

Asia-Pacific Product & Distribution WATCH

Dental Insurance in Korea & Simplified Underwriting

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Foreword

Welcome to the second edition of Underwriting & Claims Watch.

We received positive feedback from the inaugural edition and we thank you for your comments and support.

In this newsletter, we will delve further into a topic which has attracted quite some attention following the recent SCOR Global Life's Product Watch newsletter on Dental Insurance.

Many readers commented about the anti-selective nature of such products which we do recognize. However we believe that with good risk management techniques, it could still be written profitably.

While the original article gave a good overview of the product, the current article focuses on the underwriting and claims aspects to managing product profitability.

Lastly, we dedicate a section in this newsletter to our prolific clients who are active supporters of our Correspondence-based Underwriting-training programme (CUP). We are very pleased with the response to the programme and we encourage greater participation from all readers.

Lye Fook Kong

Chief Marketing Officer, SCOR Global Life Asia-Pacific

1. Dental Insurance in Korea – Underwriting and claims strategies to maximise product profitability

1.1. Introduction

In the second edition of SCOR Global Life's Asia-Pacific Product & Distribution Watch, we introduced readers to a recent innovation in the Korean market – Dental Insurance.

We received feedback from readers who were concerned about the anti-selective nature of such products. Many even questioned the viability of the product.

Understandably, dental procedures, unlike many other medical treatments, can be quite "elective". Most dental impairments are non-life threatening, and more often than not, not urgent. Dental patients decide to go ahead for treatments because of pain relief, lifestyle improvement or cosmetic purposes. This creates room for significant anti-selection. For example, applicants can tolerate their own dental problems and purchase dental insurance cover in the hope that they can get reimbursement from the insurance policies for their dental treatments.

Having said that, we believe with appropriate risk management strategies, the risks can be effectively managed. In the recent edition of Product Watch on Dental Insurance, we concentrated mainly on explaining the product itself and only briefly touched on the underwriting and claims aspects which are critical in managing the product profitably.

In this article, we focus on the underwriting and claims aspects of dental insurance which can help to manage the anti-selection risk and assist insurance companies in writing dental business to achieve better business result.

1.2. Underwriting challenges faced

Using traditional life and health questionnaire as the underwriting tool would not work for individual dental insurance covers because most of the questions do not aim at evaluating the risk of particular applicants having dental impair-

ments. One may have an entirely "clean" declaration and still have significant dental problems.

Medical examination may be another option but its cost effectiveness is questionable. In fact, most existing dental insurance products are underwritten on non-medical basis.

Another challenge comes from regulation. There are 2 major industrial databases available for risk management purposes in Korea, namely KLCIS (Korea Life Information Check System, managed by Korea Life Insurance Association) and ICPS (Insurance Claims Pooling System, managed by Korea Insurance Development Institute).



There are however, certain limitations on how these 2 databases can be used:

- All life insurers participate in KLICS, and exchange policy information regarding underwriting, medical exam and claims information. However, due to “Protection of Credit Information Act”, insurers cannot decline or rescind new applications solely based on the information provided by the KLICS – although the information obtained can be a trigger for the underwriters to ask for further information from the applicants.
- The database is also not well developed for the documentation of dental insurance – currently in-force dental policies are only input as “others” (while other product lines have their own particular field in the system). Dental records may therefore be missed out due to lack of appropriate naming.
- For ICPS, all 40 insurance companies participate. However, due to regulation there is no certainty as to whether claims adjudicators can make claims decisions based on the information provided.

OK, now we know dental risk is a bit different... now what?

In response to the challenges, there are some measures that can combat against anti-selection risk:

■ Product design

Risk mitigation measures may include:

- **Co-payment** to encourage responsible behavior.
- **Issue / expiry age** – issue age should be less than 55 and expiry age should be less than 60, since the quality of teeth deteriorates quickly beyond these ages.
- **No cherry picking of services is allowed** – applicants must purchase the entire product suite instead of a particular dental benefit.



- **Exclusions** – we shall elaborate in more details in the claims section below.
- **Fixed dollar / pre-defined lump sum cap** – prevents medical inflation creep and reduce anti-selection risk. As an example, if the median cost of prosthetic benefit is KRW 2-3 Million, a lower benefit limit (e.g., 1.5 million) should be established.
- **Waiting Period** – helps to reduce significant anti-selection risk in the first year or second year. As dental treatments are more selective than most other forms of medical treatments, a longer waiting period than most other health insurance products is usually required (usually 3-6 months, may be followed by 50% of benefit for a certain period). Additional loading may be required if waiting period is less than 3 months.
- **Tiered benefit structure / annual maximum limits** – helps to cap the total risk exposure.
- **Limited guaranteed rates** – the insurance company reserves the right to review premium rates every 3 years.

