are not used – Croatia
- Ultrasound scan, used as a screening tool, usually for large amounts of coverage – Croatia

Testing is primarily focused on liver and kidney function, lipids, blood glucose levels, cotinine detection and the presence of HIV. Testing can involve a full panel or a single representative reading. Blood testing can go beyond routine organ screening and include CBC with differentials, PSA, thyroid tests and ESR depending on level of coverage and product type.

Figure 6 – Underwriting Profile Tests

13 March, 2014

GENERAL SCREENING	Diabetes	Kidney Function	Lipids	Livers Function	HIV	PSA
Australia	X	X	X	X	X	X
Canada	X	X	X	X	X	X
Croatia	X	X	X	X		
India	X	X	X	X	X	X
Israel	X	X	X	X	X	
Italy	X	X	X	X	X	X
Japan	X	X	X	X	X	
Latin America / Caribbean	X	X	X	X	X	
Mexico	X	X	X	X	X	X
Russia	X	X	X	X	X	X
South Africa	X	X	X	X	X	X
Sweden	X	X	X	X	X	X
Switzerland	X	X	X	X	X	X
UK	X	X	X	X	X	X
USA	X	X	X	X	X	X
Percentage using	100%	100%	100%	100%	93%	73%

Figure 7 – Specific Tests: Kidney Function and Other Tests

KIDNEY FUNCTION and OTHER TESTS	KFT: BUN	KFT: Creatinine	Lipids: Chol	Lipids: HDL	Lipids: LDL	Lipids: Trig.	Hgb. A1c	CBC	eGFR	Thyroid Gland
Australia	X	X	X	X	X	X	X	X	X	X
Canada	X	X	X	X	X	X	X			
Croatia		X	X	X	X	X				
India	X	X	X	X	X	X	X	X		
Israel	X	X	X	X	X	X	X			
Italy	X	X	X	X	X	X	X			
Japan	NDP	NDP	NDP	NDP	NDP	NDP	NDP	NDP	NDP	NDP
Latin America/ Caribbean	X	X	X	X	X	X	X			
Mexico	X	X	X	X	X	X	X			
Russia	X	X	X	X	X	X	X			X
South Africa	X	X	X	X	X	X	X		X	
Sweden		X	X	X	X	X				
Switzerland		X	X	X	X	X	X			
UK	X	X	X	X	X	X	X			
USA	X	X	X	X	X	X	X	X		
Percentage using	79%	100%	100%	100%	100%	100%	86%	21%	14%	14%

Figure 8 – Specific Tests: Liver Function Tests

LIVER FUNCTION TESTS	LFT: Alk Phos	LFT: Bilirubin	LFT: AST/SGOT	LFT: ALT/SGPT	LFT: GGT	LFT: Albumin	LFT: Globulin	LFT: Hepatitis
Australia	X	X	X	X	X	X	X	X
Canada	X	X	X	X	X	X	X	X
Croatia		X	X	X	X			
India	X	X	X	X	X	X	X	X
Israel	X	X	X	X	X	X		
Italy	X	X	X	X	X	X	X	X
Japan	NDP	NDP	NDP	NDP	NDP	NDP	NDP	NDP
Latin America/ Caribbean	X	X	X	X	X	X	X	
Mexico	X	X	X	X	X	X	X	
Russia	X	X	X	X	X	X	X	X
South Africa	X	X	X	X	X		X	
Sweden	X	X	X	X	X	X	X	X
Switzerland	X	X	X	X	X	X	X	
UK	X	X	X	X	X	X	X	
USA	X	X	X	X	X	X	X	X
Percentage using	93%	100%	100%	100%	100%	86%	86%	50%

Figure 9 show the various urine tests used. Only three countries utilize all listed tests: Canada, UK and USA. Not every country screens for nicotine or legal/illegal drug usage in the urine specimen. Kidney and bladder function are the primary reason for obtaining a urine screen along with tobacco usage.

Figure 9 – Urine Tests

URINE SCREENING	Cotinine	Cocaine/Drugs	Medicines	Kidney Function	Diuretics	Blood	Protein	Glucose	Infections
Australia				X		X	X	X	X
Canada	X	X	X	X	X	X	X	X	X
Croatia				X					X
India	X			X		X	X	X	X
Israel	X			X					X
Italy		X		X		X	X	X	X
Japan							X	X	
Latin America/ Caribbean	X	X	X	X	X	X			X
Mexico	X	X	X	X		X			
Russia				X		X			X
South Africa	X	X		X			X	X	
Sweden				X					
Switzerland	X		X	X					
UK	X	X	X	X	X	X	X	X	X
USA	X	X	X	X	X	X	X	X	X
Percentage using	60%	47%	40%	93%	27%	60%	53%	53%	67%

Only Canada and the USA utilize oral fluid testing, usually in conjunction with simplified issue products. Screening normally includes nicotine, cocaine, GGT and HIV. This test is rarely used for preferred risk classification.

There are a number of sources that can be contacted during an inspection report. Figure 10 shows these items and those that are used by each country. The most common sources are the consumer themselves and tax records.

Most inspections are held directly with the customer; additional sources may be contacted depending on the level of coverage. The majority, 10 of 15 countries, also verified income through tax records and rarely through banking, credit and other sources.

Some countries will follow the reinsurer’s guidelines in determining investigation level.

Figure 10 – Inspection Report Sources of Information

INSPECTIONS	Customer	References	Banker	Accountant	Legal	Credit Report	Criminal	Tax Records	Questionnaire
Australia	X							X	
Canada	X		X		X	X		X	X
Croatia									X
India	X	X	X	X		X		X	X
Israel	X	X						X	
Italy	X								X
Japan	X							X	
Latin America/ Caribbean	X								
Mexico									
Russia	X							X	
South Africa *	X	X	X	X	X	X		X	
Sweden	X							X	
Switzerland	X							X	
UK	X	X	X	X				X	
USA	X	X	X	X	X	X	X	X	X
Percentage using	87%	33%	33%	27%	20%	27%	7%	73%	33%

*Used more for high sum assureds or business cover

The following provides additional information and commentary on underwriting requirements by country.

Australia

- Inspection report
 - Not done.
 - However, applicant asked to provide copies of their tax returns and other financial statements (profit and loss, balance sheets) depending on size of cover requested.
- Financial underwriting
 - Performed depending on the sum insured for all covers.
 - Also performed in some cases for Income Protection with guaranteed benefits known as Agreed Value.

Canada

- Attending Physician Statement/Report (APS/R)
 - The complete medical file is generally not sent and only a summary is provided by the doctor with supporting documentation.
 - If it is a high net worth case, the insurer can request the full medical file for at least the past 5-7 years.
- Inspection Report
 - The vendor also contacts banking, legal and credit providers for their history with the applicant.

Croatia

- Ultrasound scan
 - External ultrasound scan allows doctor to look more closely at organs such as the heart or womb and detect the problems.
 - Usually used for large amounts of coverage.
- Internist examination
 - When the extent of a disease or impairment is not known, an underwriter often asks an internal medicine specialist examination to get a clearer picture of the situation.
 - The aim of the internist examination is to provide the underwriter with the additional information needed to make a rating decision on the proposed insured
- Financial Records
 - As a rule, Croatian companies use financial questionnaires created by their reinsurers.

Israel

- Personal Medical Attendant's report (PMAR)
 - It is relatively simple to request and has a minimal cost to the insured. Use is also made of specialists' reports; however, these are more difficult to get a hold of and if not already in the possession of the applicant, the applicant may have a lengthy wait for the required appointment.
- Tele-underwriting
 - Tele-underwriting is not widely used; however, there are two direct insurance companies that use it.
 - Other companies use a form of tele-underwriting for their mortgage business.

Italy

- Attending Physician Statement
 - Additional information from a trusted doctor nominated by the company or from the family doctor.
- Abdominal Ultrasound
 - Abdominal ultrasound is an imaging procedure used to examine the internal organs of the abdomen, including the liver, gallbladder, spleen, pancreas and kidneys.
 - The blood vessels that lead to some of these organs can also be looked at with ultrasound.

- Financial questionnaire
 - Different kind of covers are underwritten with different questionnaires:
 - Personal cover questionnaire (family protection).
 - Business cover questionnaire (key man, partnership/share protection).
 - For business owners, financial underwriting is primarily done to make sure that the income and net worth are consistent with the amount of insurance in force and applied for.

Norway

- Investigation
 - Full set of medical questions, but no exam.
 - Anyone applying for life insurance cannot be sick at the time of application.
 - For high sum insured, it might be necessary to ask the applicant to have additional medical examinations.
- NEMNDA
 - NEMNDA is the Norwegian word for “committee”.
 - The purpose of the committee for health assessment (NEMNDA) is to provide guidelines on how different health conditions affect mortality and future disability and disease risk, and provides insurance recommendations on how this should be dealt with in relation to an insurance application. The purpose is to ensure that insurance applicants shall be treated as equally as possible when buying insurance and that other policyholders should not bear the cost of new policyholders with disproportional high risk.
 - NEMNDA prepares updated guidelines that provide guidance about how different health conditions affect or do not affect mortality, morbidity and disability. The guidelines are regularly updated.
 - NEMNDA also makes recommendations to the assessment of individual applications for insurance of difficult medical grades and for compensation when necessary.
 - NEMNDA consist of three medical doctors from the insurance companies, one medical doctor from The Norwegian Medical Association, three experts from the insurance companies, and the committee's secretary employed by Finance Norway.
 - The risk assessment of insurance applicants takes place in the individual insurance company. NEMNDA can provide recommendations on risk assessment for doubtful cases.

South Africa

- ASISA register
 - This is a register compiled by Association of Saving and Investments South Africa (ASISA, an industry body) of all lives assured in the market who have been loaded previously for insurance.
- Astute
 - This is a South African company that keeps an industry wide database that checks the existing policies in the market for the life assured. The database is known as Astute.
- Lipid screen
 - Generally only total cholesterol and HDL (High Density Lipoproteins) are used.
- Urine specimen
 - Drug profile – tests for cannabis, cocaine and other drugs like Ecstasy.
 - Can be an indicator for diabetes (glycosuria) or cancer (haematuria).

Sweden

- Hepatitis screen A, B, and C.

United Kingdom

- General Practitioners Report (GPR)
 - When the extent of a disease or impairment is not known, an underwriter often requests a GPR to get a clearer picture of the medical situation.
 - The advantage of a GPR is it generally provides the underwriter with the additional information needed to make a medical underwriting decision on the proposed insured.
 - The disadvantages of ordering a GPR are that it generally takes at least 20-30 days to receive, slowing the issue process, and it can be a costly process.
- Subject Access Request (SAR)
 - Used as an alternative to a GPR whereby the insurer uses Data Protection legislation to request, on behalf of the applicant, a full copy of medical records held by the GP.
 - Use is controversial but perceived advantages are a fuller medical history and faster turnaround speed.

United States

- Fraud Detection
 - US based vendors are refining fraud detection services in addition to the Medical Information Bureau. As fraudulent activity increases there is a strong need to identify patterns and trends that point to fraudulent activity.

4. Market Limits

This section was focused on high level market limits as they pertained to Body Mass Index (BMI) obesity.

Definition of Obesity

The definition of obesity is the excessive distribution of adipose tissue which increases the risk of cardiovascular disease, cancer and disability. It can be defined as being 20% or more above recommended body weight but the World Health Organization (WHO) has produced a set of definitions for overweight and obesity in adults based upon the Body Mass Index (BMI). A BMI of 30 or above is regarded as obesity. The BMI (also known as the Quetelet's Index) is measured as $\{\text{weight}/(\text{height})^2\}$ where weight is measured in kilograms, and height in meters (alternatively the weight in pounds can be multiplied by 704 and then divided by the square of the height in inches).

Average body weight and the distribution of BMI varies between ethnic groups and populations and the relationship between relative disease risk and BMI also varies. As a result, the concept of being underweight or overweight will vary accordingly, particularly in light framed populations in East Asia and the Indian subcontinent.

The International Diabetes Institute (IDI) has proposed a separate definition for overweight and obesity in Asian populations. Both the WHO definitions and the IDI recommendations are provided in Figure 11:

Figure 11 – BMI Limits

Obesity class	BMI	
	Current WHO	Proposed Asian
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	

However, up to five broad population (country) BMI distribution groups have been identified ranging from the countries with the most obesity such as the United States to countries in East Asia where the population have light frames. The groups, ranging from the lightest to the heaviest, are as shown in Figure 12:

Figure 12 – Rank of Geographical Areas by BMI/Weight (from lightest to heaviest)

Group	BMI region
5	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	USA (males and females), South Africa (males)

Source: Swiss Re

There is increasing interest in measures of abdominal adiposity as this may provide a better method of assessing cardiovascular risk than BMI. Waist circumference, the waist to hip ratio and waist to stature (height) have been suggested as ways to estimate abdominal fat. A waist circumference > 102 cm (> 40 inches) in men and > 88 cm (>35 inches) in women have been proposed by the National Institutes of Health in America as representing

increased risk and these have been incorporated into the National Cholesterol Education Program (NCEP) definition of the metabolic syndrome. Lower waist circumferences are recommended for use in the Indian sub-continent and the Far East. However studies that have compared BMI and measures of abdominal obesity show that adding waist circumference or waist to hip ratio to BMI has little additional effect on the quantification of the mortality or morbidity risk except in the normal to modestly overweight range.

BMI and Life Insurance

For insurance purposes, the estimates of risk associated with obesity are based on mortality studies and the BMI distribution in the insured population. For mortality, the range of increased BMI acceptable at standard rates is relatively wide but there is a log linear increase in ischemic heart disease and stroke risk with increasing BMI above 20 in those populations studied and there is an increase in the risk of some cancers and accidental death risk. By contrast being overweight is not associated with premature death in old people (in old people the mortality risk is reduced for those overweight). Being underweight and elderly carries an increased mortality and morbidity risk. Disability rates are higher in overweight and obese people at all ages.

Underwriting Practices Related to Obesity for Selected Countries

All of the responses given indicate that companies charge an additional premium for obesity and that this is based on BMI. The rating factors to be applied to different BMI levels do show differences between markets and between companies within an individual market.

It is clear that the global reinsurers are heavily influencing the rating of obesity. The responses from Israel, South Africa, Switzerland, and the UK make specific reference to ratings following the various reinsurers underwriting manuals. Although other countries do not mention reinsurers specifically it is likely that the reinsurers have influence and indeed will look for appropriate ratings for lives with elevated BMI as this business is reinsured to themselves.

Companies in a single market will show some variation in rating for obesity in particular for which lives are offered standard rates versus those who are required to pay an additional premium. The specific comment that "companies use different BMI cutoff levels for their standard and substandard risk classes" was made in the responses from Canada, Croatia, Israel, Italy, South Africa, Sweden, UK, and USA. The USA would also use BMI cutoff level for preferred lives. It was also mentioned by Sweden that any market standardization would be seen as a cartel decision.

Whilst the BMI index is the main driver for the obesity rating other factors may also influence the underwriting decision. For example, in Japan sex and age will also be taken into account.

The amount of cover available may also be limited to those with a higher BMI. This was specifically mentioned by Norway who indicated that higher BMI would result in an additional premium, limited coverage, or a decline.

The terms "overweight" or "obese" are not used in underwriting in Canada, Croatia, and the USA.

5. Regulatory Issues

Countries were asked about any anticipated regulatory issues and whether genetic testing was allowed and/or used in underwriting. In summary, the only regulatory issues mentioned were by Israel regarding equal opportunities for disabled lives and by the European countries regarding the EU (European Union) anti-discrimination by gender.

Regarding genetic testing, it is generally either: (1) not allowed, (2) not allowed unless the applicant brings it forward, or (3) allowed only above certain sums assured.

Details on a country by country basis are shown below.

Australia

- Regulatory
 - No known regulatory issues that may impact underwriting by 2013.
- Genetic testing
 - Genetic testing cannot be performed as part of the underwriting process. If the life to be insured has had a genetic test, they must disclose this and insurer can request a copy of the result. Underwriters are unable to rate on the genetic test alone; they must also rate on other factors such as family history.

Canada

- Regulatory
 - No known regulatory issues that may impact underwriting by 2013.
- Genetic testing
 - Would not require applicant to undergo.
 - If testing done and info available from applicant or applicant's doctor, would request it.

India

- Regulatory
 - In many insurance products, the insurance amount is a multiple of the premium. Effective 1 October 2013, the regulator has amended the product guidelines and the minimum insurance amount available to the applicant has been enhanced across all products.
 - This creates the need for more judicious underwriting and may lead to reassessment of the medical grids and non-medical limits across insurance companies.
 - The regulator (IRDA) has also initiated industry discussions to cover "People living with HIV and AIDS" and "Persons with Disabilities".

Israel

- Regulatory
 - The Insurance Commissioner is very active and concerned about unequal opportunities for disabled applicants.
- Genetic testing
 - In general, it is prohibited to request genetic testing or results of genetic testing for underwriting purposes.
 - If the applicant provides such results on a voluntary basis, there is a dispute whether these results may or may not be taken into consideration.

Italy

- Regulatory
 - EU Anti-Discrimination – Equal treatment between men and women in pricing, premiums and underwriting.
- Genetic testing
 - Not allowed by national laws.
 - Tests only allowed to predict genetic diseases upon applicant's explicit request.
 - Doctors can do predictive genetic tests for insurance or occupational purposes only if requested by owner.

Japan

- Regulatory
 - None.
- Genetic testing
 - None done, but it is not prohibited by law.

Latin America/Caribbean

- Regulatory
 - None.
- Genetic testing
 - Currently, no genes are tested in the life insurance underwriting process, but there are also no regulations with respect to genetic testing for life insurance.

Mexico

- Regulatory
 - In 2012, the discrimination law was approved.
 - It implies that no company could reject a person only for the reason of his disability.
 - Companies are now more careful with how they should reject an applicant.
- Genetic testing
 - Prohibited.

