

# Underwriting Process for Automatic Premium Free in Life Insurance

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**Abstract:-** This research aims to analyze the underwriting process in the selection of life insurance policies in one insurance company (PT. Asuransi XYZ) in Indonesia. This research discusses the mechanism of policy recovery to calculate the extra premiums that must be paid. Insurance products that are the object of research are insurance for financing a child's scholarship. The data used is secondary data from the XYZ Insurance Company, which is the policy recovery request data document (SPPP) and the data of the Policy Holder and the insured. The variables used in the calculation are the variable  $x$  (the age when entering insurance),  $n$  (duration of premium payment), and EM (extra mortality). Based on the results of the research, the recovery of the insurance policy goes through the stages of the underwriting process, risk classification, document verification, and extra premium calculation. From the calculation of extra premium, the premium to be paid for the first 5 years is Rp 158.612 / month (Premium I) and the premium to be paid for after 5 years is Rp 151.227, - / month (Premium II).

**Keyword:-** Underwriting, Life Insurance, Policy Recovery, Extra Premium.

## I. INTRODUCTION

Life insurance is a type of insurance that aims to provide protection for people who experience financial losses caused by the death or life of the insured person and the loss occurs unexpectedly. Life insurance also has a variety of benefits. Some of the benefits are such as protecting the family, anticipating unexpected events, preparing future plans, financial security, and can provide peace in the family's future. Therefore, life insurance has become a primary need for some sections of society in Indonesia. In insurance, the term underwriting is well known. Underwriting is the process of selecting risks or identifying risks that can occur and are owned by prospective insured. This process is very important so that companies can minimize the risks that can cause losses. In this process, the risk is assessed very carefully and the level of risk is estimated close to the risk, so there is no fatal error in estimating the cost of the risk borne by the prospective insured.

In general, customers who already have an insurance policy and later late in paying their premiums, then the current insurance policy will experience a status change to Automatic Premium Free (BPO). BPO can occur if the premium due is not paid until the end of the grace period. Policy recovery is a reactivation of policies that have been canceled or *lapse*, specifically for this type of policy with the facility can be reactivated. Lapse policy is the termination of insurance coverage as a result of not paying further premiums and the costs of policies that are due or their cash value are insufficient to pay premiums and other costs (Raditya Wardana, 2020).

In the process of policy recovery, certain stages need to be carried out, such as paying premium arrears and late fees (if any) and filling out a Policy Recovery Request Letter (SPPP). In addition, the insured who restored his policy must also complete the personal data required by the company. If the required data is incomplete or incorrect, policy recovery can be delayed / pending by the underwriter who checks it. To reduce errors that occur in policy recovery, the underwriter carefully discusses the underwriting policy recovery process to ensure completeness and compatibility of the data. After that, an underwriter recalculates the life insurance premium that must be paid by the insured. This premium payment will be recalculated based on the latest data from the insured. In this research, researchers will calculate the premium of an insured person with a case of weight obesity.

## II. METHODOLOGY

The data used in this study are secondary data obtained from the Underwriting Department of PT Asuransi XYZ, Indonesia. The data is policy data that has become Automatic Premium Free (BPO) because the advanced premium is not paid or in arrears. This policy has passed the grace period in accordance with the general conditions of the policy. In the underwriting process, there are several types of data that need to be considered by an underwriter. These data contain information about the insured who has an insurance policy at PT Asuransi XYZ. The required data is the Policy Recovery Request Letter (SPPP) and the Policy Holder and insured identification data. Furthermore, this data will be used as the basis for calculating life insurance premiums.

### III. RESULTDISCUSSION

Policy recovery is a process to restore the status of policies that have become Automatic Premium Free (BPO) because the advanced premium is not paid or overdue and has exceeded the grace period in accordance with the general conditions of the policy. The policy recovery process is carried out in accordance with company regulations.

#### A. Underwriting Process

The flow of the underwriting process and the provisions for policy recovery at PT Asuransi XYZ is started from the Policy Holder filling out and signing the Policy Recovery Request Letter (SPPP) and attaching the required documents. Then, the Policy Holder submits the document to the Service Center or called ASC. Furthermore, the Service Center or ASC receives the document for policy recovery and checks the completeness of the documents and the status of the policy. If the documents are complete, ASC will input the data recovery policy on JLIndo, check all arrears, and checklist of recovery documents. After that, ASC is required to scan recovery documents to SAE and email / submit them to the Head Office Underwriting Department.

