

# 41<sup>st</sup> India Fellowship Seminar

Date: 13th- 14th June 2024

## Life Insurance Professional Case Study ABC's Dilemma - To DEF or Not to DEF

**Presented By (Group 4):**

1. Dhvani Shah
2. Pulkit Sikri
3. Deepika Sachdeva
4. Swati Jindal



# Agenda

## 1 Case Study Synopsis

### Concerns involved in the case study

## 2 Options available to address the issues in the case study

## 3 Implications of ethical dilemma in product designing

## 4 Steps need to be taken to design product in time

## 5 Applying Relevant Sections of APS

## 6 Conclusion

### Q&A

# Agenda

## 1 Case Study Synopsis

Concerns involved in the case study

2 Options available to address the issues in the case study

3 Implications of ethical dilemma in product designing

4 Steps need to be taken to design product in time

5 Applying Relevant Sections of APS

6 Conclusion

Q&A

# Case Study Synopsis

- ABC is a young and newly qualified pricing actuary of a Life Insurance company involved in selling long term benefit-based Health Insurance products.
- Post Regulatory changes in the Product Regulations, now Life Insurers can also design Short Term Benefit Based Health products.
- However, Life Insurance company has no prior experience of selling short term Benefit Based health products as it was not allowed under earlier regulatory regime.

# Case Study Synopsis

- DEF has recently joined in the pricing department and reports to ABC and he has worked in a standalone Health insurance company and has considerable experience in pricing short term Benefit Based health Insurance Products.
- He informed ABC that he has lot of data available with him which can be used to price Benefit Based products by this life Insurance Company in return of good Bonus and early promotion.
- There is a tremendous pressure on ABC from Management to design these products quickly.

# Key Issues to Address

Options available to ABC in order to address this issue?

Implications of the offer given by DEF to ABC?

Steps needed by ABC to design new products in time?

Applying Relevant Sections of APS

 ABC: Pricing actuary

 DEF: Employee from Health insurance company

# Agenda

1 Case Study Synopsis

## Key Issues to Address

2 Options available to ABC in order to address this issue?

3 Implications of the offer given by DEF to ABC?

4 Steps needed by ABC to design new products in time?

5 Applying Relevant Sections of APS

6 Conclusion

Q&A

# Alternatives available to ABC

## Independent Pricing Strategy (without involving DEF):

- External data sources such as reinsurers and industry statistics
- Pricing internally by training & development along with conducting market research and risk management
- Seeking guidance from the regulator
- Pricing in-house by Hiring expert consultants



# Alternatives available to ABC

## Pricing using DEF's data:

- Investigate the sources of data
- Ensuring legal and ethical aspect of the data source
- Seeking guidance from other teams within the organization such as compliance
- Company policy and regulatory requirements on confidentiality
- Clarify to DEF that promotion and bonus would not be dependent upon data

# Alternatives available to ABC

## Pricing using DEF's expertise:

- Applying DEF's prior understanding
- Leverage on past experiences of DEF
- Transparency with DEF that financial rewards to be based on merit

# Alternatives available to ABC

## Negotiating timelines with management:

- Transparency with those charged with governance
- Lack of inhouse experience
- Time needed to built expertise internally
- Prioritize ethical data
- Comply with regulations

# Agenda

1 Case Study Synopsis

## Key Issues to Address

2 Options available to ABC in order to address this issue?

3 Implications of the offer given by DEF to ABC?

4 Steps needed by ABC to design new products in time?

5 Applying Relevant Sections of APS

6 Conclusion

Q&A

# Implications of DEF's offer

## Ethical Implications      Practical Implications

### 1. Confidentiality and Data Privacy:

- The data of previous company is proprietary information
- Using this data without permission is a breach of confidentiality

Section 72-A of the Information Technology (IT) Act, 2000 deals with personal information and provides punishment for disclosure of information in breach of lawful contract or without the information providers consent.

# Implications of DEF's offer

## Ethical Implications

### 2. Professional Integrity:

- Accepting DEF's offer would compromise ABC's integrity.
- Undermines the trustworthiness and credibility of the actuarial profession and the company

### 3. Coercion and Corruption:

- DEF's offer is conditional on receiving a good bonus and early promotion.
- Such actions could foster a culture of unethical behavior within the organization

# Implications of DEF's offer

## Practical Implications

### 1. Legal Risks:

- ABC and the company could face legal action from DEF's previous employer leading to financial loss
- IRDAI or LIC could impose sanctions on the company and they may scrutinize the company's practices more closely

# Implications of DEF's offer

## Practical Implications

### 2. Reputational Risks:

- Top talent may be reluctant to join or stay with a company known for unethical behavior.
- Trust from company's board members could be damaged for ABC as well as the whole actuarial and product development department.