■ Underwriting questions

- As mentioned above, most dental insurance products are underwritten on non-medical, Yes/No basis (i.e., applicants would be accepted only if they answer “No” to all questions). This is what we call a “simplified underwriting” approach.
- To address the dental risks, questions specific to related impairments should be included.
- The questions can be further classified as “weak” or “strong” questions as follow:

| | Weak questions | Strong questions |
|------------------|--|--|
| Objective | Aims at eliminating a specific group of lives with an increased dental morbidity risk. These questions will still allow many applicants with sub-standard dental health to qualify. A simplified underwriting dental product which only includes “weak” questions is similar to a guaranteed issue product, in terms of selection effect. | In contrast, strong questions seek to eliminate a wide spectrum of applicants with sub-standard dental health. They may rule out a larger number of applicants with reasonably (though not the healthiest) healthy applicants. A simplified underwriting product with a number of strong questions is closer to a fully underwritten product, in terms of selection effect. |
| Examples | <ul style="list-style-type: none"> a) Have you been treated for periodontal diseases during the past 3 years? b) Are you currently wearing denture or have you ever worn it? c) Are you wearing an artificial tooth? | <ul style="list-style-type: none"> a) Do you have, or currently applying for, any dental insurance covers? b) Have you ever been declined, postponed or accepted with a loading when applying for dental insurance? c) Do you currently, or ever have, any dental symptoms such as toothache, loose tooth (excluding milk teeth) or any other symptoms that you are or have ever aware of, whether require treatments or not? d) Are you currently undergoing any forms of dental treatments due to any illnesses or injuries? e) Have you been diagnosed or treated, or been advised to seek dental treatments for any dental impairments or conditions during the past 5 years? f) During the past 5 years, have you ever lost any natural teeth, due to periodontal diseases or undergone any periodontal surgeries as a result of recommendation from your dentists? |
| Analysis | <p>a), b) & c) above have narrow scopes, and are not very strong in identifying people with sub-standard dental health. For example, referring to a) above, applicants who have not been treated for periodontal diseases for the past 3 years do not necessarily mean that their current dental health is good, as dental treatments are elective and people tend to defer dental treatment unless the problems become very serious or symptomatic (e.g., toothache).</p> <p>b) and c) are too specific, one may not be wearing artificial tooth or denture, but still in the process of developing dental diseases of some sorts. Unless other stronger questions are included, or the benefit scope is rather narrow, just relying on these questions may not help much in the selection process.</p> | <p>a) & b) above are usually included in most application forms. These are particularly useful especially as KLICS and ICPS may not provide comprehensive information.</p> <p>c) & d) are “catch all” type of very strong questions, particularly c). While they can be quite effective in ruling out a larger group of sub-standard dental risk, they may significantly reduce acceptance rate. Almost all of us have experienced some kind of toothache at some point anyway.</p> <p>In our opinions, e) and f) are reasonably strong but not as strict as c) and d) and they provide better balance between risk selection and acceptance rate. While they do not rule out people with mild toothache at some point or people who are not in perfect dental health, those who have not received (or advised to receive) any forms of dental treatments for the past 5 years are less likely to have significant moral hazard.</p> |

There are no model answers on whether to use “strong” or “weak” questions. In fact, here are some considerations:

- i. Benefits coverage: The more benefits the product covers, the stronger and more comprehensive set of questions would be required.
- ii. Risk appetite: Underwriters have to understand the risk appetite and strategy of the product, e.g., is the company trying to aggressively gain bigger market share or prefer just to “test the water” by launching something new in the market? If the former is true, then weaker questions may be more suitable. However, additional pricing adjustment to cover additional anti-selection may be required. Otherwise, stronger questions may be more appropriate.
- iii. Channel risk: Currently, outbound marketing channel (e.g., telemarketers proactively calling customers to push sell the products) is usually less anti-selective. In-bound channel (e.g., insurance companies promote the products through TV shopping channel, then the customers call in to apply for the products after watching the advertisement) is usually more anti-selective. In fact, according to our own experience, the loss ratio of portfolio generated from the in-bound channel can be around 20% worse than its out-bound counterpart. And with some age groups (e.g., age 0-9), it can become 50-55% worse off. Although we don't have the exact numbers for agency channel, it is expected to be much worse than direct marketing channel since agents usually know which of their clients are more likely to buy dental products, and those who are more likely to buy are often of sub-standard dental health.

Therefore, the more anti-selective the channel is, the stronger the underwriting questions would be required.

■ Underwriting guidelines







Since most of the earlier version products were accepted / declined on a Yes / No basis; little underwriting guidelines were required.

However, this approach reduces acceptance rate.

