

## **Health Insurance Underwriting Manual (Sample – Demo Use Only)**

**Version:** 1.0

**Last Updated:** 2026-01-31

### **Disclaimer:**

This document contains synthetic, illustrative underwriting rules for demonstration purposes only. It does not represent real insurer policy or regulatory guidance.

### **1. Purpose**

Defines standardized business rules used to evaluate health-related risk factors and determine insurance premium adjustments during underwriting.

### **2. Risk Scoring Framework**

All applicants are evaluated using a Risk Delta Score (RDS) ranging from -10 (very low risk) to +10 (very high risk).

### **3. Premium Adjustment Rules**

- $RDS \leq -10 \rightarrow -10\%$  premium
- $RDS -9 \text{ to } -5 \rightarrow -5\%$  premium
- $RDS -4 \text{ to } +4 \rightarrow 0\%$  premium
- $RDS +5 \text{ to } +9 \rightarrow +10\%$  premium
- $RDS +10 \text{ to } +14 \rightarrow +25\%$  premium
- $RDS \geq +15 \rightarrow +40\%$  or referral for review

### **4. Category-Specific Rules**

#### **Cardiovascular Health**

- Resting HR < 60 bpm  $\rightarrow -2$
- Resting HR 60–80 bpm  $\rightarrow 0$
- Resting HR > 90 bpm  $\rightarrow +3$
- Controlled hypertension  $\rightarrow +2$
- Uncontrolled hypertension  $\rightarrow +5$

**BMI**

- Normal (18.5–24.9) → 0
- Overweight (25–29.9) → +2
- Obese (30–34.9) → +5
- Obese ( $\geq 35$ ) → +8

**Physical Activity**

- $\geq 150$  min/week → -2
- 75–149 min → 0
- $< 75$  min → +2

**Smoking**

- Former smoker  $> 5$  yrs → +1
- Former smoker  $< 5$  yrs → +3
- Current smoker → +7

**5. Allergies**

- Severe allergy with anaphylaxis → Referral required
- Controlled severe allergy → +2

**6. Fairness & Compliance**

The following must never be used in underwriting decisions:

- Race, ethnicity, religion, nationality, gender identity, marital status

**7. Decision Requirements**

Each decision must include risk category, RDS, premium adjustment, triggered rules, and explanation.

**AI Usage Notice**

This document may be used as a grounding knowledge source for AI-based underwriting systems.