Norway

- Genetic testing
 - The insurer may not request a genetic test or use the results from a genetic test.
 - There is also a requirement that only health conditions that are relevant for the risk assessment can be asked for. The insurance company has to define what is relevant.

Russia

- Regulatory
 - No known issues that may impact underwriting in 2013.
- Genetic testing
 - Currently, no genes are tested in the life insurance underwriting process, but there are also no regulations with respect to genetic testing for life insurance.

South Africa

- Regulatory
 - There is a push for “treating customers fairly” which will have an indirect impact on underwriting.
- Genetic testing
 - The insurer may use the results of a genetic test if it is supplied by the applicant, but the insurer may not request a genetic test.

Sweden

- Regulatory
 - EU Anti-Discrimination – Equal treatment between men and women in pricing, premiums, and underwriting.
- Genetic testing
 - Currently no genes are tested in the life underwriting process.
 - Regulation prohibits company from asking applicant if they have done a genetic test if the sum insured is below \$192,500 (EUR 150,000).

Switzerland

- Regulatory
 - None.
- Genetic testing
 - Currently no genes are tested in the life underwriting process.
 - Regulation prohibits company from asking applicant if they have done a genetic test up to a certain sum insured.

United Kingdom

- Regulatory
 - EU Anti-Discrimination – Equal treatment between men and women in pricing, premiums, and underwriting.
- Genetic testing
 - It is acceptable to ask questions about immediate family history.
 - Applicants are only required to share a positive result of specified genetic tests in very limited circumstances – the only positive test result that must be declared is Huntington’s disease and only if the sum assured exceeds \$801,250 (GBP 500,000).
 - Applicants may share negative results if they so choose and insurer may use this to alter their decision.
 - These rules will last until 2017 and will next be reviewed in 2014.

United States

- Regulatory
 - None.
- Genetic testing
 - Currently no genes are tested in the life underwriting process.
 - No current regulations with respect to genetic testing and life insurance.

6. Potential New Approaches to Life Underwriting

We asked about potential future developments regarding life underwriting within each country. Approaches to life underwriting vary enormously between countries. They are dependent on past practice, legislation, sales channel, competition and acceptability. Even in countries with the most developed underwriting systems, an approach that is commonly used in one country may be illegal, impractical or unacceptable in another.

"New Approaches" could include the following:

- Preferred underwriting
- Tele-interviewing and tele-underwriting
- Standard forms that can be electronically transmitted to a variety of insurers
- Electronic underwriting systems
- Expert systems
- Use of national databases (e.g. prescription histories)
- Financial underwriting using (e.g., tax records)
- Older age underwriting (e.g., the use of cognitive and functional testing)
- Use of social media information

In many countries, innovation in underwriting is led by the reinsurers, who develop systems, processes, and manuals to support their preferred basis.

The following summarizes individual countries' submissions on this subject.

Australia

- Continued growth of expert systems and tele-underwriting techniques.
- High non-medical limits introduced in 2010.

Croatia

- None mentioned.

India

- Tele-underwriting is likely to be used more frequently in the next few years.
- There is scope for social media information to be used for underwriting.
- Use of Customer Identity Number (Aadhaar) for Know Your Customer (KYC) usage of credit report for financial underwriting. Customer Identity Number is similar to Social Security Number in USA.

Latin America/Caribbean

- There was a list of items newly used in Latin America/Caribbean that is consistent with the items listed below for the United States.

Mexico

- None mentioned.

Norway

- None mentioned.

South Africa

- For many years, the South African market has focused on product innovation and therefore the products are fairly advanced and complex in comparison with other markets.
- Currently, there is a definite shift from product innovation to process innovation.
- There has been an increase in the number of companies offering direct insurance in the last few years.
- Tele-interviewing and tele-underwriting are slowly gaining popularity.

Sweden

- None mentioned.

Switzerland

- Pilot for Tele-Interviewing was scheduled to start in November 2012 (when this information was received).

United Kingdom

- Preferred underwriting is not offered although, with the aim of offering lower standard rates, insurers writing business through the independent market will now rate a higher proportion of lives and will impose ratings of +25% where previously an applicant may have been accepted at standard terms.
- Insurers are looking to design specific application forms with limited underwriting questions to support particular distribution channels.
- Electronic underwriting systems are increasing in popularity. Providers tend to implement one expert system and develop this over time to improve and increase straight-through processing rates.

The following may be of interest to other countries as examples of existing practices:

- General Practitioner's Report (GPR)
 - When the extent of a disease or impairment is not known, an underwriter often requests a GPR to get a clearer picture of the medical situation.
 - The advantage of a GPR is it generally provides the underwriter with the additional information needed to make a medical underwriting decision on the proposed insured.
 - The disadvantage of ordering a GPR is that it generally takes at least 20-30 days to receive, slowing the issue process, and it can be a costly process.
- Subject Access Request (SAR)
 - Used as an alternative to a GPR whereby the insurer uses Data Protection legislation to request, on behalf of the applicant, a full copy of medical records held by the GP.
 - Use is controversial but perceived advantages are a fuller medical history and faster turnaround speed.

- Tele-underwriting
 - There are different types of tele-underwriting. In general, tele-underwriting is where someone calls the proposed insured to either confirm information provided on the application or to the medical / paramedical examiner.
 - The call may also be used to find out more information.
 - It is always done by phone.
 - The caller who makes the calls can be from the insurance company or from an outside vendor.
 - The caller is usually knowledgeable about medical conditions and knows how to interact with customers.
 - Tele-underwriting answers are usually more honest than from other sources because the proposed insured generally feels more comfortable discussing medical issues with someone who has a medical background. Also, they sometimes don't want to admit an impairment to an agent, whom they might know personally, because it might be embarrassing.
 - When additional questions are asked of the applicant, there is usually a script and pre-programmed questions that pop up on the caller's screen, depending on how the previous question was answered. These are called drill-down questions and are designed to determine the extent of the impairment that was mentioned on the application.

- ECG, Treadmill
 - An ECG (or EKG) is an electrocardiogram or a resting test of the heart.
 - The treadmill test is a stress test to determine whether there are any irregular heart patterns.
 - These are typically performed on older applicants and those applying for large amounts of coverage.

- Financial Records / Tax Forms
 - Financial underwriting is primarily done to make sure that the income and net worth are consistent with the amount of insurance in force and applied for.
 - This evidence would include a financial questionnaire detailing specific information regarding the applicant's income, existing cover, and purpose of the proposed cover.
 - The insurer may need to see reports and accounts, loan offers, or tax returns depending upon the need for the cover.

United States

These are not new in the USA, but may be of interest to other countries:

- Preferred underwriting
 - The key elements of preferred underwriting are used by most companies.
 - These have generally remained the same since preferred underwriting began in the USA in the late 1980s / early 1990s.
 - The key elements of preferred risk underwriting usually include a profile related to:
 - Alcohol and drug abuse
 - Blood pressure
 - Build
 - Cholesterol
 - Family history
 - MVR
 - Personal medical history
 - Tobacco use
 - Other – Aviation, avocations, citizenship, hazardous activities, and foreign travel and residence
 - While the elements themselves haven't changed much over the years, what has changed are the number of classes and the cutoff levels of each for the specific criteria. The number of risk classes has increased. With this increase, the cutoff levels have moved both up and down, depending on the company, product and risk class.
 - Another more recent change is that some companies have moved from a knockout approach to a debit/credit approach.
 - A knockout approach is where an applicant does not qualify for a particular risk class if they do not meet one or more of the cutoff levels for the full set of criteria.
 - A debit/credit approach is one where a point system is used for good and bad levels for the criteria. At the end, the points are summed and the point total determines which risk class into which the applicant is placed.
 - There are also hybrid systems which include a combination of knockout and debit/credit. In fact, most debit/credit structures have some element of knockout in them.
 - Another more recent development is that some companies allow exceptions to the published guidelines.
 - These exceptions are sometimes published and sometimes kept internally to be applied to the criteria.
 - The types of exceptions allowed vary considerably.

- Older age underwriting - Older age underwriting programs in the USA may include one or more of the following:
 - Cognitive testing – Test for dementia and other cognitive impairments.
 - Functional testing – Test for frailty.
 - Changes to the traditional levels of underwriting acceptance – Lower readings on blood pressure, cholesterol, and weight, for example, could be indicative of more serious problems than higher readings for the elderly.
 - Supplemental questionnaire – This may include questions on such things as social, mental and physical activities, activities of daily living, living arrangements and travel.

7. Measuring the Impact of Underwriting on Mortality Experience

We asked about the work done in measuring the impact of different underwriting methods on mortality.

While some comprehensive studies measuring the impact of underwriting on mortality experience have been completed, very little of this work is typically available to the public. Protective value studies and studies directly measuring the experience of the various types of underwriting are being done by individual companies in Canada and the USA. These proprietary studies are not shared publicly. Nevertheless, the industry is very interested in furthering this work, as evidenced by an initial attempt by the Society of Actuaries to provide forward looking evaluations of the potential use of medical markers provided through blood testing laboratories in the USA market. That paper also provides a methodology for establishing a cost-benefit analysis of the more promising lab tests.

Moving one step further away from actual underwriting risk evaluation tools, industry experience studies exist in many markets. In many cases, those studies can be used to establish a broad relative value of the various categories of underwriting, such as well underwritten (with medical exams, blood tests, etc.) vs. various more simplified underwriting approaches. Various underwriting tools are often used within face amount ranges. The tools tend to become more extensive as face amounts increase. Therefore, experience by face amount bands is often a reasonable surrogate for establishing the value of underwriting tools.

Countries in which actuarial associations or government agencies conduct and publish fairly frequent industry mortality studies include:

- Canada
- Japan
- Mexico
- United Kingdom
- United States

In addition, the Society of Actuaries has developed an International Experience Study program which assists countries in conducting local market mortality experience studies. Studies have been published for several markets, including:

- Argentina
- Brazil
- Caribbean region (in progress)
- Estonia
- Philippines
- Poland
- Vietnam

In Australia, mortality and disability studies are not done by the local Institute. Rather, they are the responsibility of the Financial Services Council (FSC), the lobby group for the industry. In turn the FSC contracted the work to KPMG. However, the participating companies require an embargo period on publishing the data and restrict which information can be made publically available.

8. Underwriting as a Profession

This section deals with the individuals who do the actual underwriting. We asked six questions and the responses are summarized below.

Who does the underwriting in your country? Choices were actuary, doctor, and underwriter. Respondents were asked to check all that apply.

- All countries indicated the underwriter. While actuaries and doctors may be involved in some aspects of the underwriting process in some countries, neither actuaries nor doctors “underwrite” life insurance applicants.

What academic background do underwriters usually have?

- Underwriters come from varied educational backgrounds.
- While there is a formal professional underwriting certification (FALU) available through the Academy of Life Underwriting, it is not currently available in languages other than English, possibly causing some unawareness of its existence.

Is there a formal profession that underwriters belong to?

- Yes – Australia (underwriters belonging to the ALUCA), Canada (underwriters belonging to the CIU, the Canadian Institute of Underwriters), India (underwriters belonging to AIU, The Association of Insurance Underwriters), Mexico (underwriters belonging to The Asociacion Mexicana de Seleccionadores), United Kingdom (underwriters belonging to IUA, the International Underwriting Association), USA (underwriters belonging to AHOU, The Association of Home Office Underwriters)
- No – Croatia, Israel, Italy, Japan, Latin America/Caribbean (although some may belong to the AHOU in the USA), Norway, South Africa, Sweden, Switzerland

Is there a nationally recognized underwriting qualification?

- The Academy of Life Underwriting program, ultimately resulting in an FALU designation upon completion is not limited to Canada, the UK, and the USA. It is available to any underwriter who wishes to participate.
- The program materials needed for study are available in English, limiting participation by non-English speaking students.
- In Israel, at Ariel University, a year-long underwriting course is offered where students hear lectures from prominent medical specialists and then have instruction on sample cases reviewing the disease studied. The graduating students receive a diploma in underwriting.

Is there a system of formal, recorded ongoing Continuing Professional Development (CPD)?

- Australia has formal continuing education requirements for two of the three membership levels within the Australian Life Underwriters and Claims Association (ALUCA).
- While there is no universal formal continuing education program for underwriters elsewhere, there are third party providers of formal education for underwriters. Hank George, Inc. would be an example of one of these companies.
- The Academy of Life Underwriting provides education webinars throughout the year, available to underwriters on a variety of topics.
- Reinsurers routinely provide continuing education sessions either directly with client companies or by presenting at one of the 30 or so local underwriting associations in the United States and Canada.
- Most medium to large size companies in the USA provide ongoing continuing education to their staff of underwriters. These may be provided by the in house Medical Director or senior staff members.
- Very large companies in the USA have a dedicated education staff who provide ongoing seminars, along with consistent updating of their underwriting manual to ensure the most current mortality assessments are applied to the daily review of applications.

Are there nationally consistent and recognized “titles” for an underwriter (e.g., junior underwriter, senior underwriter, chief underwriter)?

- The answer to this question may be slightly misleading. There are recognized titles, however, what they mean as far as qualifications vary widely between companies. A title is merely that, not a true representation of an underwriter’s time in the business or necessarily their level of expertise.

9. Appendix – Terminology

This section includes the terminology used on a country by country basis. Note there is some overlap between the countries, but it was felt important to include definitions for all countries for clarity and completeness.

Countries are provided in alphabetical order.

9.1 Australia

CATEGORY	DESCRIPTION
Fully Underwritten	Medical, occupational, financial, and pursuits with exam and blood testing
Paramedical underwriting	Form of Fully Underwritten, includes a paramedical exam
Nonmedical	Form of Fully Underwritten, no exam
Simplified Issue	Less than a full set of medical questions, no exam
Guaranteed Issue	Coverage guaranteed with pre-existing conditions not covered. Also, first year benefit paid for accident only.
HIV Blood test	Self-explanatory – covers over \$2.5 million death & \$8000 income protection
Hepatitis B & C blood test	Self-explanatory - covers over \$2.5 million death & \$8000 income protection
MBA20 blood test	Multiple Biochemical Analysis – Lipids, liver enzymes, glucose and kidney function tests - covers over \$2.5 million death & \$8000 income protection
FBC blood test	Full blood count – cover over \$5 million death, \$1.5 million Trauma
PSA Blood test	Prostate specific antigen – over 50 year old males, \$5 million death & \$1.5 million trauma
Breast exam	Self-explanatory - over 50 year old females, \$5 million death & \$1.5 million trauma
Medical examination/paramedical	Examination performed by a medical practitioner or nurse - over 50 year old males, \$1.5 million death,
ECG/Stress ECG	Self-explanatory – Cover over \$5 million death & over 45's \$1.5 million Trauma
Medi Lite	15 minutes health check – blood pressure, urine, height/weight – Income Protection over \$8,000
MSU	Mid-Stream urinalysis – over 50 year olds Death \$5 million & Trauma 1,5 million
Dip stick	Dip stick test of a sample of urine – part of medical exam and medi lite
PMAR	Personal Medical Attendant's Report – medical history – based on disclosure in personal statement & over \$15,000 month Income Protection & \$2.5 million Death

9.2 Canada

CATEGORY	DESCRIPTION
Fully underwritten	Most comprehensive type of underwriting
Medical underwriting	Form of Fully Underwritten, includes a medical exam
Paramedical underwriting	Form of Fully Underwritten, includes a paramedical exam
Nonmedical	Form of Fully Underwritten, no exam
Simplified Issue	Less than a full set of medical questions, no exam
Guaranteed Issue	Coverage guaranteed as long as certain requirements met
Guaranteed-to-Issue	Coverage guaranteed, but could be rated
Application	Collects much information as explained above
Blood Test	Multiple screens from the blood draw are run to test things like the kidneys, liver, lipids, HIV, and diabetes.
Urine specimen	Screen for cotinine, drugs, medicines, kidney and bladder function
Oral fluid	Screen for cotinine, cocaine, HIV
Medical Information Bureau (MIB)	Screen for fraud and insurance activity
Attending Physician Statement (APS)	Additional information on impairment from doctor
Attending Physician Report (APR)	
Motor Vehicle Record (MVR)	Driving history, license suspension (driving and non-driving related), and license endorsement (e.g., motorcycle)
Tele-underwriting	Telephone interview of proposed insured
Inspection report	Confirms information about proposed insured
EKG, Treadmill	Tests for heart
Chest x-ray	Test for heart, lungs, chest in general
Financial Statements / Tax forms / Verification by accountant	Confirmation of income, net worth

CATEGORY	DESCRIPTION
Application Part 1	<p>A full application has what is called Part 1 and Part 2. Part 1 contains general non-medical information such as:</p> <ul style="list-style-type: none"> • General information <ul style="list-style-type: none"> o Name o Address o Phone number o Gender o Date of birth o Social Insurance Number (SIN) and only required for products with investment component o Drivers license number for Motor Vehicle Report (MVR) check o Citizenship o Residency Status (Canadian Citizen, Landed Immigrant Permanent Resident, Contract Worker or Other such as Student) • Occupational details • Financial information, including at least income (bankruptcy) • Purpose of Insurance • Habits <ul style="list-style-type: none"> o Smoking o Drinking o Travel (future) • Plan information, including riders • Other coverage, including whether it is going to be replaced • Whether the applicant has ever been denied coverage • Owner • Beneficiary • Pastimes (e.g., aviation, avocations, scuba diving) • Politically Exposed Foreign Person and if premium/lump sum payment is greater than \$100,000
Application Part 2	<ul style="list-style-type: none"> • Authorization to collect additional information
Attending Physician Statement (APS) Attending Physician Report (APR)	<ul style="list-style-type: none"> • Medical records or statement from the attending physician. May include copies of physician's records or may simply be a statement summarizing health status.