In response to that, more detailed underwriting guidelines are required. Some “borderline” applications will be referred to the underwriters for individual consideration, with the hope that the acceptance rates can be raised by accepting

applicants with only “mild” dental impairment histories. This is particularly useful if the underwriting questions are too “strong”.

Here are some examples of the underwriting guideline:

- Current toothache  decline.
If treated with no other impairments  accept.
- Current dental caries  decline.
If treated with no complications  accept.
- Presence of Implant / Denture / bridge
 May be decline if causes are due to serious illness.
 Can be accepted if due to accidental causes with healthy oral health.

While the additional underwriting guideline may increase acceptance rates, it often results in:

- i. Negative brand image – Deferred underwriting decisions may generate customer dissatisfaction.
- ii. Loss of good potential customers / business – due to the long underwriting process, customers may lose patience easily.
- iii. Higher underwriting and administration costs – since further referrals to underwriters are required.

A solution is to modify the underwriting questions in order to reduce the number of referrals to the underwriters while reasonably increases the acceptance rates – as an example:

“Do you currently, or ever have, toothache?”

Of course this question may be overly simple in reality but let's just use it for demonstration purpose. This question may result in a lot of referral (since a lot of applicants may answer “yes”) to the underwriters. If we want to include applicants with “treated toothache” however with good current dental health otherwise, the question can be modified as:

“Do you currently have toothache? Please answer “No” if you have previously treated toothache and are now in good dental health.”

The modification has the advantage of reducing the referral to the underwriters, thus shorten the underwriting turnaround

time and retain good customers; while excluding applicants with current dental symptoms.

In summary, the choice of underwriting questions and underwriting guideline is rather an “art” than science – while there are no definite answers, underwriters should have a good understanding of the product’s marketing strategy, company’s risk appetite and channel risk etc., and more importantly, close communication with actuaries and marketing managers will be required - additional anti-selection risks, if any, should be sufficiently addressed through pricing.

More importantly, a good coordination of underwriting questions and guidelines can result in

- i. Positive company image and better customer satisfaction.
- ii. Higher company revenue by increasing acceptance rates, while ensuring applicants with good dental health would be accepted.
- iii. Lower underwriting and administration costs – thus company profitability.

1.3. How the claims should be managed?

All of us understand that even the most conservative underwriting approach can result in some claims. Products are considered successful if the resulting loss ratios are in line (or lower) than pricing expectation; and claims adjudicators play big part in achieving this, dental products being no exception.

In the rest of this section we shall share our experience in dental claims management from the following perspective:

- i. Policy wording design, particularly on exclusions
- ii. Claims administration approach
- iii. Effectiveness of different claims adjudication measures

■ Dental Insurance – What is not covered?

Before purchasing any insurance covers, one of the most important considerations is to understand what is covered and WHAT IS NOT.

In managing anti-selection risk, the use of Waiting Period and Pre Existing Conditions are quite important.

A 90-day waiting period is the usual minimum given the “elective” nature of dental treatments.

As for the Pre Existing Conditions (PEC), it may exclude all diseases or impairments which have occurred before policy inception. Some market observers and customer groups think this is too harsh. Therefore some PEC clauses only exclude all diseases occurred within 5 years before policy inception. Here is the example of such wordings:

“... the event is not payable if the insured has been diagnosed or medically treated for the same event within 5 years before policy inception”.

This is of course not as strong as PEC clause without 5 years limitation. We are of the opinion that there should be no time limitation on the use of PEC clause. However, if it has to be imposed because of marketability (or for any other reasons), 5 years is borderline acceptable.

There are certain “dental” specific exclusions, to make sure the insurance cover won’t pay for “medically unnecessary” treatments (e.g., for cosmetic purpose). Examples:

- The extraction of any permanent teeth performed to reposition misaligned teeth.
- The extraction of any permanent teeth not directly caused by any injuries or diseases but performed as a pre-requisite for further dental treatments.
- Any dental treatments for cosmetic purposes. There are products with more exclusions (e.g., more than 10) but the purposes and wordings are quite similar.

