**MEDIBUDDY PROJECT ANALYSIS REPORT**

1. **Does the gender of the person matter for the company as a constraint for extending policies?**

The **average insurance charges** are:

* **Female**: ₹12,569.58
* **Male**: ₹13,956.75
* **Overall Average**: ₹13,270.42

### **Conclusion:-**

The **difference in average charges between males and females is minor** (₹1,387.17), indicating that **gender does not significantly impact insurance costs**. Since insurance charges are primarily influenced by **health factors like BMI, smoking status, and age**, gender should **not be a constraint for extending policies**.

MediBuddy should focus on **medical risk factors rather than gender** when determining policy eligibility.

1. **What is the average amount of money the company spent over each policy cover?**

The **company's average expenditure per policy cover** is **₹13,270.42**. This value represents the **mean insurance charges paid by customers**, considering various factors such as **age, BMI, smoking status, gender, and dependents**.

### **Key Observations:**

* The **average policy cost** helps the company understand its **typical claim expenses**.
* Higher costs may be **linked to high-risk individuals** (e.g., smokers or older individuals).
* The company can use this insight to **optimize premium pricing and risk assessment**.

This information is crucial for **future policy adjustments**, helping MediBuddy balance **customer affordability and profitability** while ensuring **financial sustainability**.

1. **Could you advice if the company needs to offer separate policies based upon the geographic location of the person?**

### The **average insurance charges by region** are:

* **Northeast** → ₹13,406.38
* **Northwest** → ₹12,417.58
* **Southeast** → ₹14,735.41 (Highest)
* **Southwest** → ₹12,346.94 (Lowest)

### **Conclusion & Recommendation:-**

* **Yes, the company should consider location-based policies** as insurance charges vary across regions.
* The **Southeast region has the highest average charges**, indicating higher medical expenses or risk factors
* **Northwest and Southwest have lower charges**, suggesting lower healthcare costs or risks.
* The company can introduce **regional pricing strategies**, such as **higher premiums in high-cost regions** and **discounts in low-risk areas** to ensure fair pricing and profitability.

1. **Does the no. of dependents make a difference in the amount claimed?**

The **average insurance charges by number of dependents** are:

* **0 dependents** → ₹12,365.98
* **1 dependent** → ₹12,731.17
* **2 dependents** → ₹15,073.56
* **3 dependents** → ₹15,355.32 (Highest)
* **4 dependents** → ₹13,850.66
* **5 dependents** → ₹8,786.04 (Lowest)

### Insights:-

* **Yes, the number of dependents impacts the amount claimed.**
* Customers with **2-3 dependents have the highest average claims**, suggesting **higher medical costs** for families.
* Customers with **5+ dependents claim the least**, possibly due to **shared coverage plans** or different healthcare usage patterns.
* The company should **introduce family-based insurance plans**, offering **discounts for multiple dependents** while ensuring **profitable pricing**.

1. **Does a study of persons BMI get the company any idea for the insurance claim that it would extend?**

The **average insurance charges by BMI category** are:

* **Normal weight** → ₹10,409.34 (Lowest)
* **Overweight** → ₹10,987.51
* **Obese** → ₹15,552.34 (Highest)

### **Insights:-**

* **Yes, BMI significantly impacts insurance claims.**
* **Obese individuals have the highest claims**, suggesting higher **medical risks** and **health-related expenses**.
* **Normal-weight individuals claim the least**, indicating lower medical risks.
* The company should **adjust premiums based on BMI**, charging **higher premiums for obese individuals** while offering **discounts for maintaining a healthy BMI**.

1. **Is it needed for the company to understand whether the person covered is a smoker or a non-smoker?**

* **Non-smokers (no)**: Average insurance charge is **₹8434.27** with **1064 policies.**
* **Smokers (yes)**: Average insurance charge is **₹32050.23** with **274 policies.**
* **Grand Total**: Overall average insurance charge is **₹13270.42** across **1338 policies.**

**Conclusion:-**  
Yes, it is essential for the company to determine whether a person is a smoker or a non-smoker. The average charges for smokers are significantly higher than for non-smokers, which directly impacts risk assessment and premium calculation.

1. **Does age have any barrier on the insurance claimed?**

The average charges for different age groups show a clear pattern, with **seniors** having the highest average insurance charges at **₹17,902.55**, followed by **adults** with an average of **₹12,382.50**, and **youth** with the lowest average charges of **₹9,011.34**. This indicates that as individuals grow older, their healthcare needs increase, leading to higher insurance claims. Seniors likely require more frequent medical attention, specialized treatments, and extended care, which contributes to the higher costs. Therefore, understanding the age group of the insured person is crucial for the company to accurately assess risk and determine appropriate premium amounts.

1. **Can the company extend certain discounts after checking the health status (BMI) in this case?**

The relationship between BMI categories and average insurance charges:

* **Normal weight**: Average insurance charge is **₹10,409.34**.
* **Obese**: Average insurance charge is significantly higher at **₹15,552.34**.
* **Overweight**: Average insurance charge is **₹10,987.51**.
* **Underweight**: Average insurance charge is the lowest at **₹8,852.20**.

**Conclusion:-**  
Yes, the company can consider extending certain discounts based on the health status, specifically BMI. Individuals with **normal weight** and **underweight** status tend to have lower average insurance charges, indicating that they may pose a lower risk in terms of medical expenses. Offering discounts or incentives to these groups can encourage maintaining a healthier lifestyle and potentially reduce future claims. Conversely, individuals falling under the **obese** and **overweight** categories, with higher average charges, may not be eligible for such discounts due to the increased risk of health issues. ​