PT Asuransi XYZ has a centralized work system since 2019. For this reason, the Head Office has a major role in every process, one of which is the underwriting process. After ASC gives an email to the Head Office Guarantee Division, the Guarantee Department immediately receives the email and verifies the document. The staff underwrites data recovery submissions with the policy master at SAE. Then, they counted the total amount of the Policy Holder's arrears.

If the policy recovery is included in the Standard Policy Recovery, the Underwriting Department does not need to conduct medical consultations with a Company Doctor. However, if the recovery of the policy is included in the Sub-standard Policy Recovery, the Underwriting Division may charge an extra premium/decrease in the Amount of Insurance Money (JUA) to the Insured. If the Insured has a medical indication, the Underwriting department needs to consult a Company Doctor. What is meant by Sub-standard Policy Recovery in PT Asuransi XYZ is seen from the Underweight / Overweight Risk as well as the Job Risk stated in the company's Occupational Risk? This research only focuses on discussing Overweight or Obese Risk.

#### B. Risk Classification

The risk of Obesity or Obese in the Underwriting department of PT Asuransi XYZ is measured by calculating the Body Mass Index (BMI). According to Ajeng Quamilla (2020), Body Mass Index is a standard metric that is used to determine who is included in the healthy and unhealthy weight group. BMI is calculated by comparing a person's weight and height.

$$BMI = \frac{\text{weight in kilogram}}{\text{height in meters}^2} \quad 1$$

After welding the Policy Recovery Risk, the Underwriting Department classifies the risk of policy recovery. The risk recovery policy classification that can occur in PT Asuransi XYZ is as follows:

#### 1. Standard Policy Recovery

After calculating the BMI and the BMI results of the Policy Holder declared healthy/normal, then the policy recovery is included in the Standard Policy Recovery. The Head Office Underwriting Department conducts recovery approval. Then, the Underwriting Department prints recovery desiccation, and then the decree is signed by the Head of Department and the staff scans the decree for inclusion in SAE. After that, the system automatically activates the policy and the Policy Holder receives an SMS notification.

#### 2. Sub-Standard Policy Recovery

If the Underwriting Department has calculated the BMI and the BMI results of the Policy Holder are stated to be less / excessive or the Policy Holder has a certain job that is at risk, the Underwriting Department calculates extra premiums according to non-medical / medical substandard dispositions. After calculating according to the product, the Underwriting Department prepares a Substandard Policy Recovery Offer Letter and scans it on the Electronic Application System or SAE. Furthermore, the Underwriting Department provided the email notification and the Letter of Offer to ASC.

If the Policy Holder does not agree, then the Automatic Premium Free or BPO procedure is carried out and the policy guarantee process is completed. However, if the Policy Holder agrees to the offer, then the ASC directly orders the premium change clause, SAE, and submits it to the Policy Holder if the policy is active.

Furthermore, the Head Office Underwriting Department adjusts the rates on JLIndo with Substandard Recovery Dispositions. Then they also did an approval and printed and scanned Sub-standard Recovery Decree. After that, the Policy Holder receives an SMS arrears confirmation of the arrears. If the Policy Holder repays, the system automatically activates the policy and the Policy Holder receives an SMS notification. But if not, the system will automatically delete the process 15 days after recovery approval. Furthermore, the Policy Holder receives an SMS notification that the policy cannot be recovered and finish the underwriting process of the policy recovery.

#### C. Document Verification

Researchers discuss one example of a case at PT Asuransi XYZ. In this case, the Policy Holder (hereinafter referred to as Mrs. A) has a simple policy product at PT Asuransi XYZ whose insurance policy has been started since 2017 and the premium is paid monthly. The product is called JS Prestasi. This product has the following benefits:

1. Scholarship payments
2. Payment of compensation if the insured dies during the insurance period.
3. If the insured suffers from total permanent disability due to an accident, then the insured is freed from the obligation to pay further premiums, and the benefits of the stages not yet received will still be paid
4. If the child who will receive the scholarship dies, the Policy Holder is exempted from the obligation to pay the premium and all standard premiums are returned and the benefits of the unpaid stage continue to be paid

The Underwriting Department verifies the data contained in the SPPP and Master Policy, whether the data is in accordance with the Identity card (KTP). Then, the Underwriting Department also checks the Height (TB) and Weight (BB) Policy Holders currently using BMI. In the SPPP, the Policy Holder writes **157 cm Height** and **75 kg Body Weight**. Then, BMI = 30,43.