■ Claims management approach

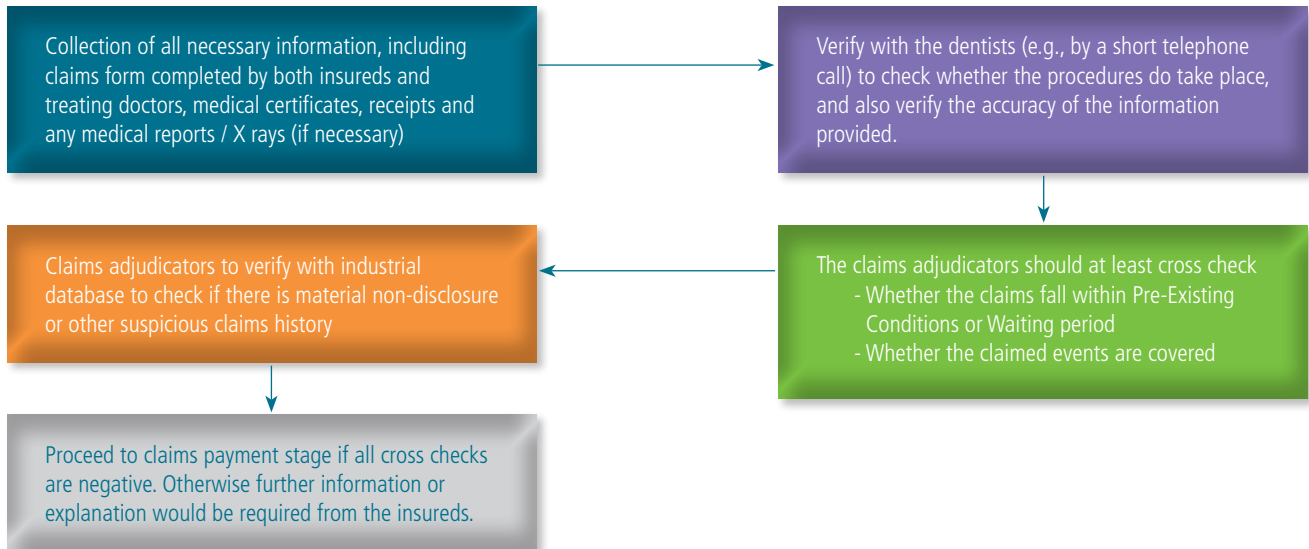
The quality of claims management has a crucial effect to the overall profitability of any dental products. Claims management can be done in-house, while a few insurance companies hire Third Party Administrators (TPA) to handle the claims. Based on our understanding, insurance companies using TPAs to handle claims tend to exhibit a more consistent claims pattern.

Any claims application procedure starts with submission of all necessary documents and these requirements are documented on almost all dental policies.

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Some companies in Korea accept copies of receipts (instead of originals) as claims evidence for small medical claims amounts. This approach is of course not preferred; however it is the market practice. The problem is not obvious because most dental products pay lump sum benefits, however if

companies decide to launch reimbursement type products in the future, then "coordination of benefit" among different policies on the same life would be an issue. The basic dental claims adjudication procedure should include the following:



There are certain red flags which indicate more vigorous investigations may be necessary

- 1 **Early claims**, i.e., claims within contestable period
- 2 **Large amount of claims within a very short period**, e.g., a large amount of composite resins performed during a short time span
- 3 Claimants who own **multiple dental insurance policies**
- 4 **The lump sum of the claim is very large**, e.g., > USD 500

■ Importance of claims adjudication efforts

With well executed claims measures in place, up to 20% of the submitted claims amount would be declined.

According to our observation, the most common decline reasons (which account for the majority of all declined claims) are:

1. **Claims falling outside of the scope of coverage.**
2. **Claims belongs to a pre-existing condition.**
3. **Claims incurred within the waiting period.**

Therefore the claims adjudicators' role is very important, as the identification of all of the above require significant effort from the adjudicators.

1.4. Conclusion

Dental products, as with other elective products, carry significant anti-selection risk. However with proper product design, effective underwriting and claims strategies, profitability can be achieved. At the same time as ensuring the portfolio is of high quality, loss ratios in line (or lower) than the pricing assumptions can be secured.

SCOR Global Life would be more than happy to assist with product development, as well as advising our clients in the development of sound underwriting and claims strategies.

2. Simplified underwriting is not simple

What is Simplified Underwriting (SU)?

SU is also known in the market by other names such as simplified issue, short form application, straight through processing. Compared to the traditionally underwritten policies, simplified underwritten policies have a number of distinct characteristics which include:

1. Fewer health questions,
2. No intensive medical exams,
3. Immediate issue of medically "clean" cases,
4. Meant for Lower coverage amounts but higher maximum issue ages of 65 to 70.

Simplified underwriting is not a new topic and this concept has almost been around for decades. We understand that different regions have different underwriting practices and have developed different guidelines with regards to SU. In this article, we share our knowledge on SU and summarize the global trends and latest developments on this topic.

2.1. The Growth of SU in China

The life insurance industry in China has seen significant growth since the government liberalised its insurance industry from 1980. The Compound Annual Growth Rate (CAGR) of life insurance premium in China has been around 11.5% to 15.5% in recent years¹. In 2011, the total life premium income has exceeded RMB 960 billion². There are currently more than 60 life insurers in China with some of them being ranked in the top 500 global companies.

The growth of SU in China in recent years can be largely attributed to the purchasing habits of the Chinese, growth of the bancassurance channel and the current economic environment. The Chinese have a preference for saving and investment type of insurance products rather than pure protection products.