CATEGORY	DESCRIPTION
Blood Test	<p>The life insurance blood test screens include a variety of tests. The blood test provides the most current medical information on an applicant, except for possibly an APS. The items typically screened for and their corresponding tests include:</p> <ul style="list-style-type: none"> • Diabetes screen <ul style="list-style-type: none"> o Glucose – Measures blood sugar levels and is an indicator of diabetes o A1C Glycated Hemoglobin – Measures concentration of glucose over time • Kidney screen <ul style="list-style-type: none"> o BUN (Blood Urea Nitrogen) – Test for kidney disease and dehydration o Creatinine – Test for kidney disorder and dehydration • Lipid screen <ul style="list-style-type: none"> o Cholesterol – Risk factor in heart disease and stroke o HDL (High Density Lipoprotein) and LDL (Low Density Lipoprotein) – Components of cholesterol that are risk factors in heart disease <ul style="list-style-type: none"> o Triglycerides – Risk factor in heart disease • Liver screen <ul style="list-style-type: none"> o Alkaline Phosphatase – Test for liver and bone disease o Bilirubin – Test for liver and blood disease or disorder o AST and SGOT (Aspartate Aminotransferase) – Test for liver and muscle disorders o ALT and SGPT (Alanine Aminotransferase) – Test for liver disease o GGT (Gamma Glutamyltransferase) – Tests for liver disorder, alcohol, drugs o Total protein includes Albumin and Globulin <ul style="list-style-type: none"> § Albumin – Test for advanced liver disease and malnutrition § Globulin – Test for immune disorders, infections and allergic reactions • HIV screen • PSA (Prostate Specific Antigen) for men ages 50+ • Hepatitis Screens for new immigrants and for cases where warranted
Chest x-ray	<p>The chest x-ray is less commonly used in underwriting in Canada today and most companies do not request a chest x-ray on a routine basis at all, but is still used for very large amounts of coverage by some companies. The chest x-ray makes images of the heart, lungs, airways, blood vessels, and bones of the spine and chest. It can find issues related to shortness of breath, chest pain, chronic cough and fever.</p>
EKG, Treadmill	<p>An EKG (or ECG) is an electrocardiogram or a resting test of the heart. The treadmill test is a stress test to determine whether there are any irregular heart patterns. These are typically performed on older applicants and those applying for large amounts of coverage. There is some concern that an applicant could drop dead from the stress test. These blood tests provide an indicator of cardiac events, however, the EKG and treadmill test are still relatively common.</p>
Financial Records / Tax Forms	<p>The larger incomes today have placed more emphasis on financial underwriting. Financial underwriting is primarily done to make sure that the income and net worth are consistent with the amount of insurance in force and applied for. For business owners, the anticipated growth of the business is also an important consideration.</p>

CATEGORY	DESCRIPTION
Guaranteed Issue	<p>The characteristics of guaranteed issue life underwriting include:</p> <ul style="list-style-type: none"> • No or a few medical questions • No medical or paramedical exam, no blood or urine specimen • The applicant cannot be turned down for coverage, with a few exceptions. <p>Generally the only circumstances where one can be turned down are:</p> <ul style="list-style-type: none"> o The proposed insured doesn't meet specific age requirements for the plan, or o The proposed insured currently is living in a nursing home or Long Term Care facility <ul style="list-style-type: none"> • Small face amounts • Return of premium for death in first two years
Guaranteed-to-Issue	<p>Guaranteed-to-issue is sometimes referred to as guaranteed acceptance. This type of underwriting is similar to guaranteed issue; however, the person cannot be turned down for coverage. Instead, rating of the individual is allowed. Guaranteed-to-issue also has relatively small benefits, sometimes return of premium with interest.</p>
Inspection Report	<p>The inspection report is typically where a third party vendor calls the applicant to validate and augment application information. This is similar to the simplest form of tele-underwriting.</p> <p>In Canada the vendor also does contact banking, legal and credit providers for their history with the applicant</p>

CATEGORY	DESCRIPTION
Medical / Paramedical Underwriting	<p>This consists of a Full Application and a mandatory medical or paramedical exam. A full application has what is called Part 1 and Part 2. Part 1 contains general non-medical information such as:</p> <ul style="list-style-type: none"> • General information <ul style="list-style-type: none"> o Name o Address o Phone number o Gender o Date of birth o Social Insurance Number (SIN) and only required for products with investment component o Drivers license number for Motor Vehicle Report (MVR) check o Citizenship o Residency Status (Canadian Citizen, Landed Immigrant Permanent Resident, Contract Worker or Other such as Student) • Occupational details • Financial information, including at least income (bankruptcy) • Purpose of Insurance • Habits <ul style="list-style-type: none"> o Smoking o Drinking o Travel (future) • Plan information, including riders • Other coverage, including whether it is going to be replaced • Whether the applicant has ever been denied coverage • Owner • Beneficiary • Pastimes (e.g., aviation, avocations, scuba diving) • Politically Exposed Foreign Person and if premium/lump sum payment is greater than \$100,000 • Authorization to collect additional information • Signature
Medical Information Bureau (MIB)	<p>The MIB was formed years ago by 15 medical directors to help protect insurance companies from fraud. Member companies submit a request for information on a proposed insured. MIB provides information on whether the proposed insured was found to have one or more impairments by another member company when they applied for insurance with this other company. MIB will also indicate what the impairments were, the degree of disease or disorder, and the relevant time frame.</p> <p>MIB is used as an alert only for underwriting. No rating can be attributed to the applicant based solely on the MIB finding without further research to confirm the impairment(s). When underwriting has been completed, the company augments the existing record by sending their findings back to MIB using special MIB codes for MIB to add to their database. MIB retains information for 7 years after which it may no longer be passed along to companies.</p> <p>MIB has additional services for member companies. One is called the Insurance</p>

CATEGORY	DESCRIPTION
	<p>Activity Index (IAI). The IAI provides companies with information on whether the proposed insured has applied for other coverage. It does not provide information on the outcome of that other application. This information can be used to identify other coverage including the possibility of over (too much) insurance, the possibility of denial of coverage not admitted by the applicant, and potential fraud in the case where the insured is applying for too many policies in a very short period of time.</p>
<p>Motor Vehicle Record (MVR)</p>	<p>The MVR generally provide information on the driving record of the individual. As there are many motor vehicle deaths and many accidental deaths are alcohol related, this information is important for the underwriting process. Included in the MVR is a history of:</p> <ul style="list-style-type: none"> • Moving violations • DUI (Driving Under the Influence) and DWI (Driving While Intoxicated) citations • Reckless driving incidences • Suspension of the drivers license for driving and non-driving reasons (e.g., not paying legally obligated child support payments) • Special license endorsement (e.g., motorcycle)
<p>Oral Fluid Test</p>	<p>An oral fluid sample can provide information on:</p> <ul style="list-style-type: none"> • HIV • Cotinine • Cocaine • Hepatitis (used in Canada, but only by a few companies) <p>The oral fluid test is less invasive than a blood test. It can also be collected by an agent so a paramedical or medical examiner is not needed.</p>
<p>Part 2 contains a series of detailed medical questions, for example:</p>	<ul style="list-style-type: none"> • Full medical history • Alcohol/Drug consumption • Family history <p>An exam will also be completed either by a doctor (Medical), usually performed in the doctor’s office or proposed insured’s home, or by a paramedical professional (Paramedical), usually performed in the proposed insured’s home/office.</p> <p>The Paramedical exam is done by a nurse and consists of a series of medical questions as in the Part 2 above but will include blood and urine specimens as well as vitals: height, weight, pulse, blood pressure.</p> <p>A Medical exam is done by a doctors and consists of a series of medical questions as in Part 2 above but will include in addition to the vitals a general examination such as auscultation of the heart and lungs .</p>

CATEGORY	DESCRIPTION
Tele-underwriting	<p>There are different types of tele-underwriting. In general, tele-underwriting is where someone calls the proposed insured to either confirm information provided on the application or to the medical / paramedical examiner. The call may also be used to find out more information. It is always done by phone. The caller who makes the calls can be from the insurance company or from an outside vendor. The caller is usually knowledgeable about medical conditions and knows how to interact with customers. Tele-underwriting answers are usually more honest than from other sources because the proposed insured generally feels more comfortable discussing medical issues with someone who has a medical background and they sometimes don't want to admit an impairment that might be embarrassing to an agent, whom they might know personally.</p> <p>When additional questions are asked of the applicant, there is usually a script and pre-programmed questions that pop up on the caller's screen, depending on how the previous question was answered. These are called drill-down questions and are designed to determine the extent of the impairment that was mentioned on the application.</p>
Urine Specimen	<p>Urine Specimen A urine specimen can provide information on:</p> <ul style="list-style-type: none"> • Cotinine (metabolite for smoking) • Cocaine and other drugs • Diuretics • Kidney and bladder function

9.3 Croatia

CATEGORY	DESCRIPTION
Application	<p>A Full Application contains general non-medical information part and medical questionnaire part.</p> <p>General non-medical information part contains data such as:</p> <ul style="list-style-type: none"> • General information <ul style="list-style-type: none"> o Name o Address o Phone number o Gender o Date of birth o Identity number o Citizenship • Occupational details • Plan information, including riders • Owner • Beneficiary • Authorization to collect additional information • Signature <p>Medical questionnaire part contains a series of detailed medical questions, for example:</p> <ul style="list-style-type: none"> • Habits <ul style="list-style-type: none"> o Smoking o Drinking • Other coverage • Whether the applicant has ever been denied coverage • Full medical history • Family history • Pastimes (e.g., aviation, avocations, sports) • Attending Physician Address
Attending Physician	A usual doctor of proposed insured.
Blood Test	<p>Tests not done:</p> <p>HIV</p> <p>PSA</p> <p>Alk Phos</p> <p>BUN</p> <p>A1c</p> <p>Total Protein</p>
Diabetes	<ul style="list-style-type: none"> • Glucose – Measures blood sugar levels and is an indicator of diabetes;
EKG	<p>An EKG (or ECG) is an electrocardiogram or a resting test of the heart. This is typically performed on older applicants and those applying for large amounts of coverage.</p>
Financial Records	<p>The larger incomes today have placed more emphasis on financial underwriting. Financial underwriting is primarily done to make sure that the income and net worth are consistent with the amount of insurance in force and applied for. For business owners, the anticipated growth of the business is also an important consideration. As a rule, Croatian companies use financial questionnaires drawn</p>

CATEGORY	DESCRIPTION
	by their reinsurers.
Full Underwriting	Full underwriting comprises of medical underwriting and financial status evaluation. It is usual in Croatia that financial underwriting is performed under underwriting guidelines proposed by corresponding reinsurer.
Internist examination	When the extent of a disease or impairment is not known, an underwriter often ask for an internal medicine specialist examination to get a clearer picture of the situation. The aim of internist examination is to provide the underwriter with the additional information needed to make a rating decision on the proposed insured.
Kidney screen	<ul style="list-style-type: none"> • Creatinine – Test for kidney disorder and dehydration; no BUN
Lipid screen	<ul style="list-style-type: none"> • Cholesterol – Risk factor in heart disease and stroke • HDL (High Density Lipoprotein) and LDL (Low Density Lipoprotein) – Components of cholesterol that are risk factors in heart disease • Triglycerides – Risk factor in heart disease
Liver screen	<ul style="list-style-type: none"> • Bilirubin – Test for liver and blood disease or disorder • AST and SGOT (Aspartate Aminotransferase) – Test for liver and muscle disorders • ALT and SGPT (Alanine Aminotransferase) – Test for liver disease • GGT (Gamma Glutamyltransferase) – Tests for liver disorder, alcohol, drugs
Medical Underwriting	This consists of a Full Application and a mandatory medical exam. Depending on answers collected from medical questionnaire, age of proposed insured and amount of insurance coverage sought medical underwriting is taking place. An exam is completed by a doctor (Medical), usually performed in the doctor's office. The exam will include blood and urine specimens as well as a general examination and measurements taken of height, weight, blood pressure, pulse rate, and more. A regular medical examination might include additional examination of the condition of the heart, lungs and nervous system.
Simplified underwriting	This consists of a Full Application which contains general non-medical information part and medical questionnaire part. This is basic underwriting type which enable insurance company to properly select and classify proposed risks.
Ultrasound scan	External ultrasound scan allows doctor to look more closely at organs such as the heart or womb and detect the problems. It is usually used for large amounts of coverage.
Urine Specimen	A urine specimen can provide information on bladder and kidney

9.4 India

CATEGORY	DESCRIPTION
Proposal form (Application Form)	Provides information about personal, medical, occupation and avocational details of the applicant.
Medical Examination	Medical examination conducted by a doctor or a paramedical professional for applicants above a particular age or sum assured.
Blood Test	Blood tests including complete blood count, kidney function tests, liver function tests, lipids, HIV, blood sugar test and PSA for higher age for certain term products are used.
Urine specimen	Used to screen for, drugs medicines, kidney and bladder function, infections and cotinine.
EKG, Treadmill	To assess the cardiac status.
Chest x-ray	To assess the status of lungs and check for any bony abnormalities
Questionnaires- Medical/financial/avocation/occupational risk	To assess any medical/financial/avocational /occupational risk through specific questionnaires e.g. Hypertension questionnaire, Diabetes questionnaire etc.
Financial records / Tax forms/business records	To assess net worth through documents including salary slips, Income Tax Returns, Profit & Loss accounts, bank statement, property documents etc.
Gathering Information using telephone recorded lines	While tele-underwriting is not an established norm as yet for comprehensive risk assessment, telephonic calls are made to procure additional information or seek clarifications form the applicants on a case to case basis.
Face to Face Report	This report is completed by the Agent Advisor in a standardized format and provides details regarding the financial profile of the applicant. It is required for cases above a particular sum assured.
Online verification of applicant's age	The age proof provided by the applicant at the proposal stage is verified with the electoral data base available for each state in India.
Field verification/investigations	To confirm the disclosures made by the applicant on the proposal form and other documents furnished for risk assessment, field verifications are conducted through certain trained agencies on a case to case basis.
Automatic/Clear case underwriting	<p>Cases are screened through an automated rule based engine. This may include medical examination as well (where only numerical values are involved).</p> <p>This is system based automated underwriting. The applicant's data is entered into the policy issuance system by a data entry operator and the case is screened for all questions on the proposal by a rule based engine. After the automated risk assessment, the case is issued or allocated to a junior underwriter for manual underwriting.</p> <p>Certain medical cases that involve simple numeric parameters are also underwritten on this basis. Cases involving ECG, TMT or complex medical examinations are excluded.</p>

Non Medical underwriting -	<p>Cases that fail the clear case process i.e. cases that are not underwritten by the automated rule engine are allocated to a junior underwriter. Post risk assessment, the underwriter issues the case on standard rates or may offer different terms for reasons including occupation, avocation, build and family history. This category also includes the cases that are kicked out by the automated rule engine owing to the system smarts (intelligent rules) that have been built over time e.g. cases from a particular locality or sourced by a particular producer.</p> <p>Cases kicked out by the automated rule based engine for reasons including build, occupation, system smarts (based on prudent underwriting practices) are underwritten by a junior underwriter. This excludes medical reports.</p>
Medical underwriting	<p>Most comprehensive underwriting – fully underwritten by an underwriter medically and financially. This includes detailed medical and financial underwriting based on mandatory medical examination on the basis of age and sum assured, disclosures made on the proposal form, medical questionnaires, medical examination and financial documents including Income Tax Returns, Salary Statements, Profit & Loss Statements etc.</p> <p>The medical examination is conducted by a doctor usually at his office, or by a paramedical professional, at the applicant’s premises. The medical examination includes detailed medical history, physical checkup, blood and urine tests The category of medical examination is based on the applicant’s age and sum assured.</p>
Simplified issuance	<p>Includes cases underwritten on an accept / reject basis. The proposal includes the basic questions for risk assessment (medical and non-medical) in addition to the regulatory and legal requirements. No medical examinations are conducted. The underwriting decision is arrived at on the basis of limited information available on the proposal form.</p>
Diabetes screening	<ul style="list-style-type: none"> • Glucose – Measures blood sugar levels and is an indicator of diabetes • A1C Glycated Hemoglobin – Measures concentration of glucose over time (diabetes control level)
Kidney screen	<ul style="list-style-type: none"> • BUN (Blood Urea Nitrogen) – Assess the status of kidneys • Creatinine – Assess the status of kidneys
Lipid screen	<ul style="list-style-type: none"> • Cholesterol – Risk factor in heart disease and stroke • HDL (High Density Lipoprotein) and LDL (Low Density Lipoprotein) – Components of cholesterol that are risk factors in heart disease • Triglycerides – Risk factor in heart disease
Liver screen	<ul style="list-style-type: none"> • Alkaline Phosphatase – Test for liver and bone disease • Bilirubin – Test for liver disease or disorder • AST and SGOT (Aspartate Aminotransferase) – Test for liver and muscle disorders • ALT and SGPT (Alanine Aminotransferase) – Test for liver disease • GGT (Gamma Glutamyltransferase) – Tests for liver disorder, alcohol, rugs • Total protein includes Albumin and Globulin <ul style="list-style-type: none"> § Albumin – Test for advanced liver disease and malnutrition § Globulin – Test for immune disorders, infections and allergic reactions