In this case, Ms. A is subject to **Class I Obese Risk** because the BMI results show that Mrs. A has an excess weight which is quite heavy, which is 30.43. Based on company regulations, the BMI Range determined by the Underwriting Department of PT Asuransi XYZ is as follows:

**Table 1.** BMI Range PT Asuransi XYZ

Source: PT Asuransi XYZ's Processed Company Data

BMI Range	Weight Category	Information
<15,99	Severe Thinness	Consult a doctor
16.00 – 16.99	Moderate Thinness	25% Consult a doctor
17.00 – 18.49	Mild Thinness	Standard
18.50 – 24.99	Normal Weight	Standard
25.00 – 29.99	Overweight	Standard
30.00 – 34.99	Obese – Class I	25%
35.00 – 39.99	Obese – Class II	50% Consult a doctor
>40	Obese – Class III	Consult a doctor

After seeing the results of the BMI calculation, the Recovery of Mrs. A's policy includes the **Non-Medical Sub-Standard Policy Recovery** due to the Risk of Obese Class I does not require a doctor's consultation and Mrs. A does not have a medical indication.

*D. Extra Premium*

The Underwriting Department checks the amount of all overdue payments. Mrs. A uses a monthly payment policy. According to data from the Policy Master, Mrs. A made the last payment on December 10, 2019, while the filing for Policy Recovery was made on April 20, 2020. So, Mrs. A has been in arrears of premium payments for 4 months.

After checking all overdue bills, the Underwriting Department performs an extra premium calculation. Based on data from the insured, it is known that the age when

entering insurance is 27 years old, the premium payment is 18 years and the extra mortality charged is 25%.

With the data already known, the Underwriting Department will look for standard premium rates from SK Products in accordance with the policy that Mrs. A has. Because of Msr. A has a JS Prestasi product, the Underwriting Department looks at the SK JS Prestasi Product and immediately writes the standard premium rate to the policy master.

$$\begin{aligned} \text{Standard Premium Rate} &= 190,87 \quad (2) \\ \text{New Premium Rate} &= \text{Standard Premium Rate} + \text{waiver premium} + \text{personal accident} = 208,70 \quad (4) \end{aligned}$$

After that, the Underwriting Department submits the data to the Company's Actuarial Division to calculate the new premium rate. Data obtained from the Company's Actuarial Division amounted to:

$$\begin{aligned} \text{Sub-Standard Premium Rate} &= 192,30 \quad (5) \\ \text{New Premium Rate} &= \text{Sub-Standard Premium Rate} + \text{waiver premium} + \text{personal accident} = 208,70 \quad (6) \end{aligned}$$

The calculation starts from entering the Amount of Insurance Money (JUA) factor in the policy and standard premium rate + wp + pa from SK Product. The purpose of the calculation is to match the results with the premium stated in the policy. Then, enter the sub-standard premium rates obtained from the Company's Actuarial Division and the standard premium rates obtained from SK Products to find the difference. After that, enter the sub-standard premium rates + wp + pa was obtained from the Company's Actuarial Division in order to get a sub-standard premium + pa + wp premium. That way, we get a new substandard premium for the first 5 years (Premium I) and after 5 years (Premium II). After calculating, the results are seen in the form of an increase in premium charged to Policy Holder. Therefore, the premium to be paid for the first 5 years is Rp 158.612 / month (Premium I) and the premium to be paid for after 5 years is Rp 151.227 / month (Premium II). These results are obtained from the sub-standard premium + pa + wp multiplied by a monthly payment factor of 0,095.

**IV. CONCLUSION**

The Insurance Policy Recovery Mechanism in PT Asuransi XYZ starts with filling out the Policy Recovery Request Letter (SPPP) and giving a scan of the Identity Card (KTP) and current photo to ASC. Furthermore, ASC processes the recovery and e-mails to the Central Office. Head Office Underwriting Department then processes the recovery and classifies the risks of the recovery. Risks that may occur in the case of policy recovery are the Standard, Sub-standard, and Cancel / Non-recoverable Risk classes. In Standard Risk, Policy Holder has fulfilled the existing requirements in accordance with company regulations and there is no increase in the premium in the policy. If the policy recovery is a sub-standard risk, then the Underwriting

Policy Holder needs to review the recovery. There are several conditions that must be met by the Policy Holder because there is an increase in premiums from the Underwriting Department.

The calculation of sub-standard premium rates is calculated by the Company's Actuarial Division. After calculating the new sub-standard premium, the Underwriting Department will make a Recovery Offer Letter regarding the risk and increase of the premium charged to the Policy Holder. Then the Policy Holder can approve/reject the offer. At PT Asuransi XYZ, risks that may occur in the case of Sub-standard Policy Recovery are Underweight / Overweight Risk and Job Risk. Based on the calculation, the premium to be paid for the first 5 years is Rp 158.612 / month (Premium I) and the premium that must be paid for after 5 years is Rp 151.227 / month (Premium II).

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