In addition, given that the intention behind these preferred products is not for protection, there is a belief that the additional risks of anti-selection from SU remains mitigated while at the same time SU makes it more convenient and quicker for the sale process, something much sought after by insurers and the insureds alike.

With the continued importance of bancassurance, companies need SU products that are simple and easy to sell as banks prefer a short selling processes and quick turn-around time.

Furthermore, the worldwide financial crisis which also affected the Chinese investment market, prompted companies to find ways to reduce costs including using simplified underwriting as a way to eliminate costly medical tests.

However China is a big country and within each region, different social-demographic classes may exhibit different insurance buying behaviour, due to the varied stage of economic development and also cultural differences. As such, it is a timely reminder that there is no one size fits all approach for SU in China. Rather, in structuring any SU process, the local situation must be taken fully into account as we shall see in later parts of this article.

2.2. Keep a good balance

It is well recognised that while simplified underwritten products are designed to be simple and easy for the consumers, they are often riskier than fully underwritten products. Results from CMIR -2004³ adequately illustrate the mortality experience for SU is higher than that for full underwriting. How can then SU keep a good balance between making it easier to generate business and managing the risks? Let's considerate the SU approach process.

2.3. Pre-underwriting for successful SU

In the pre-underwriting stage, we need to consider 3 important areas namely the target market, the distribution channel, and product design.

SU works best in a market with homogeneous risks and a market where simple and fast sale is needed. Examples are the affinity groups, those actively at work, those with mortgages, the mass affluent or the high net worth. A market with homogeneous risks will help to mitigate the risk of high anti-selection. It is also important that these customers are willing to pay a higher premium for a simple and fast sale.

The distribution channel must be tailored for the target market. Direct mail, tele-marketing, worksite, bank distribution and internet are common channels for SU products. Appropriate training and evaluation of distribution channels are equally important in the success of SU.

The product design should achieve several goals, such as simple and quick sales processes, lower distribution costs, delivering product features attractive to healthy lives. Life covers (including accidental death) are common. CI covers have also been offered in certain markets but with fewer covered conditions in addition to Hospitalisation cash products which are quite common in many markets. Several techniques have been used to mitigate anti-selection risks in products offered under SU, e.g. pre-existing condition exclusions, restriction of maximum sum assured, return of premium in the first 1 to 3 years instead of full sum assured, and longer waiting period.

2.4. Underwriting tools for successful SU

There are several underwriting tools for SU products. The selected underwriting tool must be adapted for the target market, selected distribution channel and the unique product design. The most popular underwriting tool is the proposal form. A carefully drafted proposal form should meet the following principles: 1) Crafted to invite yes/no answers to avoid follow-up for open ended answers; 2) Specific, clear, unambiguous, single layer questions.

The survey report of SOA in 2004^{iv} showed the common application questions used by at least 80% of the SU products. They are 1) Gender; 2) Use of tobacco products; 3) Alcohol or drug use/abuse; 4) Recent hospitalization or alternative care utilization; 5) Personal history of heart disease, stroke, internal cancer or melanoma, HIV/AIDS, blood disorders, kidney conditions, Alzheimer's disease or dementia, diabetes, liver conditions, or respiratory conditions.

SU uses a low number of key medical questions to get a general understanding of the risk, and enable a speedier application process. However, the downside is that the risk is not fully understood. Some examples of these simplified proposal form questions are illustrated below.

Illustration 1a: Simplified Health Questions in proposal form

| Questions on Health | | Insured |
|--|--|--|
| <p>■ Have you ever suffered from or received treatment for any of the following?</p> <ul style="list-style-type: none"> i. Cancer ii. Heart and/or heart valve conditions iii. Chronic kidney disease iv. Stroke and/or transient ischaemic attacks v. Liver cirrhosis and/or end stage liver failure vi. Systemic lupus erythematosus vii. Terminal illness viii. Severance or total loss of use of one or both limits OR total loss of use of one or both eyes <p>If the answer is "Yes", the benefit payable in the event of death or total and permanent disability (before age 65) will be up to 101% of the total premiums paid and bonuses.</p> | | <input type="radio"/> Yes <input type="radio"/> No |

Illustration 1b: Extreme case of Simplified Health Questions in proposal form

| Questions on Health | | Insured |
|--|--|--|
| <p>■ Have you ever been hospitalized during the past 12 months?</p> <p>If the answer is "Yes", please provide details below:</p> | | <input type="radio"/> Yes <input type="radio"/> No |