Complete Blood count:	including Hemoglobin, WBC, differential counts, RBC, platelet count and ESR to detect any blood abnormality
Urine Specimen	<ul style="list-style-type: none"> • Kidney and bladder function • Infections • Detection of diabetes • Cotinine (metabolite for smoking) - Only for certain term products where preferred underwriting is done
ECG, Treadmill	An ECG is regularly made use of to assess the cardiac status for moderate to high sum assured. A treadmill test is typically performed on older applicants and those applying for large amounts of coverage.
Chest x-ray	The chest x-ray is less commonly used in underwriting now. This was commonly used till a few years ago. It has now been restricted for very large amounts of coverage by some companies.
Attending Physician Statement (APS)	When the extent of a disease or an impairment is not known, an underwriter often requests for an APS to ascertain the exact status.
Collecting information via telephone calls	In India tele-underwriting is not very popular as yet, however this is likely to grow in the next few years. As stated above, most companies make use of telephone calls to seek clarifications and additional information at the time of underwriting.
Investigator's Report	This details the findings of an inspection conducted by an external party through a personal visit or through telephone calls prior to underwriting decision.
Financial Records / Tax Forms	The larger incomes and higher sum assured being requested today have placed more emphasis on financial underwriting. Financial underwriting is primarily done to make sure that the income and net worth are consistent with the amount of insurance in force and applied for. For business owners, the anticipated growth of the business is also an important consideration. These include salary slips, Income Tax Returns, company's Balance Sheet and Profit & loss accounts.
Financial Surrogates	Since in India, getting Income tax returns from self-employed group is a challenge, the Life Insurance Industry including our company accept financial surrogates which provide information regarding client's financial status. The surrogates includes documents like Bank statement, vehicle insurance details, property papers, mutual fund and fixed deposit receipts.
Medical Network Task Force (MNTF)	We use diagnostic centers for conducting applicant's medical examination and for collection of samples. MNTF is an industry level initiative to monitor / improve the quality of medical reports, regulate and standardize the pre-policy medical checkup process through regular Diagnostic Center audits, flagging & broadcasting of defaulting centers and creating a preferred service provider network for better risk management & customer experience. It is aimed at improving the mortality experience, save costs and ensure customer delight

9.5 Israel

CATEGORY	DESCRIPTION
Short Health Declaration	4 questions, limited sum assured
Full Health Declaration	Multiple questions, also limited sum assured, age dependent.
MER	Medical Examiner's Report: includes physical examination, ECG and Laboratory
Extensive MER	As MER, added would be more extensive LABS and a stress ECG
Short HD / Full HD / MER / Extensive MER	<p>All consist of a Full Application form containing general information and the relevant medical information. The type of relevant medical information required depends on age and requested sum assured. The application has 2 parts; part one contains general non medical information such as:</p> <p>General information</p> <ul style="list-style-type: none"> o Name o Address o Phone number o Gender o Date of birth o Identity number • Occupational details • Financial information, including at least income <ul style="list-style-type: none"> o All applications require basic details of earnings, when dealing with private individual policies, this information is generally not provided. If a high sum assured is requested, the underwriter will demand proof of income. o A substantial amount of policies come from the business sector, known as manager insurance (actually is employee insurance), this typically has term insurance, disability as well as pension as part of the policy. It is directly related to salary and proof of income is demanded. o At higher sum assureds, financial questionnaires are a requirement. o When dealing with key-person insurance / company loan insurance, often the applicants are requested to provide audited financial statements. • Habits <ul style="list-style-type: none"> o Smoking o Drinking • Plan information, including riders • Other coverage, including whether it is going to be replaced • Whether the applicant has ever been denied coverage • Owner • Beneficiary • Authorization to collect additional information • Signature
Part 2 contains a series of detailed medical questions, for example:	<ul style="list-style-type: none"> • Full medical history, however the short HD would not necessarily cover a complete range of illnesses. • Family history • Pastimes (e.g., aviation, avocations, scuba diving)

Medical Examiners Report	The Medical Examiner's Report will be completed by doctor and can be conducted in the applicant's home / work environment or in the doctor's office. The examination will include: blood and urine specimens as well as a general examination with measurements taken of height, weight, Blood pressure, pulse, ECG and more.
Tests and Requirements	
ECG	Electrocardiography
HD	Health Declaration
LAB	Laboratory Results
MER	Medical Examiner's Report
PMAR	Personal Medical Attendant's report
Stress ECG	Stress Electrocardiography
Financial Records	The larger incomes today have placed more emphasis on financial underwriting. Financial underwriting is primarily done to make sure that the income and net worth are consistent with the amount of insurance in force and applied for. For business owners, the anticipated growth of the business is also an important consideration.
ECG, Treadmill	An EKG (or ECG) is an electrocardiogram or a resting test of the heart. The treadmill test is a stress test to determine whether there are any irregular heart patterns. These are typically performed on older applicants and those applying for large amounts of coverage.
Tele-underwriting	<p>There are different types of tele-underwriting. In general, tele-underwriting is where someone calls the proposed insured to either confirm information provided on the application or to the medical / paramedical examiner. The call may also be used to find out more information. It is always done by phone. The calls are made from the insurance company.</p> <p>When additional questions are asked of the applicant, there is usually a script and pre-programmed questions that pop up on the caller's screen, depending on how the previous question was answered. These are called drill-down questions and are designed to determine the extent of the impairment that was mentioned on the application.</p> <p>Tele-underwriting is not widely used. There are two direct insurance companies that use it; other companies use a form of tele-underwriting for their mortgage business.</p>
Personal Medical Attendant's report (PMAR)	When the extent of a disease or impairment is not known, an underwriter often requests a PMAR to get a clearer picture of the situation. The advantage of a PMAR is it generally provides the underwriter with the additional information needed to make a rating decision on the proposed insured. The disadvantage of ordering a PMAR is that it generally slows the issue process, while the advantage is that it is relatively simple to request and at minimal cost to the insured. Use is also made of specialists' reports, however these are more difficult to get hold of and if not already in the possession of the applicant, the applicant may have a lengthy wait for the required appointment.
Urine Specimen	<p>A urine specimen can provide information on:</p> <ul style="list-style-type: none"> • Cotinine (metabolite for smoking) • Kidney and bladder function

Blood Test	<p>The life insurance blood test screens include a variety of tests. The blood test provides the most current medical information on an applicant, except for possibly a PMAR. The items typically screened for and their corresponding tests include:</p> <ul style="list-style-type: none"> • Diabetes screen <ul style="list-style-type: none"> o Glucose – Measures blood sugar levels and is an indicator of diabetes o HbA1c – Measures concentration of glucose over time, only required when Diabetes Mellitus has been declared or found. • Kidney screen <ul style="list-style-type: none"> o UREA (Blood Urea Nitrogen) – Test for kidney disease and dehydration o Creatinine – Test for kidney disorder and dehydration • Lipid screen <ul style="list-style-type: none"> o Cholesterol – Risk factor in heart disease and stroke o HDL (High Density Lipoprotein) and LDL (Low Density Lipoprotein) – Components of cholesterol that are risk factors in heart disease o Triglycerides – Risk factor in heart disease • Liver screen <ul style="list-style-type: none"> o Alkaline Phosphatase – Test for liver and bone disease o Bilirubin – Test for liver and blood disease or disorder o AST and SGOT (Aspartate Aminotransferase) – Test for liver and muscle disorders o ALT and SGPT (Alanine Aminotransferase) – Test for liver disease o GGT (Gamma Glutamyltransferase) – Tests for liver disorder, alcohol, drugs (rarely used) o Total protein includes Albumin <ul style="list-style-type: none"> § Albumin – Test for advanced liver disease and malnutrition • HIV screen
Physical examination	Blood pressure, Pulse, height, weight
Blood Test	Multiple screens from the blood draw are run to test things like the kidneys, liver, lipids, HIV, and diabetes.
Urine specimen	Screen for cotinine, kidney and bladder function
Attending Physician Report (PMAR)	Additional information on impairment from doctor
Tele-underwriting	Telephone interview of proposed insured
ECG, Stress ECG (treadmill)	Tests for heart
Financial records / Tax forms	Confirmation of income, net worth

9.6 Italy

CATEGORY	DESCRIPTION
Simplified Issue	<p>The characteristics of Simplified issue life underwriting include:</p> <ul style="list-style-type: none"> • Health questionnaire <ul style="list-style-type: none"> o Height and weight o Medical history o Habits (smoking, drinking) o Any medical treatment • No blood or urine analysis • Small face amounts • Age under 60 ("age range" for participation: persons between 18 and 60 may participate)
<ul style="list-style-type: none"> • Fully underwritten / Medical underwriting 	<p>This type of underwriting replaces health questionnaire with more detailed medical information and exams:</p> <ul style="list-style-type: none"> • Medical questionnaire and APS • Blood tests, urine analysis and more • Required for age over 60, high face amounts, special products (e.g. preferred risks) <p>This type of underwriting adds to the previous one an exhaustive financial valuation in order to define the adequacy of the face amount</p>
Application	Collects much information as explained above. It contains the health questionnaire too.
Attending Physician Statement (APS)	Additional information from a trusted doctor nominated by our
	Company or from the family doctor.
Blood Test	Multiple screens from the blood draw are run to test things like the kidneys, liver, lipids, HIV and diabetes.
Urine analysis	Measures several different components of urine
ECG, Treadmill	Tests for heart
Chest x-ray	Test for heart, lungs, chest in general
abdominal ultrasound	Procedure used to examine the internal organs of the abdomen
Financial questionnaire	Confirmation on income
Attending Physician Statement (APS)	<p>APS is requested to get provides additional medical information on an applicant, like:</p> <ul style="list-style-type: none"> • Statements on the personal history of the Insured • Previous diseases • Lifestyle • Medical examiner's declaration <p>an APS provides the underwriter with the additional information needed to make a rating decision on the proposed insured.</p>

CATEGORY	DESCRIPTION
Blood Test	<p>The life insurance blood test screens include a variety of tests. The blood test provides the most current medical information on an applicant:</p> <ul style="list-style-type: none"> • Diabetes screen <ul style="list-style-type: none"> o Glucose – Measures blood sugar levels and is an indicator of diabetes o Glycated Hemoglobin – Measures concentration of glucose over time • Kidney screen <ul style="list-style-type: none"> o BUN (Blood Urea Nitrogen) – Test for kidney disease and dehydration o Creatinine – Test for kidney disorder and dehydration • Lipid screen <ul style="list-style-type: none"> o Cholesterol – Risk factor in heart disease and stroke o HDL (High Density Lipoprotein) and LDL (Low Density Lipoprotein) – Components of cholesterol that are risk factors in heart disease o Triglycerides – Risk factor in heart disease • Liver screen <ul style="list-style-type: none"> o Alkaline Phosphatase – Test for liver and bone disease o Bilirubin – Test for liver and blood disease or disorder o AST and SGOT (Aspartate Aminotransferase) – Test for liver and muscle disorders o ALT and SGPT (Alanine Aminotransferase) – Test for liver disease o GGT (Gamma Glutamyltransferase) – Tests for liver disorder, alcohol, drugs • Total protein includes Albumin and Globulin <ul style="list-style-type: none"> o Albumin – Test for advanced liver disease and malnutrition o Globulin – Test for immune disorders, infections and allergic reactions • Hepatitis screen <ul style="list-style-type: none"> o HCV test o Hepatitis B test • HIV screen • PSA (Prostate Specific Antigen) for men ages 45+
Urine Analysis	Urine tests are very useful for providing information to assist in the diagnosis, monitoring and treatment of a wide range of diseases.
ECG, Treadmill	An EKG (or ECG) is an electrocardiogram or a resting test of the heart. The treadmill test is a stress test to determine whether there are any irregular heart patterns. These are typically performed for large amounts of coverage.
Chest x-ray	The chest x-ray makes images of the heart, lungs, airways, blood vessels, and bones of the spine and chest. It can find issues related to shortness of breath, chest pain, chronic cough and fever.
Abdominal ultrasound	Abdominal ultrasound is an imaging procedure used to examine the internal organs of the abdomen, including the liver, gallbladder, spleen, pancreas, and kidneys. The blood vessels that lead to some of these organs can also be looked at with ultrasound.
Financial questionnaire	<p>The purpose of financial underwriting is to establish that the amount, term and type of any insurance are appropriate for the risk the applicant is seeking to cover. Different kind of covers are underwritten with different questionnaires:</p> <ul style="list-style-type: none"> o Personal cover questionnaire (family protection) o Business cover questionnaire (key man, partnership/share protection) <p>For business owners, financial underwriting is primarily done to make sure that the income and net worth are consistent with the amount of insurance in force and applied for.</p>

9.7 Japan

CATEGORY	DESCRIPTION
Medical	Form of Fully Underwritten, includes a medical exam
Interview with Underwriter	Underwriting with Application form and Interview with Underwriter. The interview includes medical questions. (*) The interviewer is authorized by the Life Insurance Association of Japan.
Medical Check-up	Form of Fully Underwritten through submitting a result of medical check-up performed annually inside a company.
Application Only	Underwritten only by application, includes medical questions.
No Medical Underwriting	No medical underwriting
Others	A company submit circumstances of employee, etc.
Underwriting Type	Components
Medical / Paramedical Underwriting	Following medical conditions in an application are evaluated and medical inspections are performed. <ul style="list-style-type: none"> • Name, Gender, Date of Birth • Occupation, Salary • Current Sickness • Past Sickness History • Abnormal check in medical check-up • Blood pressure • Urine Specimen (protein, sugar) • Height, Weight • Examination by touch • Operative scar • Physical disability
Interview with Underwriter	Following medical conditions in an application are evaluated and observations by interviewer is performed. The interviewer is not medical doctor so that there is no medical inspection or examination by touch. <ul style="list-style-type: none"> • Name, Gender, Date of Birth • Occupation, Salary • Current Sickness • Past Sickness History • Abnormal check in medical check-up • Observation of physical disability • Observation of health condition • Height, Weight

CATEGORY	DESCRIPTION
Medical Check-up	<p>Following medical conditions in an application and a result of medical check-up are evaluated.</p> <ul style="list-style-type: none"> • Name, Gender, Date of Birth • Occupation, Salary • Current Sickness • Past Sickness History • Abnormal check in medical check-up • Observation of physical disability • Blood pressure • Urine Specimen (protein, sugar) • Height, Weight • Blood test (Liver function test, etc.) • Cardiac electrogram
Application Only	<p>Following medical conditions in an application are evaluated</p> <ul style="list-style-type: none"> • Name, Gender, Date of Birth • Occupation, Salary • Current Sickness • Past Sickness History • Abnormal check in medical check-up • Observation of physical disability • Height, Weight

9.8 Latin America

CATEGORY	DESCRIPTION
Application Part 1	<p>A full application has what is called Part 1 and Part 2. Part 1 contains general non-medical information such as:</p> <ul style="list-style-type: none"> • General information <ul style="list-style-type: none"> o Name o Address o Phone number o Gender o Date of birth o Social security number (or taxpayer identity number) o Drivers license number for Motor Vehicle Report (MVR) check o Citizenship • Occupational details • Financial information, including at least income • Habits <ul style="list-style-type: none"> o Smoking o Drinking • Plan information, including riders • Other coverage, including whether it is going to be replaced • Whether the applicant has ever been denied coverage • Owner • Beneficiary • Authorization to collect additional information • Signature
Application Part 2	<p>Contains a series of detailed medical questions, for example:</p> <p>Full medical history</p> <ul style="list-style-type: none"> • Family history • Pastimes (e.g., aviation, avocations, scuba diving)
Blood Test	<p>Multiple screens from the blood draw are run to test kidney and liver function, lipids, HIV, and blood sugar levels. Exam kits are used where permitted, however in some countries the kits cannot be used as they are not easy to import or are banned. These countries are Argentina, Brazil, Costa Rica. Other countries impose high Custom duties, however sometimes the shipping plus duties plus the cost of the exams is less than in-country labs. In-country labs are clinical labs and not reference labs. Many lack the reagents for the toxicology tests found in US reference labs. Reflex tests are not available and the sample is not held for retesting upon request. In many labs, reports are still typed on several pages and then signed by the technician.</p>
Urine specimen	<p>Screen for cotinine, drugs, medicines, kidney and bladder function.</p>
Medical Information Bureau (MIB)	<p>Screen for fraud and insurance activity – Only in certain markets. A Latin American company was the first insurance company authorized by MIB to do checks outside of the US and Canada and has fed the database with domestic Life, DI and foreign nationals. Insurers are working with the MIB to introduce the service to the Caribbean.</p>

CATEGORY	DESCRIPTION
Attending Physician Statement (APS)	<p>Additional information on impairment from an attending physician. These are difficult to obtain in Latin America and the Caribbean, as doctors do not keep the same type of detailed information on their patients as in the US. Most handwrite a narrative on the insurers form. In many instances the statement may be written as a type of Certificate indicating wellness to return to work or to stay home due to an illness. Some physicians do provide good reports, depending on the country or the island, however, a comprehensive report, as seen in the US, is rarely if ever seen. Most of the statements in Latin America and the Caribbean are obtained by the producers. There are no APS retrieval companies or services in any of the countries. As pointed out before, both in Latin America and the Caribbean, the APS can be very short, usually obtained by the producer or agent who goes to the client's physician and obtains a summary on a company form. Rarely is a photocopy of records is obtained. Sometimes it is easier to obtain copies of records if the client was admitted to a private hospital; a public institution will make it very difficult to obtain records.</p> <p>However, at claim time, due diligence and investigator insistence is helpful in obtaining some records. In other instances, the investigator has access to the records but is not allowed to make copies.</p> <p>Underwriter experience is essential in order to extrapolate information obtained on scant APS summaries.</p>
Motor Vehicle Record (MVR)	<p>Used only on very special and large cases. Experience indicates that MVRs usually provide very little information that leads to adverse actions.</p> <p>In Latin America and the Caribbean, except for a few countries such as Argentina, a scoring system is used for auto insurance. Most of the other countries do not keep records or records are not available for motor vehicles. This tool can be costly; it is not available in all states nor other countries and can add delays.</p>
Tele-underwriting	<p>Not used at this time. The Tele-underwriting alternative has been explored for non US markets and found that it may delay the process as producers or agents cannot complete the application and bind during the sales visit. Individuals in Latin America and the Caribbean are reluctant to talk to strangers over the phone about their personal health or finances.</p>
Pharmaceutical database check	<p>Provides drug usage of proposed insured. Used only in the US for certain niche market. Prescription histories can be used for US market proposed insureds written through Latin American companies. Records can be clear even though individuals have admitted to an impairment. Many applicants that are in the military, national guard or work for the government are not in prescription databases.</p>

CATEGORY	DESCRIPTION
Inspection report (IR)	<p>Confirms information about proposed insured. Widely used throughout all markets, usually using multilingual interviewers that are college graduates in Psychology. Service provides a very thorough IR, accessing different databases in Central and South America as well as the Caribbean.</p> <p>IR in these markets provides valuable information if performed correctly. Unlike the US where there are restrictions on certain questions due to privacy laws, inspectors in these markets may ask more direct questions about lifestyle and habits. Regarding finances, many clients do not want to discuss details over the phone for fear that someone could be tapping the line and obtaining information about them or their finances and then be subject to extortions or kidnappings. Alternatives may be sought to complete the reports.</p>
EKG, Treadmill	<p>Tests for heart. In Latin America and the Caribbean almost no lab provides NT-Pro BNP testing. The ones that are offering these tests do so at astronomical costs and long delays. Most insurers rely on resting EKGs.</p> <p>In Latin America and the Caribbean, the EKG and TMT are less expensive than in the US, but clients must go to a special facility which may take most of the day.</p>
Chest x-ray	Rarely ordered.
Financial records / Tax forms	Confirmation of income, net worth
Oral fluid	Not used-In Latin America and the Caribbean.
Urine Specimen	<p>A urine specimen can provide information on:</p> <ul style="list-style-type: none"> • Cotinine (metabolite for smoking) • Cocaine and other drugs • Medicines • Kidney and bladder function <p>The test is very expensive in Latin America. In the Caribbean they use a screening immune-assay. Not as accurate.</p> <p>Cotinine test is less common in Latin America and the Caribbean. Some local labs use a screening immune-assay that turns a specific color in the presence of Nicotine. Most test Nicotine, but not Cotinine. The lab may indicate on the lab result that testing for Cotinine was performed, but it is hard to prove that the procedure was correct. Most companies operating in these markets rely on what the producers (agent) tell them. Rarely is there a thorough review of the lab capabilities, systems, equipment and reliability. There is a lack of confidence that the laboratory is performing tests appropriately. This issue has been raised many times with US Labs to encourage them to help labs in Latin America and the Caribbean. There is a reluctance to set up labs and companies are left at the mercy of what is available with no confidence in the quality.</p>

9.9 Mexico

CATEGORY	DESCRIPTION
Application	Collects much information as explained above
Blood Test	Multiple screens from the blood draw are run to test things like the kidneys, liver, lipids, HIV, and diabetes.
Urine specimen	Screen for cotinine, drugs, medicines, kidney and bladder function
Medical Information Bureau (MIB)	Screen for fraud and insurance activity and medical impairments
Attending Physician Statement (APS)	Additional information on impairment from doctor
Inspection report	Confirms information about proposed insured
EKG, Treadmill	Tests for heart
Financial records / Tax forms	Confirmation of income, net worth
Inspection Report	The inspection report is typically where a third party vendor calls the applicant to validate and augment application information. This is similar to the simplest form of tele-underwriting. We use this report from 250,000 USD or more.
Medical Underwriting	<p>This consists of a Full Application, a mandatory medical exam and laboratory tests.</p> <p>We use come certified providers for laboratory tests.</p> <ul style="list-style-type: none"> • General information <ul style="list-style-type: none"> o Name o Address o Phone number o Gender o Date of birth o Federal identification number o Citizenship • Occupational details • Face amount • Financial information, including income and properties specifications • Habits <ul style="list-style-type: none"> o Smoking • Plan information • Additional coverage like inability or cancer • Whether the applicant has ever been denied coverage • Penal history • Owner • Beneficiary • Authorization to collect additional information • Signature • Family history • Pastimes, in some cases like motorcycling or scuba diving we require additional application
	An exam will also be completed either by a doctor (Medical), usually performed in the doctor’s office. The exam will include blood and urine specimens, as well as a general examination and measurements taken of height, weight, blood pressure, pulse rate, and more. ECG depends on the face amount and the age

CATEGORY	DESCRIPTION
Nonmedical	This consists of a Full Application, it's the same that we describe in Medical underwriting except that we don't require the medical exam and it doesn't include blood, urine or ECG tests.
Blood Testing	<p>The life insurance blood test screens include a variety of tests. The blood test provides the most current medical information on an applicant, except for possibly an APS. The items typically screened for and their corresponding tests include:</p> <ul style="list-style-type: none"> • Diabetes screen <ul style="list-style-type: none"> o Glucose – Measures blood sugar levels and is an indicator of diabetes o A1C Glycated Hemoglobin – Measures concentration of glucose over time o AGP (Advance Glycation Product) – Tests for abnormal blood sugar levels; is indicator of diabetes • Kidney screen <ul style="list-style-type: none"> o BUN (Blood Urea Nitrogen) – Test for kidney disease and dehydration o Creatinine – Test for kidney disorder and dehydration • Lipid screen <ul style="list-style-type: none"> o Cholesterol – Risk factor in heart disease and stroke o HDL (High Density Lipoprotein) and LDL (Low Density Lipoprotein) – Components of cholesterol that are risk factors in heart disease o Triglycerides – Risk factor in heart disease • Liver screen <ul style="list-style-type: none"> o Alkaline Phosphatase – Test for liver and bone disease o Bilirubin – Test for liver and blood disease or disorder o AST and SGOT (Aspartate Aminotransferase) – Test for liver and muscle disorders o ALT and SGPT (Alanine Aminotransferase) – Test for liver disease o GGT (Gamma Glutamyltransferase) – Tests for liver disorder, alcohol, drugs o Total protein includes Albumin and Globulin <ul style="list-style-type: none"> § Albumin – Test for advanced liver disease and malnutrition § Globulin – Test for immune disorders, infections and allergic reactions • HIV screen • PSA (Prostate Specific Antigen) for men ages 40+ <p>A urine specimen can provide information on:</p> <ul style="list-style-type: none"> • Cotinine (metabolite for smoking) • Cocaine and other drugs • Medicines • Kidney and bladder function

9.10 Norway

CATEGORY	DESCRIPTION
Underwriting	Full set of medical questions, no exam
Simplified underwriting	Less than a full set of medical questions, no exam
Workability underwriting	One questions; workable or not workable
ROFF	<p>There are a national register consisting of information about people who have not got the coverage they applied for, either limited coverage, additional premium, or denial. The register is named ROFF. It only contains the identification number and name of the insurance company who have performed the underwriting. If another insurance company receives an application they can check the register and contact the life insurance company who has performed the underwriting for details. All life insurance companies being a member of Finance Norway have access to the ROFF-register. The information is deleted after 10 years.</p>
NEMNDA	<p>The purpose of the committee for health assessment, hereinafter NEMNDA is to establish a system for the best possible professional assessment of death, disease and disability associated with diseases, disorders, and lifestyle. NEMNDA shall prepare and updated guidelines that provide guidance about how different health conditions affect or do not affect mortality, morbidity and disability and provide recommendations on how this should be handled in relation to an insurance application.</p> <p>NEMNDA shall also make recommendations to the assessment of individual applications for insurance of difficult medical grade, and for compensation when necessary.</p> <p>It is a goal that the guidelines at any time should be as good as possible according to the medical statistics in Norway and in other countries it is natural to compare with, so all insurance applicants may be treated fairly and that most insurance applicants can get a quote on insurance.</p> <p>Insurance companies that are party to this convention undertake to support NEMNDA's work so that guidelines can be as good as possible. Moreover, the goal is that the companies that are members of the convention have the expertise in health assessment area that participation in NEMNDA provides.</p> <p>The insurance professional participants in NEMNDA will also assist Finance Norway, the industrial policy work on relevant and related areas.</p> <p>NEMNDA has a history going back to the 1920-ies and for all practical purposes all life insurance companies are following the guidelines provided from NEMNDA.</p>

CATEGORY	DESCRIPTION
Underwriting	<p>This consists of a full set of medical questions. There is no requirement of a medical or paramedical exam. There are different questionnaires if the individual is applying for an individual insurance or if he/she is applying as an employer within a company.</p> <p>The questionnaire when applying for insurance typically consists of the following information. The questionnaires are not standardized and there are differences between the insurance companies.</p> <ul style="list-style-type: none"> • General information <ul style="list-style-type: none"> o Name o Address o Phone number o Social security number (or identity number). Date of birth and gender are part of the identity number and there is no need for separate questions for this information. • Medical history • Family history • Habits <ul style="list-style-type: none"> o Smoking o Drinking • Education • Income • Other coverage, including whether it is going to be replaced • Whether the applicant has ever been denied coverage • Authorization to collect additional information • Signature <p>Based upon the information provided in the questionnaire the underwriter (within the insurance company) might make an interview with the applicant. This will be performed as an interview by phone. The information will be stored on tape. The underwriter might also collect additional information for the medical doctor. For high sum insured it might be necessary to ask the applicant to have additional medical examinations.</p>
Simplified underwriting	<p>There are a few medical questions, but otherwise the information to be provided is similar to the previous underwriting.</p> <p>Based upon the information provided in the questionnaire the underwriter (within the insurance company) might make an interview with the applicant. This will be performed as an interview by phone. The information will be stored on tape. The underwriter might also collect additional information for the medical doctor.</p> <p>For high sum insured it might be necessary to ask the applicant to have additional medical examinations.</p>
Workability underwriting	<p>The underwriting consists of one question and this is if the individual is 100 % workable or not.</p>

9.11 Russia

CATEGORY	DESCRIPTION
Fully underwritten	Most comprehensive type of underwriting
Medical underwriting	Form of Fully Underwritten, includes a medical exam
Nonmedical	Form of Fully Underwritten, no exam
Simplified Issue	Less than a full set of medical questions, no exam
Blood Testing	<ul style="list-style-type: none"> • Diabetes screen <ul style="list-style-type: none"> o Glucose – Measures blood sugar levels and is an indicator of diabetes o HbA1c Glycated Hemoglobin – Measures concentration of glucose over time o AGP (Advance Glycation Product) – Tests for abnormal blood sugar levels; is indicator of diabetes • Kidney screen <ul style="list-style-type: none"> o BUN (Blood Urea Nitrogen) – Test for kidney disease and dehydration o Creatinine – Test for kidney disorder and dehydration • Lipid screen <ul style="list-style-type: none"> o Cholesterol – Risk factor in heart disease and stroke o HDL (High Density Lipoprotein) and LDL (Low Density Lipoprotein) – Components of cholesterol that are risk factors in heart disease o Triglycerides – Risk factor in heart disease • Liver screen <ul style="list-style-type: none"> o Alkaline Phosphatase – Test for liver and bone disease o Bilirubin – Test for liver and blood disease or disorder o AST and SGOT (Aspartate Aminotransferase) – Test for liver and muscle disorders o ALT and SGPT (Alanine Aminotransferase) – Test for liver disease o GGT (Gamma Glutamyltransferase) – Tests for liver disorder, alcohol, drugs o Total protein includes Albumin and Globulin <ul style="list-style-type: none"> § Albumin – Test for advanced liver disease and malnutrition § Globulin – Test for immune disorders, infections and allergic reactions • Thyroid gland screen <ul style="list-style-type: none"> o T3 – Triiodothyronine – Test for thyroid gland disease o T4- Serum thyroxine - Test for thyroid gland disease o TSH – Thyroid stimulation hormone - Test for thyroid gland disease • HIV screen • PSA (Prostate Specific Antigen) for men ages 50+
Medical questionnaire (Filled by Doctor)	• Document with medical information which is filled by Doctor to describe health status and anamneses. Format of the document may vary from insurer to insurer
Kidney and bladder	• Kidney and bladder function

9.12 South Africa

CATEGORY	DESCRIPTION
Accidental death	Death resulting directly and solely from an accidental injury visible on the surface of the body or disclosed by an autopsy; a disease or infection resulting directly from an accidental injury as described.
Acquisitions	One company taking over controlling interest in another company.
Activities of daily living	A list of activities, normally including mobility, dressing, bathing, toileting, transferring, and eating which are used to assess degree of impairment and determine eligibility for some types of insurance benefits.
Amyotrophic lateral sclerosis	Amyotrophic lateral sclerosis (ALS), sometimes called Lou Gehrig's disease, is a rapidly progressive, invariably fatal neurological disease that attacks the nerve cells (neurons) responsible for controlling voluntary muscles. The disease belongs to a group of disorders known as motor neuron diseases, which are characterized by the gradual degeneration and death of motor neurons. Motor neurons are nerve cells located in the brain, brainstem, and spinal cord that serve as controlling units and vital communication links between the nervous system and the voluntary muscles of the body. Messages from motor neurons in the brain (called upper motor neurons) are transmitted to motor neurons in the spinal cord (called lower motor neurons) and from them to particular muscles. In ALS, both the upper motor neurons and the lower motor neurons degenerate or die, ceasing to send messages to muscles. Unable to function, the muscles gradually weaken, waste away (atrophy), and twitch (fasciculations). Eventually, the ability of the brain to start and control voluntary movement is lost.
Anemia	Anemia is a medical condition in which the red blood cell count or hemoglobin is less than normal. The normal level of hemoglobin is generally different in males and females. For men, anemia is typically defined as hemoglobin level of less than 13.5 gram/100ml and in women as hemoglobin of less than 12.0 gram/100ml.
Angiogram	Angiography or arteriography is a medical imaging technique used to visualize the inside, or lumen, of blood vessels and organs of the body, with particular interest in the arteries, veins and the heart chambers. This is traditionally done by injecting a radio-opaque contrast agent into the blood vessel and imaging using X-ray based techniques such as fluoroscopy.
Angioplasty	Angioplasty is the technique of mechanically widening a narrowed or obstructed blood vessel, the latter typically being a result of atherosclerosis. An empty and collapsed balloon on a guide wire, known as a balloon catheter, is passed into the narrowed locations and then inflated to a fixed size using water pressures some 75 to 500 times normal blood pressure (6 to 20 atmospheres). The balloon crushes the fatty deposits, opening up the blood vessel for improved flow, and the balloon is then deflated and withdrawn. A stent may or may not be inserted at the time of ballooning to ensure the vessel remains open.
Ankylosing spondylitis	A type of arthritis that causes chronic inflammation of the spine and the sacroiliac joints. Chronic inflammation in these areas causes pain and stiffness in and around the spine. Over time, chronic spinal inflammation (spondylitis) can lead to a complete cementing together (fusion) of the vertebrae, a process called ankylosis. Ankylosis causes total loss of mobility of the spine.
Annuity	A stream of periodic payments made over a specified period of time.

CATEGORY	DESCRIPTION
Anxiety disorder	Anxiety disorder is a blanket term covering several different forms of a type of mental illness of abnormal and pathological fear and anxiety.
Asset	All funds, property, goods, securities, rights of action, or resources of any kind owned by someone.
Autoimmune disease	An illness that occurs when the body tissues are attacked by its own immune system. The immune system is a complex organization within the body that is designed normally to "seek and destroy" invaders of the body, including infectious agents. Patients with autoimmune diseases frequently have unusual antibodies circulating in their blood that target their own body tissues.
Avascular necrosis	Avascular necrosis (also osteonecrosis, bone infarction, aseptic necrosis, ischemic bone necrosis, and AVN) is a disease where there is cellular death (necrosis) of bone components due to interruption of the blood supply.[3] Without blood, the bone tissue dies and the bone collapses. If avascular necrosis involves the bones of a joint, it often leads to destruction of the joint articular surfaces.
Balance Sheet	An accounting term referring to a listing of a company's assets, liabilities and surplus as of a specific date.
Benefits	The amount payable by the insurance company to a claimant, assignee or beneficiary under each coverage.
BMI	The body mass index (BMI), or Quetelet index, is a heuristic proxy for human body fat based on an individual's weight and height. BMI does not actually measure the percentage of body fat.
Bond	A certificate issued by a government or corporation as evidence of a debt. The issuer of the bond promises to pay the bondholder a specified amount of interest for a specified period and to repay the loan on the expiration (maturity) date.
Broker	A marketing specialist who represents buyers of property and liability insurance and who deals with either agents or companies in arranging for the coverage required by the customer.
Business insurance	A policy which primarily provides coverage of benefits to a business as contrasted to an individual. It is issued to indemnify a business for the loss of services of a key employee or a partner who becomes disabled.
Business overhead protector	A type of short-term disability income contract that reimburses the insured person for specified, fixed monthly expenses, normal and customary in the operation and conduct of his/her business or office.
Buy & Sell agreement	A contract among members of a firm that provides for the continuation of the business through an agreement by which each principal agrees that, in the event of his or her death, his or her estate will sell its interest back to the business entity for a predetermined amount. The amount may be calculated as a fixed amount or as a variable amount, depending on business factors. The agreement is usually funded by life insurance.