Illustration 2: Full Health Questions in Proposal form

| Questions on Health | | |
|--|--|--|
| | Proposer | Insured |
| 1. Have you ever had or been told to have or been treated for: | <input type="radio"/> Yes <input type="radio"/> No | <input type="radio"/> Yes <input type="radio"/> No |
| a. epilepsy, fits, stroke, paralysis, weakness of limb, persistant headache, unconsciousness, nervous breakdown, depression or any other nervous/mental disorders? | <input type="radio"/> Yes <input type="radio"/> No | <input type="radio"/> Yes <input type="radio"/> No |
| b. diabetes, thyroid disorders or any other endocrine disorders? | <input type="radio"/> Yes <input type="radio"/> No | <input type="radio"/> Yes <input type="radio"/> No |
| c. double vision, impaired sight, hearing or speech, ear discharge, nose bleeds or any other disorder of eye, ear, nose or throat? | <input type="radio"/> Yes <input type="radio"/> No | <input type="radio"/> Yes <input type="radio"/> No |
| d. asthma, persistant cough, coughing with blood, pneumonia tuberculosis, chest or breathing complaints/ discomfort or any other lung diseases? | <input type="radio"/> Yes <input type="radio"/> No | <input type="radio"/> Yes <input type="radio"/> No |
| e. raised cholesterol, high blood pressure, heart attack, heart murmur, mitral valve prolapsed or other heart valve disorders, breathlessness, irregular or fast heart rate, chest discomfort or pain, disease of any other disorder of the heart or blood vessels? | <input type="radio"/> Yes <input type="radio"/> No | <input type="radio"/> Yes <input type="radio"/> No |
| f. gastritis, stomach or duodenal ulcer, blood in stools, fistula, piles or any other stomach or bowel disorders? | <input type="radio"/> Yes <input type="radio"/> No | <input type="radio"/> Yes <input type="radio"/> No |
| g. jaundice, hepatitis carrier or any other form of hepatitis, liver disorders or gall bladder disorder? | <input type="radio"/> Yes <input type="radio"/> No | <input type="radio"/> Yes <input type="radio"/> No |
| h. blood, protein or sugar in urine, kidney stones, infection or any other disorders of the kidney, bladder or genital organs? | <input type="radio"/> Yes <input type="radio"/> No | <input type="radio"/> Yes <input type="radio"/> No |
| i. slipped disc, gout, arthritis, pain or deformity or disorders of the muscles, spine, limbs or joints or severe injury? | <input type="radio"/> Yes <input type="radio"/> No | <input type="radio"/> Yes <input type="radio"/> No |
| j. cancer, tumour, cyst or growth of any kind? | <input type="radio"/> Yes <input type="radio"/> No | <input type="radio"/> Yes <input type="radio"/> No |
| k. anaemia, any other disorders of the blood, advised to abstain from donating blood or received blood transfusion or blood products on account of haemophilia or any other reason? | <input type="radio"/> Yes <input type="radio"/> No | <input type="radio"/> Yes <input type="radio"/> No |
| l. any other illness, disorder, operation, physical disability or accident not mentioned above? | <input type="radio"/> Yes <input type="radio"/> No | <input type="radio"/> Yes <input type="radio"/> No |
| 2. Have you or your spouse received any medical advice, counselling or treatment in connection with sexually transmited diseases, AIDS, AIDS Related Complex or any other AIDS related conditions? | <input type="radio"/> Yes <input type="radio"/> No | <input type="radio"/> Yes <input type="radio"/> No |
| 3. Have you had HIV testing done (please state reason and results), or in the last 3 months had any of the following symptoms for more than one week continuously: fatigue, weight loss, diarrhoea, enlarged lymph nodes or unusual skin lesions? | <input type="radio"/> Yes <input type="radio"/> No | <input type="radio"/> Yes <input type="radio"/> No |
| 4. In the past five years, have you had any test done such as X-ray, ultrasound, CT scan, biopsy, pap smear, electrocardiogram (ECG), blood or urine test? | <input type="radio"/> Yes <input type="radio"/> No | <input type="radio"/> Yes <input type="radio"/> No |
| Additional health questions for female only (For age 10 and above) | | |
| 5. a. Have you had or received any treatment for or intend to be treated for any disease or disorder of the breast including breast lump, cyst, fibroadenoma, fibrocystic disease, nipple changes or discharge, mammary dysplasia, Paget's disease of the nipple or breast carcinoma in situ, cancer or growth? | <input type="radio"/> Yes <input type="radio"/> No | <input type="radio"/> Yes <input type="radio"/> No |
| b. Have you had or received any treatment for or intend to be treated for any disease or disorder of the cervix uteri or ovaries including ovarian cysts, abnomal uterine or vaginal bleeding, abnomal enlargement of the abdomen, carcinoma in situ or cancer? | <input type="radio"/> Yes <input type="radio"/> No | <input type="radio"/> Yes <input type="radio"/> No |
| c. Have you had any time undergone a PAP smear, mammogram or ultrasound of the breast or pelvis, cone biopsy or colposcopy for which the results are abnormal? | <input type="radio"/> Yes <input type="radio"/> No | <input type="radio"/> Yes <input type="radio"/> No |
| d. Have you had any complications during your pregnancy or as a result of your pregnancy? (E.g. ectopic pregnancy, diabetes, high blood pressure or protein in urine) | <input type="radio"/> Yes <input type="radio"/> No | <input type="radio"/> Yes <input type="radio"/> No |
| e. Have any of your children suffered from hereditary disorders? (E.g. Spina bifida or Down's Syndrome) | <input type="radio"/> Yes <input type="radio"/> No | <input type="radio"/> Yes <input type="radio"/> No |
| f. Have any of your children suffered from congenital disorders? (E.g. Club foot, Hole-in-heart or Cleft lip/ palate) | <input type="radio"/> Yes <input type="radio"/> No | <input type="radio"/> Yes <input type="radio"/> No |
| g. Are you now pregnant? If "Yes", how many months? | <input type="radio"/> Yes <input type="radio"/> No | <input type="radio"/> Yes <input type="radio"/> No |