CATEGORY	DESCRIPTION
CABG	Coronary artery bypass surgery, also coronary artery bypass graft (CABG, pronounced "cabbage") surgery, and colloquially heart bypass or bypass surgery is a surgical procedure performed to relieve angina and reduce the risk of death from coronary artery disease. Arteries or veins from elsewhere in the patient's body are grafted to the coronary arteries to bypass atherosclerotic narrowings and improve the blood supply to the coronary circulation supplying the myocardium (heart muscle).
Cancellation	The discontinuance of an insurance policy before its normal expiration date, either by the insured or the company.
Cancer	Cancer /'kænsər/ (listen), known medically as a malignant neoplasm, is a broad group of various diseases, all involving unregulated cell growth. In cancer, cells divide and grow uncontrollably, forming malignant tumors, and invade nearby parts of the body. The cancer may also spread to more distant parts of the body through the lymphatic system or bloodstream. Not all tumors are cancerous. Benign tumors do not grow uncontrollably, do not invade neighboring tissues, and do not spread throughout the body.
Capital Gain	Portion of the total GAIN recognized on the sale or exchange of a non-inventory asset which is not taxed as ORDINARY INCOME. Capital gains have historically been taxed at a lower rate than ordinary income.
Case Management	A system of coordinating medical services to treat a patient, improve care and reduce cost. A case manager coordinates health care delivery for patients.
Cashflow	The movement of cash in and out of a business from day-to-day direct trading and other non-trading or indirect effects, such as capital expenditure, tax and dividend payments.
Catastrophe	Event which causes a loss of extraordinary magnitude, such as a hurricane or tornado.
Cession	The portion of insurance transferred to a reinsurer by the ceding company. Cession of reinsurance by reinsurers is called "retrocession."
Chronic fatigue syndrome	Chronic fatigue syndrome (CFS) is the most common name used to designate a significantly debilitating medical disorder or group of disorders generally defined by persistent fatigue accompanied by other specific symptoms for a minimum of six months, not due to ongoing exertion, not substantially relieved by rest, nor caused by other medical conditions. The disorder may also be referred to as myalgic encephalomyelitis (ME), post-viral fatigue syndrome (PVFS), chronic fatigue immune dysfunction syndrome (CFIDS), or several other terms. Biological, genetic, infectious and psychological mechanisms have been proposed for the development and persistence of symptoms but the etiology of CFS is not understood and may have multiple causes. There is no diagnostic laboratory test or biomarker for CFS.
Claimant	The person making a claim. Use of the word "claimant" usually denotes that the person has not yet filed a lawsuit. Upon filing a lawsuit, claimant becomes a plaintiff, but the terms are often used interchangeably.

CATEGORY	DESCRIPTION
Closed Corporation	<p>Whilst it is no longer possible to form a new close corporation, it is still worth knowing the main features them. It is possible still to purchase a shelf close corporation, although availability of these will become increasingly scarcer, or you may find if you are buying an existing business its legal entity is that of a close corporation.</p> <p>A close corporation has certain advantages and disadvantages over sole proprietorships.</p>
Colonoscopy	Colonoscopy is the endoscopic examination of the large bowel and the distal part of the small bowel with a CCD camera or a fiber optic camera on a flexible tube passed through the anus. It may provide a visual diagnosis (e.g. ulceration, polyps) and grants the opportunity for biopsy or removal of suspected lesions.
Combined ratio	Basically, a measure of the relationship between rands spent for claims and expenses and premium taken in; more specifically, the sum of the ratio of losses incurred to premiums earned and the ratio of commissions and expenses incurred to premiums written. A ratio above 100 means that for every premium rand taken in, more than a rand went for losses, expenses, and commissions.
Comission	Fee paid to an agent or insurance salesperson as a percentage of the policy premium. The percentage varies widely depending on coverage, the insurer and the marketing methods.
Congestive heart failure	Congestive heart failure (CHF) is a condition in which the heart's function as a pump is inadequate to meet the body's needs.
Contingent liability	Contingent liability cover is a life policy which will liquidate the personal guarantees given by a guarantor on behalf of the business in the event of premature death or permanent disability.
Contract	A binding agreement between two or more parties for the doing or not doing of certain things. A contract of insurance is embodied in a written document called the policy.
COPD	Chronic obstructive pulmonary disease (COPD), also known as chronic obstructive lung disease (COLD), chronic obstructive airway disease (COAD), chronic airflow limitation (CAL) and chronic obstructive respiratory disease (CORD), is the co-occurrence of chronic bronchitis and emphysema, a pair of commonly co-existing diseases of the lungs in which the airways become narrowed.[1] This leads to a limitation of the flow of air to and from the lungs, causing shortness of breath (dyspnea). In clinical practice, COPD is defined by its characteristically low airflow on lung function tests.[2] In contrast to asthma, this limitation is poorly reversible and usually gets progressively worse over time.
CT scan	X-ray computed tomography, also Computed tomography (CT) or Computed axial tomography (CAT), can be used for medical imaging and industrial imaging methods employing tomography created by computer processing. Digital geometry processing is used to generate a three-dimensional image of the inside of an object from a large series of two-dimensional X-ray images taken around a single axis of rotation.
Current assets	Cash and anything that is expected to be converted into cash within twelve months of the balance sheet date.

CATEGORY	DESCRIPTION
CVA	Brain cell function requires a constant delivery of oxygen and glucose from the bloodstream. A stroke, or cerebrovascular accident (CVA), occurs when blood supply to part of the brain is disrupted, causing brain cells to die. Blood flow can be compromised by a variety of mechanisms.
Death benefit	The limit of insurance or the amount of benefit that will be paid in the event of the death of a covered person.
Diabetes	Diabetes is a chronic condition associated with abnormally high levels of sugar (glucose) in the blood.
Disability	A physical or a mental impairment that substantially limits one or more major life activities of an individual. It may be partial or total.
Dividend	A return of part of the premium on participating insurance to reflect the difference between the premium charged and the combination of actual mortality, expense and investment experience. Such premiums are calculated to provide some margin over the anticipated cost of the insurance protection.
Dread disease	Dread Disease Coverage is a kind of health insurance coverage that gives protection for a specific dread or catastrophic disease (like cancer or heart disease).
ECG	Electrocardiography is a transthoracic (across the thorax or chest) interpretation of the electrical activity of the heart over a period of time, as detected by electrodes attached to the outer surface of the skin and recorded by a device external to the body. The recording produced by this noninvasive procedure is termed as electrocardiogram (also ECG or EKG). An electrocardiogram (ECG) is a test that records the electrical activity of the heart.
ECHO	An echocardiogram, often referred to in the medical community as a cardiac ECHO or simply an ECHO, is a sonogram of the heart (it is not abbreviated as ECG, which in medicine usually refers to an electrocardiogram). Also known as a cardiac ultrasound, it uses standard ultrasound techniques to image two-dimensional slices of the heart. The latest ultrasound systems now employ 3D real-time imaging.
EEG	Electroencephalography (EEG) is the recording of electrical activity along the scalp. EEG measures voltage fluctuations resulting from ionic current flows within the neurons of the brain. In clinical contexts, EEG refers to the recording of the brain's spontaneous electrical activity over a short period of time, usually 20–40 minutes, as recorded from multiple electrodes placed on the scalp. Diagnostic applications generally focus on the spectral content of EEG, that is, the type of neural oscillations that can be observed in EEG signals. In neurology, the main diagnostic application of EEG is in the case of epilepsy, as epileptic activity can create clear abnormalities on a standard EEG study.
Embedded value	The Embedded Value (EV) of a life insurance company is the present value of future profits plus adjusted net asset value. It is a construct from the field of actuarial science which allows insurance companies to be valued.
Endorsement	Part of most insurance policies; policy forms that modify the main coverage form; changes to the policy language.

CATEGORY	DESCRIPTION
Epilepsy	Epilepsy is a disorder of the brain's electrical system. Abnormal electrical impulses cause brief changes in movement, behavior, sensation, or awareness. These interruptions, known as seizures, may last from a few seconds to a few minutes. People who have had two or more seizures are considered to have epilepsy.
Equity	Residual interest in the assets of an entity that remains after deducting its liabilities. Also, the amount of a business' total assets less total liabilities.
Exclusions	Specific conditions or circumstances listed in the policy for which the policy will not provide benefit payments.
Fibromyalgia	Fibromyalgia (FM or FMS) is a medical disorder characterized by chronic widespread pain and allodynia, a heightened and painful response to pressure. It is an example of a diagnosis of exclusion. Fibromyalgia symptoms are not restricted to pain, leading to the use of the alternative term fibromyalgia syndrome for the condition. Other symptoms include debilitating fatigue, sleep disturbance, and joint stiffness. Some patients may also report difficulty with swallowing, bowel and bladder abnormalities, numbness and tingling, and cognitive dysfunction. Fibromyalgia is frequently comorbid with psychiatric conditions such as depression and anxiety and stress-related disorders such as posttraumatic stress disorder.
Full blood count	A complete blood count (CBC), also known as full blood count (FBC) or full blood exam (FBE) or blood panel, is a test panel requested by a doctor or other medical professional that gives information about the cells in a patient's blood. A scientist or lab technician performs the requested testing and provides the requesting medical professional with the results of the CBC.
Functional Capacity evaluation	A compilation information that 1. objectively assists in measuring functional abilities and consistency of efforts, 2. provides further data for the determination of permanent work capacity and 3. helps to promote safe work parameters.
Genetic testing	Genetic testing (also called DNA-based tests) is among the newest and most sophisticated of techniques[1] used to test for genetic disorders which involves direct examination of the DNA molecule itself. Other genetic tests include biochemical tests for such gene products as enzymes and other proteins and for microscopic examination of stained or fluorescent chromosomes.
Goodwill	Any surplus money paid to acquire a company that exceeds its net tangible assets value.
Grace period	A specified period after a premium payment is due, in which the policyholder may make such payment, and during which the protection of the policy continues.
Group Insurance	Insurance written on a number of people under a single master policy, issued to their employer or to an association with which they are affiliated.
Hazardous activity	Bungee jumping, scuba diving, horse riding and other activities not generally covered by standard insurance policies. For insurers that do provide cover for such activities, it is unlikely they will cover liability and personal accident, which should be provided by the company hosting the activity.

CATEGORY	DESCRIPTION
Hepatitis	Inflammation of the liver.
HIV	Human immunodeficiency virus (HIV) is a lentivirus (a member of the retrovirus family) that causes acquired immunodeficiency syndrome (AIDS),[1][2] a condition in humans in which progressive failure of the immune system allows life-threatening opportunistic infections and cancers to thrive. Infection with HIV occurs by the transfer of blood, semen, vaginal fluid, pre-ejaculate, or breast milk.
Hypertension	Persistently high arterial blood pressure. Hypertension may have no known cause (essential or idiopathic hypertension) or be associated with other primary diseases (secondary hypertension). This condition is considered a risk factor for the development of heart disease, peripheral vascular disease, stroke and kidney disease. (
Hyperthyroidism	Hyperthyroidism is the term for overactive tissue within the thyroid gland that causes an overproduction of thyroid hormones (thyroxine or "T4" and/or triiodothyronine or "T3"). Hyperthyroidism is thus a cause of thyrotoxicosis,[1] the clinical condition of increased thyroid hormones in the blood.
Hysterectomy	A hysterectomy is the surgical removal of the uterus, usually performed by a gynecologist. Hysterectomy may be total (removing the body, fundus, and cervix of the uterus; often called "complete") or partial (removal of the uterine body while leaving the cervix intact; also called "supracervical").
Income replacement benefit	A form of health insurance that provides periodic payments to replace income when an insured person is unable to work as a result of illness, injury, or disease.
Income Taxes	Incurred income taxes (including income taxes on capital gains) reported in each annual statement for that year.
Influenza	An acute viral infection involving the respiratory tract, occurring in isolated cases, in epidemics or in pandemics striking many continents simultaneously or in sequence. It is marked by inflammation of the nasal mucosa, the pharynx and conjunctiva and by headache and severe, often generalised myalgia. Fever, chills and prostration are common. Involvement of the myocardium and of the central nervous system occur infrequently. A necrotising bronchitis and interstitial pneumonia are prominent features of severe influenza and account for the susceptibility of patients to secondary bacterial pneumonia due to Streptococcus pneumoniae, Haemophilus influenzae and Staphylococcus aureus. The incubation period is one to three days and the disease ordinarily lasts for three to ten days.
Insomnia	Inability to sleep, abnormal wakefulness.
Insulin resistance	Insulin resistance (IR) is a condition in which the cells of the body become resistant to the effects of insulin, that is, the normal response to a given amount of insulin is reduced. As a result, higher levels of insulin are needed in order for insulin to have its effects. The resistance is seen with both the body's own insulin (endogenous) and if insulin is given through injection

CATEGORY	DESCRIPTION
Insurable interest	The conditions that make a risk insurable are (a) the peril insured against must produce a definite loss not under the control of the insured, (b) there must be a large number of homogeneous exposures subject to the same perils, (c) the loss must be calculable and the cost of insuring it must be economically feasible, (d) the peril must be unlikely to affect all insureds simultaneously, and (e) the loss produced by a risk must be definite and have a potential to be financially serious.
Investment income	The return received by insurers from their investment portfolios including interest, dividends and realized capital gains on stocks. It doesn't include the value of any stocks or bonds that the company currently owns.
Key man cover	Life insurance owned by a business entity on the life of a key individual that will, in the event of his or her death, offset a loss in earnings and provide the funds necessary to find, hire, and develop a replacement. It is designed to offset losses resulting from the death of a key person, such as reduced sales, interruption of a vital research project, flow of production, or an impaired credit standing.
Laminectomy	Laminectomy is an orthopaedic spine operation to remove the portion of the vertebral bone called the lamina.
Lapse	The termination or discontinuance of an insurance policy due to nonpayment of a premium.
Lapse ratio	The ratio of the number of life insurance policies that lapsed within a given period to the number in force at the beginning of that period.
Leukemia	Leukemia is a cancer of the blood cells.
Liability	Debts or obligations owed by one entity (DEBTOR) to another entity (CREDITOR) payable in money, goods, or services.
Liver function tests	Liver function tests (LFTs or LFs), are groups of clinical biochemistry laboratory blood assays designed to give information about the state of a patient's liver.[1] The parameters measured include PT/INR, aPTT, albumin, billirubin (direct and indirect) and others. According to some, liver transaminases (AST/ALT (SGOT/SGPT) are not liver function tests, but are biomarkers of liver injury in a patient with some degree of intact liver function.[citation needed] Other sources include transaminases.
Lloyd's	Generally refers to Lloyd's of London, England, an institution within which individual underwriters accept or reject the risks offered to them. The Lloyd's Corp. provides the support facility for their activities.
Lump sum disability	The purpose of this cover is to provide a lump sum benefit should the insured person become permanently disabled and therefore unable to work and earn an income (occupationally disabled). The benefit is meant to compensate for future loss of income and costs associated with being disabled.

CATEGORY	DESCRIPTION
Lymphoma	Cancer that begins in cells of the immune system. There are two basic categories of lymphomas. One kind is Hodgkin's lymphoma, which is marked by the presence of a type of cell called the Reed-Sternberg cell. The other category is non-Hodgkin's lymphomas, which includes a large, diverse group of cancers of immune system cells. Non-Hodgkin's lymphomas can be further divided into cancers that have an indolent (slow-growing) course and those that have an aggressive (fast-growing) course. These subtypes behave and respond to treatment differently. Both Hodgkin's and non-Hodgkin's lymphomas can occur in children and adults, and prognosis and treatment depend on the stage and the type of cancer.
Major Depression	Major depressive disorder (MDD) (also known as recurrent depressive disorder, clinical depression, major depression, unipolar depression, or unipolar disorder) is a mental disorder characterized by an all-encompassing low mood accompanied by low self-esteem, and by loss of interest or pleasure in normally enjoyable activities
Malingering	The practice of feigning illness or inability to work in order to collect insurance benefits.
Mastectomy	Surgery to remove the breast (or as much of the breast tissue as possible).
Myocardial infarction	A heart attack (also known as a myocardial infarction) is the death of heart muscle from the sudden blockage of a coronary artery by a blood clot. Coronary arteries are blood vessels that supply the heart muscle with blood and oxygen. Blockage of a coronary artery deprives the heart muscle of blood and oxygen, causing injury to the heart muscle. Injury to the heart muscle causes chest pain and chest pressure sensation. If blood flow is not restored to the heart muscle within 20 to 40 minutes, irreversible death of the heart muscle will begin to occur. Muscle continues to die for six to eight hours at which time the heart attack usually is "complete." The dead heart muscle is eventually replaced by scar tissue.
Misrepresentation	A false, incorrect, improper, or incomplete statement of a material fact, made in the application or claim process.
MMI (Maximum Medical Improvement)	Maximum Medical Improvement (MMI) is a treatment plateau in each person's healing process. It can mean that the patient has fully recovered from the injury or that the patient's medical condition has stabilized to the point that no major medical or emotional change can be expected in the injured workers' condition. This occurs despite continuing medical treatment or rehabilitative programs the injured worker partakes in.
MRI	Magnetic resonance imaging (MRI), nuclear magnetic resonance imaging (NMRI), or magnetic resonance tomography (MRT) is a medical imaging technique used in radiology to visualize detailed internal structures. MRI makes use of the property of nuclear magnetic resonance (NMR) to image nuclei of atoms inside the body.

CATEGORY	DESCRIPTION
Multiple Sclerosis	Multiple sclerosis (MS) is a disease in which the nerves of the central nervous system (brain and spinal cord) degenerate. Myelin, which provides a covering or insulation for nerves, improves the conduction of impulses along the nerves and also is important for maintaining the health of the nerves. In multiple sclerosis, inflammation causes the myelin to disappear. Consequently, the electrical impulses that travel along the nerves decelerate, that is, become slower. In addition, the nerves themselves are damaged. As more and more nerves are affected, a person experiences a progressive interference with functions that are controlled by the nervous system such as vision, speech, walking, writing, and memory.
Nephritis	
Nerve conduction study	A nerve conduction study (NCS) is a test commonly used to evaluate the function, especially the ability of electrical conduction, of the motor and sensory nerves of the human body.
Net-income	The total after-tax earnings generated from operations and realized capital gains as reported in the company's annual statement.
Nett-current assets	Current Assets less Current Liabilities.
Neuralgia	
Non-disclosure	Failure or refusal to declare or reveal some information that is required to be declared or revealed. Information that could be material to the underwriting or assessment of risk.
Osteoarthritis	Osteoarthritis (OA) also known as degenerative arthritis or degenerative joint disease or osteoarthrosis, is a group of mechanical abnormalities involving degradation of joints,[1] including articular cartilage and subchondral bone. Symptoms may include joint pain, tenderness, stiffness, locking, and sometimes an effusion. A variety of causes—hereditary, developmental, metabolic, and mechanical—may initiate processes leading to loss of cartilage. When bone surfaces become less well protected by cartilage, bone may be exposed and damaged. As a result of decreased movement secondary to pain, regional muscles may atrophy, and ligaments may become more lax.[2]
Osteoporosis	Osteoporosis is a disease of bones that leads to an increased risk of fracture.[1] In osteoporosis the bone mineral density (BMD) is reduced, bone microarchitecture deteriorates, and the amount and variety of proteins in bone is altered.
Own occupation disability	Own occupation disability means that you are no longer able to perform the duties of your current occupation due to medical impairment.
Own or any other reasonable occupation	Own or reasonable other occupation disability refers to being impaired to such an extent that you cannot perform the functions of your own occupation or a reasonable alternative, based on your skills and training.
Partnership	Relationship between two or more persons based on a written, oral, or implied agreement whereby they agree to carry on a trade or business for profit and share the resulting profits. Unlike a CORPORATION'S shareholders, the partnership's general partners are liable for the DEBTS of the partnership.