To address the shortcomings of a shorter questionnaire, Insurers in the US are turning to other tools that offer the advantage of being electronic, fast and cheap, such as MIBs (Medical Information Bureau), MVRs (Motor Vehicle Report), and Pharmaceutical (Rx) Database. Overall, there can be considerable mortality savings relative to expenses incurred for these underwriting tools.

In a study of a representative MIB member, researchers found that using the MIB Checking Service saved the member \$30 for every \$1 spent^v. Another study suggests that MVRs likely have positive protective value across a wide spectrum of ages and face amounts^{vi}. Electronic reports from the Rx Database can quickly and accurately provide the underwriter with a detailed history of the applicant's use of prescription drugs and certain medical equipment.

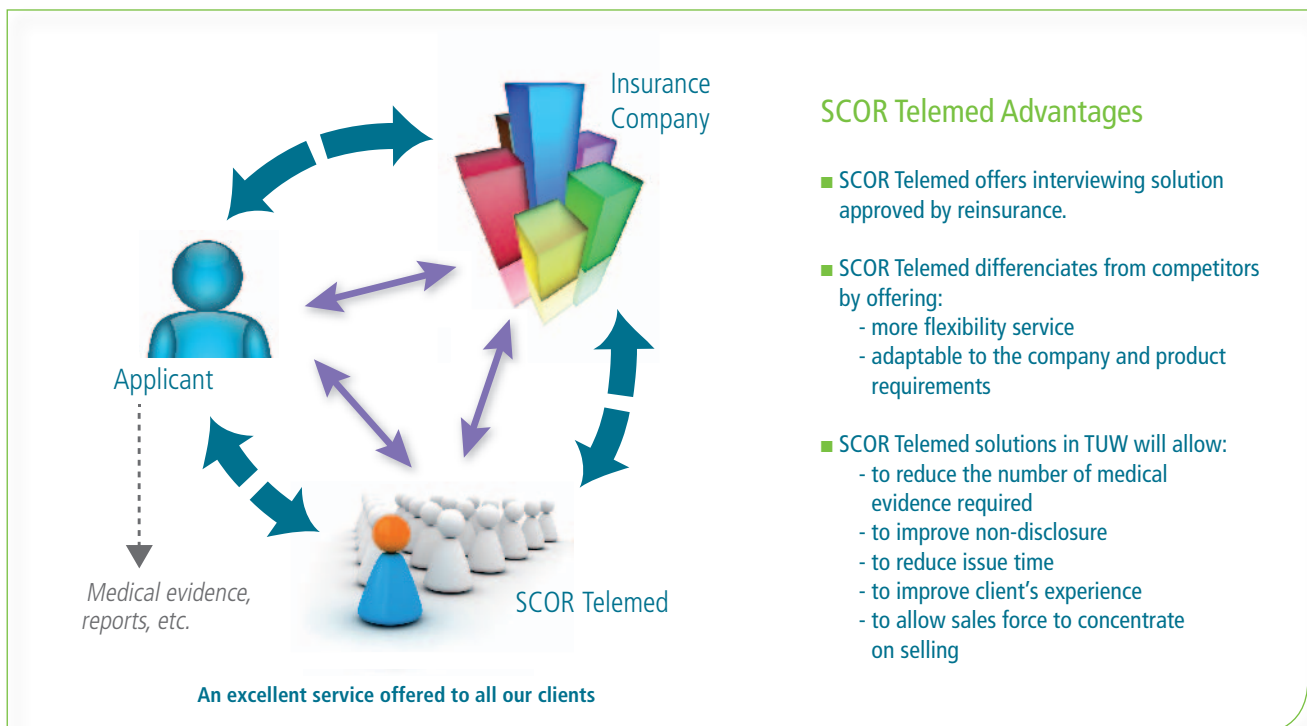
In the past, SU is aimed mainly on "clean" applicants within the targeted age and coverage parameters. But with the introduction of new underwriting tools such as tele-underwriting, the reach of SU has been enhanced without unduly increasing the process time.