CATEGORY	DESCRIPTION
Passive income	Includes income derived from such sources as dividends, interest, royalties, rents, amounts received from personal service contracts, and income received as a beneficiary of an estate or trust.
Personality disorder	Personality disorders are a class of personality types and enduring behaviors associated with significant distress or disability, which appear to deviate from social expectations particularly in relating to others
Polysomnography	Polysomnography (PSG), also known as a sleep study, is a multi-parametric test used in the study of sleep and as a diagnostic tool in sleep medicine. The test result is called a polysomnogram, also abbreviated PSG.
Post traumatic Stress syndrome	Post-traumatic stress disorder. An anxiety disorder that develops in reaction to physical injury or severe mental or emotional distress, such as military combat, violent assault, natural disaster, or other life-threatening events. Having cancer may also lead to PTSD. Symptoms interfere with day-to-day living and include reliving the event in nightmares or flashbacks; avoiding people, places, and things connected to the event; feeling alone and losing interest in daily activities; and having trouble concentrating and sleeping.
Pre - existing condition	A coverage limitation included in many health policies which states that certain physical or mental conditions, either previously diagnosed or which would normally be expected to require treatment prior to issue, will not be covered under the new policy for a specified period of time.
Premium	The sum paid by a policyholder to keep an insurance policy in force.
Profit	Positive difference that results from selling products and services for more than the cost of producing these goods.
PSA	Prostate-specific antigen (PSA) also known as gamma-seminoprotein or kallikrein-3 (KLK3) is a glycoprotein that in humans is encoded by the KLK3 gene. KLK3 is a member of the kallikrein-related peptidase family secreted by the epithelial cells of the prostate gland. PSA is produced for the ejaculate where it liquefies the semen in the seminal coagulum and allows sperm to swim freely.[
PTY (LTD)	Private Company ((Pty) Limited) A Private Company ((Pty) limited) is treated by South African law as a separate legal entity and has to register as a tax payer in its own right. A Private Company ((Pty) limited) has a separate life from its owners and is required by the Companies Act No 61 of 1973 to perform rights and duties of its own.
Qota share	Automatic reinsurance that requires the insurer to transfer, and the reinsurer to accept, a given percentage of every risk within a defined category of business written by the insurer. For example, in the case of a 20% quota share, the insurer transfers 20% of its liability and premiums on every risk to the reinsurer, who must pay 20% of any loss sustained, whether total or partial. The percentage is constant throughout and applies to premiums and losses alike.
Reinstatement	The resumption of coverage under a policy which has lapsed.
Reinsurance	Process by which an insurance company obtains insurance on its insurance claims with other insurers in order to spread the risk. A company that insures upper layers of coverage for commercial carriers, risk retention groups, captive insurance companies and other insurance providers.
Re-insurance ceded	The unit of insurance transferred to a reinsurer by a ceding company.
Renal Failure	

CATEGORY	DESCRIPTION
Reserve	(1) an amount representing liabilities kept by an insurer to provide for future commitments under policies outstanding. (2) An amount allocated for a special purpose. Note that a reserve is usually a liability and not an extra fund.
Revenue	The amount of money that a company actually receives during a specific period, including discounts and deductions for returned merchandise. It is the "top line" or "gross income" figure from which costs are subtracted to determine net income.
Risk assessment	A thorough examination of the exposures of the nonproft, both insurable and uninsurable.
Risk class	Risk class, in insurance underwriting, is a grouping of insureds with a similar level of risk. Typical underwriting classifications are preferred, standard and substandard, smoking and nonsmoking, male and female.
Risk Management	Management of the pure risks to which a company might be subject. It involves analyzing all exposures to the possibility of loss and determining how to handle these exposures through practices such as avoiding the risk, retaining the risk, reducing the risk, or transferring the risk, usually by insurance.
Sarcoidosis	Sarcoidosis (from sarc meaning flesh, -oid, like, and -osis, diseased or abnormal condition), also called sarcoid, Besnier-Boeck disease or Besnier-Boeck-Schaumann disease, is a disease in which abnormal collections of chronic inflammatory cells (granulomas) form as nodules in multiple organs
Seum cholesterol	Cholesterol, from the Greek chole- (bile) and stereos (solid) followed by the chemical suffix -ol for an alcohol, is an organic chemical substance classified as a waxy steroid of fat. It is an essential structural component of mammalian cell membranes and is required to establish proper membrane permeability and fluidity.
Sole proprietor	The Sole Proprietorship is the simplest and most common form of business, conducted by a single individual owner (the "Sole Proprietor"). Sole Proprietorships can conduct business under their own name by simply doing business, for example, as "Jane Jones". A sole proprietor can also do business under a trade name such as "Jane's Jet Skis" or "Supreme Skis".
Solvency	Having sufficient assets--capital, surplus, reserves--and being able to satisfy financial requirements--investments, annual reports, examinations--to be eligible to transact insurance business and meet liabilities.
Spinal fusion	Spinal fusion, also known as spondylodesis or spondylosyndesis, is a surgical technique used to join two or more vertebrae. Supplementary bone tissue, either from the patient (autograft) or a donor (allograft), is used in conjunction with the body's natural bone growth (osteoblastic) processes to fuse the vertebrae.
Statutory Reserve	A reserve, either specific or general, required by law.
Stop - loss	Any provision in a policy designed to cut off an insurer's losses at a given point
Substandard risk	An individual, who, because of health history or physical limitations, does not measure up to the qualification of a standard risk.
Surplus	Not needed; extra.
Taxable earnings	The amount of an employee's earnings subject to a tax.

CATEGORY	DESCRIPTION
Temporary Partial Disability	An employee may be eligible for temporary partial disability when he or she is able to do some work but is still recuperating from the effects of the injury, and is, thus, temporarily limited in the amount or type of work which can be performed compared to the pre-injury work.
Temporary Total Disability	This benefit is payable when the injured worker is unable to work during a period when he/she is under active medical care and has not yet reached what is called "maximum medical improvement" (MMI). By virtue of simple common sense, once "maximum medical improvement" has been reached the condition can no longer be categorized as temporary.
Term life insurance	Life insurance that provides protection for a specified period of time. Common policy periods are one year, five years, 10 years or until the insured reaches age 65 or 70. The policy doesn't build up any of the nonforfeiture values associated with whole life policies
Thyroidectomy	A thyroidectomy is an operation that involves the surgical removal of all or part of the thyroid gland. Surgeons often perform a thyroidectomy when a patient has thyroid cancer or some other condition of the thyroid gland (such as hyperthyroidism) or goiter.
Total Disability	An illness or injury which prevents an insured person from continuously performing every duty pertaining to his/her occupation or engaging in any other type of work.
Trust	A legal entity that acts as fiduciary, agent or trustee on behalf of a person or business entity for the purpose of administration, management and the eventual transfer of assets to a beneficial party. The entity acts as a custodian for trusts, estates, custodial arrangements, asset management, stock transfer, beneficial ownership registration and other related arrangements. A trust company does not own the assets its customers assign to its management, but it may assume some legal obligation to take care of assets on behalf of other parties.
Tuberculosis	Tuberculosis, MTB, or TB (short for tubercle bacillus) is a common, and in many cases lethal, infectious disease caused by various strains of mycobacteria, usually <i>Mycobacterium tuberculosis</i> . [
Turnover	The number of times a particular product is sold and restocked during a fixed period of time.
Underwriting	The process of selecting risks for insurance and determining in what amounts and on what terms the insurance company will accept the risk.
Underwriting expenses incurred	Expenses, including net commissions, salaries and advertising costs, which are attributable to the production of net premiums written.
Valuation	A calculation of the policy reserve in life insurance. Also, a mathematical analysis of the financial condition of a pension plan.
Valve replacement	Valve replacement surgery is the replacement of one or more of the heart valves with either an artificial heart valve or a bioprosthesis (homograft from human tissue or xenograft, e.g., from pig). It is an alternative to valve repair
Waiting period	There may be a waiting period before the benefit is paid. This could range from 7 days to three to six months depending on the product type and offering; although some companies no longer impose a waiting period.

CATEGORY	DESCRIPTION
Waiver of premium	A provision in some insurance contracts which enables an insurance company to waive the collection of premiums while keeping the policy in force if the policyholder becomes unable to work because of an accident or injury. The waiver of premium for disability remains in effect as long as the insured is disabled.
Whole of life	Life insurance which might be kept in force for a person's whole life and which pays a benefit upon the person's death, whenever that might be.

9.13 Sweden

CATEGORY	DESCRIPTION
Social Security Register	This register will provide information as to whether the applicant has been on sick leave.
Application	Collects much information as explained above
Blood Test	Multiple screens from the blood draw are run to test things like the kidneys, liver, lipids, HIV, and diabetes.
Urine specimen	Screen for kidney function
Attending Physician Statement (APS)	Additional information on impairment from doctor
Tele-underwriting	Telephone interview of proposed insured
Pulmonary function test	Tests of the lungs
EKG, Treadmill	Tests for heart
Chest x-ray	Test for heart, lungs, chest in general
Financial records / Tax forms	Confirmation of income, net worth
Blood Testing	<p>The life insurance blood test screens include a variety of tests. The blood test provides the most current medical information on an applicant, except for possibly an APS. The items typically screened for and their corresponding tests include:</p> <ul style="list-style-type: none"> • Diabetes screen <ul style="list-style-type: none"> o Glucose – Measures blood sugar levels and is an indicator of diabetes o A1C Glycated Hemoglobin – Measures concentration of glucose over time • Kidney screen <ul style="list-style-type: none"> o Creatinine – Test for kidney disorder and dehydration • Lipid screen <ul style="list-style-type: none"> o Cholesterol – Risk factor in heart disease and stroke o HDL (High Density Lipoprotein) and LDL (Low Density Lipoprotein) – Components of cholesterol that are risk factors in heart disease o Triglycerides – Risk factor in heart disease • Liver screen <ul style="list-style-type: none"> o Alkaline Phosphatase – Test for liver and bone disease o Bilirubin – Test for liver and blood disease or disorder o AST and SGOT (Aspartate Aminotransferase) – Test for liver and muscle disorders o ALT and SGPT (Alanine Aminotransferase) – Test for liver disease o GGT (Gamma Glutamyltransferase) – Tests for liver disorder, alcohol, drugs o Total protein includes Albumin and Globulin <ul style="list-style-type: none"> § Albumin – Test for advanced liver disease and malnutrition § Globulin – Test for immune disorders, infections and allergic reactions • Hepatitis screen A,B and C • HIV screen • PSA (Prostate Specific Antigen) for men ages 50+
Pulmonary Function Test	The Pulmonary Function Test (PFT) is a test which measures the volume and force of the lungs and airways. Only done if there is a sign of respiratory problem or high sum insured.

9.14 Switzerland

CATEGORY	DESCRIPTION
Fully underwritten	Most comprehensive type of underwriting
Simplified underwriting	Less than a full set of medical questions (3 – 5 questions)
Medical Underwriting	<p>This consists of a Full Application and a mandatory medical exam. A full application has what is called Part 1 and Part 2. Part 1 contains general non-medical information such as:</p> <ul style="list-style-type: none"> • General information <ul style="list-style-type: none"> o Name o Address o Gender o Date of birth o Citizenship • Occupational details • Financial information, including at least income • Habits <ul style="list-style-type: none"> o Smoking o Drinking • Plan information, including riders • Other coverage, including whether it is going to be replaced • Whether the applicant has ever been denied coverage • Owner • Beneficiary • Authorization to collect additional information • Signature <p>Part 2 contains a series of detailed medical questions, for example:</p> <ul style="list-style-type: none"> • Full medical history • Family history • Pastimes (e.g., aviation, avocations, scuba diving) <p>An exam will also be completed either by a doctor (Medical), usually performed in the doctor's office, usually performed in the proposed insured's home. The exam will include blood and urine specimens as well as a general examination and measurements taken of height, weight, blood pressure, pulse rate, and more.</p>
Application	Collects much information as explained above
Blood Test	Multiple screens from the blood draw are run to test things like the kidneys, liver, lipids, HIV, and diabetes.
Urine specimen	Screen for cotinine, medicines, kidney and bladder function
Attending Physician Statement (APS)	Additional information on impairment from doctor
Tele-underwriting (pilote)	Telephone interview of proposed insured
EKG, Treadmill	Tests for heart
Lungfunction test	lungs
Financial records / Tax forms	Confirmation of income, net worth

CATEGORY	DESCRIPTION
Blood Test	<p>The life insurance blood test screens include a variety of tests. The blood test provides the most current medical information on an applicant, except for possibly an APS. The items typically screened for and their corresponding tests include:</p> <ul style="list-style-type: none"> • Diabetes screen <ul style="list-style-type: none"> o Glucose – Measures blood sugar levels and is an indicator of diabetes o A1C Glycated Hemoglobin – Measures concentration of glucose over time • Kidney screen <ul style="list-style-type: none"> o Creatinine – Test for kidney disorder and dehydration • Lipid screen <ul style="list-style-type: none"> o Cholesterol – Risk factor in heart disease and stroke o HDL (High Density Lipoprotein) and LDL (Low Density Lipoprotein) – Components of cholesterol that are risk factors in heart disease o Triglycerides – Risk factor in heart disease • Liver screen <ul style="list-style-type: none"> o Alkaline Phosphatase – Test for liver and bone disease o Bilirubin – Test for liver and blood disease or disorder o AST and SGOT (Aspartate Aminotransferase) – Test for liver and muscle disorders o ALT and SGPT (Alanine Aminotransferase) – Test for liver disease o GGT (Gamma Glutamyltransferase) – Tests for liver disorder, alcohol, drugs o Total protein includes Albumin and Globulin <ul style="list-style-type: none"> § Albumin – Test for advanced liver disease and malnutrition § Globulin – Test for immune disorders, infections and allergic reactions • HIV screen • PSA (Prostate Specific Antigen) for men ages 50+
Urine Specimen	<p>A urine specimen can provide information on:</p> <ul style="list-style-type: none"> • Cotinine (metabolite for smoking) • Medicines • Kidney and bladder function
Attending Physician Statement (APS)	<p>When the extent of a disease or impairment is not known, an underwriter often requests an APS to get a clearer picture of the situation. The advantage of an APS is it generally provides the underwriter with the additional information needed to make a rating decision on the proposed insured. The disadvantage of ordering an APS is that it generally takes at least 7-21 days to receive, slowing the issue process.</p>
EKG, Treadmill	<p>An EKG (or ECG) is an electrocardiogram or a resting test of the heart. The treadmill test is a stress test to determine whether there are any irregular heart patterns. These are typically performed on older applicants and those applying for large amounts of coverage. There is some concern that an applicant could drop dead from the stress test.</p>
Financial Records / Tax Forms	<p>The larger incomes today have placed more emphasis on financial underwriting. Financial underwriting is primarily done to make sure that the income and net worth are consistent with the amount of insurance in force and applied for. For business owners, the anticipated growth of the business is also an important consideration.</p>

9.15 United Kingdom

CATEGORY	DESCRIPTION
Fully underwritten	Most comprehensive type of underwriting
Medical underwriting	Form of Fully Underwritten, includes a medical exam
General Practitioner's report	Form of Fully Underwritten, includes report from General Practitioner
Nonmedical	Form of Fully Underwritten, no exam
Guaranteed Issue	Coverage guaranteed as long as certain requirements met
Application	See section 2
General Practitioners Report (GPR)	Medical history of the applicant as known to their doctor and deemed to be relevant to the insurance application.
Subject Access Request	Full copy of the medical history of the applicant held by their doctor.
Paramedical screening	Type of medical examination that is usually performed by a fully trained registered nurse
Medical Examination Report	Medical exam and result of tests conducted by doctor specified by insurer
HIV	HIV test
ECG	A resting or an exercise ECG, also known as a treadmill test.
Blood tests	Fasting blood profile, liver function tests, fasting lipids, renal function test, full blood count, fasting blood sugar.
Urine Test	Screen for cotinine, drugs, proteinuria, hematuria or glucose
Pulmonary Function Tests (PFTs)	Range of tests used in the evaluation of respiratory disease
Tele-underwriting	Range of questions directly to applicant to add to the application form information data or instead of
Financial questionnaire	Dependent upon the requested benefit level and purpose of cover, independent financial information would be necessary, including need for reports and accounts, loan offers etc.
General Practitioners Report (GPR)	When the extent of a disease or impairment is not known, an underwriter often requests a GPR to get a clearer picture of the medical situation. The advantage of a GPR is it generally provides the underwriter with the additional information needed to make a medical underwriting decision on the proposed insured. The disadvantage of ordering a GPR is that it generally takes at least 20-30 days to receive, slowing the issue process and can be a costly process.
Subject Access Request (SAR)	Used as an alternative to a GPR whereby the insurer uses Data Protection legislation to request, on behalf of the applicant, a full copy of medical records held by the GP. Use is controversial but perceived advantages are a fuller medical history and faster turnaround speed.