Using tele-underwriting, the SU process can now widen an insurer's target market to include applicants who would answer "yes" to the initial questions, but whose history would not represent a significant risk. Results of a survey shows tele-underwriting produced more truthful answers than traditional methods of gathering information^{vii}.

SCOR has developed a system of tele-underwriting (called Telemed). It combines advantages of tele-interview, auto-underwriting, and an expert system. It can enhance SU process by gathering all risk information with drill down questions for specific conditions, automating the evaluation process for the risk acceptance by the insurer but at the same time do allow the involvement of manual underwriting if necessary.

With tele-underwriting enhancing the SU process, clients can be segmented into further risk categories than were available before. This segmentation allows the insurers to understand the clients better and offer suitable acceptance terms, all this happening while clients remain satisfied with a shorter process than full underwriting.

Illustration 3: SCOR Telemed Value Proposition to Clients



2.5 Post-underwriting for successful SU

Traditionally, the key point for evaluation of the whole process is at the claims stage. However, this is obviously not enough for SU products, in particular if they are being introduced in a new market. On-going evaluation of distribution channels and customers is important to ensure profitability.

Although customers are “pre-selected”, SU still needs a good proportion of healthy lives to take-up the offer. Take-up ratio analysis is a good method to manage anti-selection in addition to selective lapse ratio. Other tools include premium discounts that apply only after a period of continuous insurance coverage, penalties for early termination, and cross selling to healthy existing members are all possible methods for managing risks in the pool^{viii}.

Evaluation and analysis of claims data should also be done. By tracking the causes of early claims, monitoring the trend of loss ratio, and eventually performing a cost/benefit on the SU approach taken, areas for improvement in the SU process can be revealed.

2.6 Future trend of SU: much simpler on the surface, but more complicated at the back

With increasing promulgation of electronic technologies into everyday life, for e.g. E-services, digitization of information and better customer segmentation tools and electronic databases of all sorts, this has herald a new and exciting era for SU.

It is now within reach of insurers to electronically assess data that was not available previously. Credit card consumption patterns, personal activity records in fitness centres, medical check-up results etc, are now stored electronically and if needed, can be made available to insurers. Such information can help paint the lifestyle of an individual. As mentioned in earlier sections, such non-traditional underwriting information has been found to be a cost-effective way to select risks.

Through the use of predictive models, lifestyle underwriting as this new approach is called, is expected to revolutionise the way underwriting will be performed. Its use as a tool in SU is invaluable.

By expanding the data sources available (at the same time greater ease of collecting this information than intrusive medical exams for instance) and predictive data analysis tools, it can help insurers have an even better understanding of applicants while at the same yield significant reduction in costs due to fewer medical tests called for. At the same time, it also shortens the new business cycle leading to increased sales and customer satisfaction^{ix}.

Set up the databases and build up the analysis tools will require an investment of time and money. Nevertheless, we believe that the future is in lifestyle underwriting and the benefits should outweigh the costs.

2.7 Conclusion

Simplified Underwriting is not SIMPLE, it is in fact, a complex mix of art and science. In order to be successful, every step in the SU process must be analysed and evaluated. We believe that SU is the way forward and is not a fad that will go away. Traditional full form underwriting with complex medical requirements is becoming too onerous in the current fast paced era.

SCOR Global Life has cooperated with several insurers to develop unique SU solutions for the target markets, including tools for analysing target markets, coming up with protocols for training and management of distribution channels, design/tailor-made products and proposal forms for SU, introducing measures for dynamic integration of SU into the whole underwriting process and post implementation evaluation.

We are happy to share our knowledge and experience in the area of SU with our clients.

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Correspondence-based Underwriting Programme (CUP)

Many thanks for your support for our CUP programme.

Every month since July 2011, cases under the CUP were rolled out to our Asia-Pacific clients to encourage continuous learning at one's own pace.

The programme has received positive response from the market. In just a year since launch, participation has grown 3 fold.

In particular, we are delighted by the active participation and we have listed below top 3 participants who have consistently engaged with our monthly CUP cases since July 2011. They are:

1. Mr. Sriaroon Kanjanakarn (Ace Insurance Thailand)
2. Mr. John Zhang (Generali Insurance China)
3. Ms. Macy Li (Generali Insurance China)

A special encouragement goes to Mr. Sriaroon Kanjanakarn, who participated in all our cases since launch.

Moving forward, any readers who are interested in joining the programme can write to Jason Tan at (jtan@scor.com) with your particulars (name, job title and office email address).

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