CATEGORY	DESCRIPTION
Fully Underwritten	<p>It may be worth noting that many insurers will use the same application form for both pure term assurance and term assurance with accelerated critical illness. Certain information will only be requested if the applicant has given a specific response to an earlier question.</p> <ul style="list-style-type: none"> • General information <ul style="list-style-type: none"> o Name o Date of birth o Sex o Marital status o Tobacco use o Residency o Address o Contact details (phone number, email address) o Name and address of General Practitioner who holds applicants medical records o Existing insurance cover o Concurrent or applications within the last 12 months o Residency, work or travel outside agreed territories in the last 5 years. o Intention to live, work or travel outside agreed territories o Participation in specific pastimes (e.g. private aviation mountaineering etc) o Employment status o Specific risk occupations o Industry classification o Job title
Part 2 Medical details	<ul style="list-style-type: none"> • Medical details <ul style="list-style-type: none"> o Height o Weight with possible a question about any change in the last x months o Average alcohol consumption o Positive test for HIV, Hepatitis B or C. o Exposure to HIV o Within the last 5 years tested positive or treatment for a disease that was transmitted sexually o Within the last 5 years use of recreational drugs o Full medical history o Family history <p>If a medical examination is required this will usually be performed at a doctor's surgery. Alternatively a paramed may be requested which will often be done by a nurse attending the applicant's property.</p>
Guaranteed Issue	<ul style="list-style-type: none"> • Generally limited to older life applicants • No medical questions other than possibly tobacco use. • Cover guaranteed • Low sum assured • Benefit limited to accidental death or return of premiums in the first 1/2 years

CATEGORY	DESCRIPTION
Blood Test	<p>The life insurance blood test screens include a variety of tests. The blood test provides the most current medical information on an applicant, except for possibly a GPR. The items typically screened for and their corresponding tests include:</p> <ul style="list-style-type: none"> • Diabetes screen <ul style="list-style-type: none"> o Glucose – Measures blood sugar levels and is an indicator of diabetes o A1C Glycated Hemoglobin – Measures concentration of glucose over time • Kidney screen <ul style="list-style-type: none"> o BUN (Blood Urea Nitrogen) – Test for kidney disease and dehydration o Creatinine – Test for kidney disorder and dehydration • Lipid screen <ul style="list-style-type: none"> o Cholesterol – Risk factor in heart disease and stroke o HDL (High Density Lipoprotein) and LDL (Low Density Lipoprotein) – Components of cholesterol that are risk factors in heart disease o Triglycerides – Risk factor in heart disease • Liver screen <ul style="list-style-type: none"> o Alkaline Phosphatase – Test for liver and bone disease o Bilirubin – Test for liver and blood disease or disorder o AST and SGOT (Aspartate Aminotransferase) – Test for liver and muscle disorders o ALT and SGPT (Alanine Aminotransferase) – Test for liver disease o GGT (Gamma Glutamyltransferase) – Tests for liver disorder, alcohol, drugs o Total protein includes Albumin and Globulin <ul style="list-style-type: none"> § Albumin – Test for advanced liver disease and malnutrition § Globulin – Test for immune disorders, infections and allergic reactions • HIV screen • PSA (Prostate Specific Antigen) for men ages 50+
Urine Test	<p>A urine specimen can provide information on:</p> <ul style="list-style-type: none"> • Proteinuria • Hematuria • Glucose • Cotinine (metabolite for smoking) • Cocaine and other drugs • Medicines <p>Kidney and bladder function</p>
General Practitioner's Report (GPR)	<p>When the extent of a disease or impairment is not known, an underwriter often requests a GPR to get a clearer picture of the medical situation. The advantage of a GPR is it generally provides the underwriter with the additional information needed to make a medical underwriting decision on the proposed insured. The disadvantage of ordering a GPR is that it generally takes at least 20-30 days to receive, slowing the issue process and can be a costly process.</p>
Subject Access Request (SAR)	<p>Used as an alternative to a GPR whereby the insurer uses Data Protection legislation to request, on behalf of the applicant, a full copy of medical records held by the GP. Use is controversial but perceived advantages are a fuller medical history and faster turnaround speed.</p>

CATEGORY	DESCRIPTION
Tele-underwriting	<p>There are different types of tele-underwriting. In general, tele-underwriting is where someone calls the proposed insured to either confirm information provided on the application or to the medical / paramedical examiner. The call may also be used to find out more information. It is always done by phone. The caller who makes the calls can be from the insurance company or from an outside vendor. The caller is usually knowledgeable about medical conditions and knows how to interact with customers. Tele-underwriting answers are usually more honest than from other sources because the proposed insured generally feels more comfortable discussing medical issues with someone who has a medical background and they sometimes don't want to admit an impairment that might be embarrassing to an agent, whom they might know personally.</p> <p>When additional questions are asked of the applicant, there is usually a script and pre-programmed questions that pop up on the caller's screen, depending on how the previous question was answered. These are called drill-down questions and are designed to determine the extent of the impairment that was mentioned on the application.</p>
ECG, Treadmill	<p>An ECG is an electrocardiogram or a resting test of the heart. The treadmill test is a stress test to determine whether there are any irregular heart patterns. These are typically performed on older applicants and those applying for large amounts of coverage.</p>
Financial Records / Tax Forms	<p>Financial underwriting is primarily done to make sure that the income and net worth are consistent with the amount of insurance in force and applied for. This evidence would include a financial questionnaire detailing specific information regarding the applicant's income, existing cover and purpose of the proposed cover. In addition, the insurer may need to see reports and accounts, loan offers or tax returns depending upon the need for the cover.</p>

9.16 United States of America

CATEGORY	DESCRIPTION
Application	Collects much information as explained above
Blood Test	Multiple screens from the blood draw are run to test things like the kidneys, liver, lipids, HIV, and diabetes, PSA
Urine specimen	Screen for cotinine, drugs, medicines, kidney and bladder function, infection
Oral fluid	Screen for cotinine, cocaine, HIV, GGT
Medical Information Bureau (MIB)	Screen for fraud and insurance activity, past medical history and lab results
Attending Physician Statement (APS)	Additional information on impairment from doctor
Motor Vehicle Record (MVR)	Driving history, license suspension (driving and non-driving related), and license endorsement (e.g., motorcycle)
Tele-underwriting	Telephone interview of proposed insured
Pharmaceutical histories	Provides prescription drug usage of proposed insured
Inspection report	Confirms information about proposed insured, financial information
EKG, Treadmill	Tests for heart
Chest x-ray	Test for heart, lungs, chest in general
Financial records / Tax forms/Criminal Records	Confirmation of income, net worth, obligations (Buy-Sell Agreements, Trust agreements, etc.)
Application	<p>A full application has what is called Part 1 and Part 2. Part 1 contains general non-medical information such as:</p> <ul style="list-style-type: none"> • General information <ul style="list-style-type: none"> o Name o Address o Phone number o Gender o Date of birth o Social security number (or taxpayer identity number) o Drivers license number for Motor Vehicle Report (MVR) check o Citizenship • Occupational details • Financial information, including at least income • Habits <ul style="list-style-type: none"> o Smoking o Drinking • Plan information, including riders • Other coverage, including whether it is going to be replaced • Whether the applicant has ever been denied coverage • Owner • Beneficiary • Authorization to collect additional information • Signature
Part 2	<p>contains a series of detailed medical questions, for example:</p> <ul style="list-style-type: none"> • Full medical history • Family history • Pastimes (e.g., aviation, avocations, scuba diving)

CATEGORY	DESCRIPTION
Attending Physician Statement (APS)	When the extent of a disease or impairment is not known, an underwriter often requests an APS to get a clearer picture of the situation. The advantage of an APS is that it generally provides the underwriter with the additional information needed to make a rating decision on the proposed insured. The disadvantage of ordering an APS is that it generally takes at least 7-21 days to receive, slowing the final decision and issue process. The APS typically contains the last five years of medical treatment, or more in cases with a significant long term illness.
Blood Test	<p>The life insurance blood test screens include a variety of tests. The blood test provides the most current medical information on an applicant, except for possibly an APS. The items typically screened for and their corresponding tests include:</p> <ul style="list-style-type: none"> • Diabetes screen <ul style="list-style-type: none"> o Glucose – Measures blood sugar levels and is an indicator of diabetes o A1C Glycated Hemoglobin – Measures concentration of glucose over time o AGP (Advance Glycation Product) – Tests for abnormal blood sugar levels; is indicator of diabetes • Kidney screen <ul style="list-style-type: none"> o BUN (Blood Urea Nitrogen) – Test for kidney disease and dehydration o Creatinine – Test for kidney disorder and dehydration • Lipid screen <ul style="list-style-type: none"> o Cholesterol – Risk factor in heart disease and stroke o HDL (High Density Lipoprotein) and LDL (Low Density Lipoprotein) – Components of cholesterol that are risk factors in heart disease o Triglycerides – Risk factor in heart disease • Liver screen <ul style="list-style-type: none"> o Alkaline Phosphatase – Test for liver and bone disease o Bilirubin – Test for liver and blood disease or disorder o AST and SGOT (Aspartate Aminotransferase) – Test for liver and muscle disorders o ALT and SGPT (Alanine Aminotransferase) – Test for liver disease o GGT (Gamma Glutamyltransferase) – Tests for liver disorder, alcohol, drugs o Total protein includes Albumin and Globulin <ul style="list-style-type: none"> § Albumin – Test for advanced liver disease and malnutrition § Globulin – Test for immune disorders, infections and allergic reactions • HIV screen • PSA (Prostate Specific Antigen) for men ages 50+
Chest x-ray	The chest x-ray is less commonly used in underwriting in the USA today, but is still used for very large amounts of coverage by some companies. The chest x-ray makes images of the heart, lungs, airways, blood vessels, and bones of the spine and chest. It can find issues related to shortness of breath, chest pain, chronic cough and fever.
EKG, Treadmill	An EKG (or ECG) is an electrocardiogram or a resting test of the heart. The treadmill test is a stress test to determine whether there are any irregular heart patterns. These are typically performed on older applicants and those applying for large amounts of coverage. There is some concern that an applicant could experience a cardiac event resulting in death from the stress test. A few companies have replaced these tests by blood tests, such as NT-pro BNP. These blood tests provide an indicator of cardiac events, however, the EKG and

CATEGORY	DESCRIPTION
	treadmill test are still relatively common.
Guaranteed Issue	<p>The characteristics of guaranteed issue life underwriting include:</p> <ul style="list-style-type: none"> • No or a few medical questions • No medical or paramedical exam, no blood or urine specimen • The applicant cannot be turned down for coverage, with a few exceptions. Generally the only circumstances where one can be turned down are: <ul style="list-style-type: none"> o The proposed insured doesn't meet specific age requirements for the plan, o The proposed insured currently is living in a nursing home or Long Term Care facility • Small face amounts • Return of premium for death in first two years
Guaranteed-to-Issue	<p>Guaranteed-to-issue is sometimes referred to as guaranteed acceptance. This type of underwriting is similar to guaranteed issue; however, the person cannot be turned down for coverage. Instead, rating of the individual is allowed. Guaranteed-to-issue also has relatively small benefits, sometimes return of premium with interest.</p>
Inspection Report	<p>The inspection report is typically where a third party vendor calls the applicant to validate and augment application information. This is similar to the simplest form of tele-underwriting.</p>
Medical / Paramedical Underwriting	<p>This consists of a Full Application and a mandatory medical or paramedical exam.</p> <p>An exam will be completed either by a doctor (Medical), usually performed in the doctor's office, or by a paramedical professional (Paramedical), usually performed in the proposed insured's home. The exam will include medical history questions, blood and urine specimens, a general examination, and measurements taken of height, weight, blood pressure, pulse rate, and more.</p>
Medical Information Bureau (MIB)	<p>The MIB was formed years ago by 15 medical directors to help protect insurance companies from fraud. Member companies submit a request for information on a proposed insured. MIB provides information on whether the proposed insured was found to have one or more impairments by another member company when they applied for insurance with this other company. MIB will also indicate what the impairments were.</p> <p>No rating can be attributed to the applicant based solely on the MIB finding without further research to confirm the impairment(s). When underwriting has been completed, the company sends their decision back to MIB using special MIB codes for MIB to add to their database. MIB retains information for 7 years after which it may no longer be passed along to companies.</p> <p>In recent years, MIB has added additional services for member companies. One is called the Insurance Activity Index (IAI). The IAI provides companies with information on whether the proposed insured has applied for other coverage. It does not provide information on the outcome of that other application. This information can be used to identify possible other coverage, possible denial of coverage not admitted by the applicant, or potential fraud (if the proposed insured is applying for too many policies in a very short period of time).</p>

CATEGORY	DESCRIPTION
Motor Vehicle Record (MVR)	<p>The MVR varies state by state, but all states generally provide information on the driving record of the individual. As there are many motor vehicle deaths and many accidental deaths are alcohol related, this information is important for the underwriting process. Included in the MVR is a history of:</p> <ul style="list-style-type: none"> • Moving violations • DUI (Driving Under the Influence) and DWI (Driving While Intoxicated) citations • Reckless driving incidences • Suspension of the drivers license for driving and non-driving reasons (e.g., not paying legally obligated child support payments) • Special license endorsement (e.g., motorcycle)
Older age underwriting	<p>Older age underwriting programs in the USA may include one or more of the following:</p> <ul style="list-style-type: none"> • Cognitive testing – Test for dementia and other cognitive impairments • Functional testing – Test for frailty • Changes to the traditional levels of underwriting acceptance – Lower readings on blood pressure, cholesterol, and weight, for example, could be indicative of more serious problems than higher readings for the elderly • Supplemental questionnaire – This may include questions on such things as social, mental and physical activities, activities of daily living, living arrangements and travel.
Oral Fluid Test	<p>An oral fluid sample can provide information on:</p> <ul style="list-style-type: none"> • HIV • Cotinine • Cocaine • Hepatitis (used in Canada, but not currently approved for use in the USA) <p>The oral fluid test is less invasive than a blood test. It can also be collected by an agent so a paramedical or medical examiner is not needed.</p>

CATEGORY	DESCRIPTION
Pharmaceutical Database Check	<p>The process is that a company will send a request on a particular individual to the vendor, providing their name, social security number and date of birth. The vendor attempts to match the individual in their database and then returns one of three responses:</p> <ul style="list-style-type: none"> • The prescription history if there is one, • That the proposed insured is in the database, but no prescriptions found, or • That the person was not found <p>The first two responses are considered “hits” and the company is charged for this service. They are not charged in third instance where there wasn’t a hit. The prescription history that is provided includes:</p> <ul style="list-style-type: none"> • The drug prescribed • The date it was prescribed • The dosage prescribed • The prescription period • The doctor who made the prescription • The relative importance or seriousness of the drug in a red, yellow, green format, with red drugs being the most serious and green drugs being ones that are generally not a concern, like cold medication. Note that green drugs can become more of a concern when there are multiple ones. <p>Companies can use this information to find nondisclosure of medications, doctors that may not have been disclosed, and whether the person is taking their medications as prescribed. It may also disclose that the person has an impairment not previously mentioned on the application or to the examiner. This information is determined by knowledge of what each drug is used for. Note that a company must be careful about drawing specific conclusions as many drugs can be used for multiple conditions.</p> <p>The reason “individual” and “person” was used here instead of “proposed insured” is because some companies utilize this information at the time of claim rather than at time of application. However, most companies that currently utilize the pharmacy database do check on the proposed insured.</p>

CATEGORY	DESCRIPTION
Preferred underwriting	<p>The key elements of preferred underwriting are used by most companies. These have generally remained the same since preferred underwriting began in the USA in the late 1980s / early 1990s. The key elements of preferred risk underwriting include:</p> <ul style="list-style-type: none"> • Alcohol and drug abuse • Blood pressure • Build • Cholesterol • Family history • MVR • Personal medical history • Tobacco use • Other – Aviation, avocations, citizenship, foreign travel, hazardous activities, residence <p>While the elements themselves haven't changed much over the years, what has changed are the number of classes and the cutoff levels of each for the specific criteria. The number of risk classes has increased. With this increase, the cutoff levels have moved both up and down, depending on the company, product and risk class.</p> <p>Another more recent change is that some companies have moved from a knockout approach to a debit/credit approach. A knockout approach is where an applicant does not qualify for a particular risk class if they do not meet one or more of the cutoff levels for the full set of criteria. A debit/credit approach is one where a point system is used for good and bad levels for the criteria. At the end, the points are summed and the point total determines which risk class the applicant is placed. There are also hybrid systems which include a combination of knockout and debit/credit. In fact, most debit/credit structures have some element of knockout in them.</p> <p>Another more recent development is that some companies allow exceptions to the published guidelines. These exceptions are sometimes published and sometimes kept internally to be applied to the criteria. The types of exceptions allowed vary considerably.</p>
Tele-underwriting	<p>There are different types of tele-underwriting. In general, tele-underwriting is where someone calls the proposed insured to either confirm information provided on the application or to the medical / paramedical examiner. The call may also be used to find out more information. It is always done by phone. The caller who makes the calls can be from the insurance company or from an outside vendor. The caller is usually knowledgeable about medical conditions and knows how to interact with customers. Tele-underwriting answers are usually more honest than from other sources because the proposed insured generally feels more comfortable discussing medical issues with someone who has a medical background and they sometimes don't want to admit an impairment that might be embarrassing to an agent, whom they might know personally.</p>

CATEGORY	DESCRIPTION
	When additional questions are asked of the applicant, there is usually a script and pre-programmed questions that pop up on the caller's screen, depending on how the previous question was answered. These are called drill-down questions and are designed to determine the extent of the impairment that was mentioned on the application.
Urine Specimen	A urine specimen can provide information on: <ul data-bbox="597 436 1019 567" style="list-style-type: none">• Cotinine (metabolite for smoking)• Cocaine and other drugs• Medicines• Bladder and kidney function