# Implications of DEF's offer

## Practical Implications

### 3. Data Reliability and Suitability:

- Data obtained from a different company might not be entirely applicable to the new products being developed
- Relying on potentially inappropriate data could result in inaccurate pricing

# Agenda

1 Case Study Synopsis

## Key Issues to Address

2 Options available to ABC in order to address this issue?

3 Implications of the offer given by DEF to ABC?

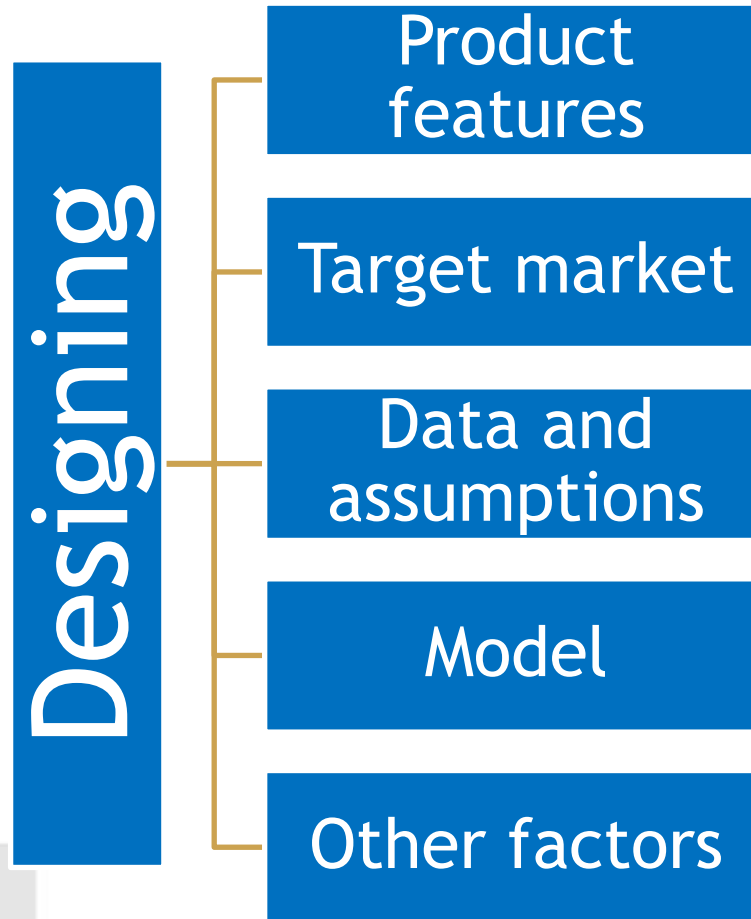
4 Steps needed by ABC to design new products in time?

5 Applying Relevant Sections of APS

6 Conclusion

Q&A

# Steps for designing of product:



# Product features

- **Similar to market design:** Product designing and assumption setting would be easier
- Exclusion/Conditions to be market benchmarked to avoid anti-selection.
- DEF expertise can also be used for same.
- Reinsurance support
- **Consistent with exiting long term benefit:** Model can be used / along with data for assumptions

# Target market

- One can target for **existing channels only** for now so to price adequately and timely.
- One can also chose to sell through channel where **market data is available**.
- This is required for expense/ lapse/ mortality/ morbidity assumption setting.
- Volume of sales from respective channels can be procured for assumption setting and profit testing.

# Model requirements

- The **existing model** can be modified to allow for shorter term
- DEF's **expertise** can be used in model validation/ quick generation of Prem rates.
- Checks/ Validation in existing model as applicable can be used
- Consistency checks against similar longer term benefit plan can be done
- Model development can be **outsourced** and DEF's expertise can be used for other aspects of product pricing

# Data:

- **Insurance Industry data:** Publicly available information from health insurance companies after assessing the suitability
- **Reinsurance expertise and data** can be used for quick turnaround.
- **Own data:** Operating assumption experience can be used of existing long term product subject to suitability

# Other factors

- Profit Target
- Sensitivity Analysis of Assumptions
- Margins in assumptions
- Competition
- Administration
- Impact on Financing/Capital Requirements



# Agenda

1 Case Study - Background

## Key Issues to Address

2 Options available to ABC in order to address this issue?

3 Implications of the offer given by DEF to ABC?

4 Steps needed by ABC to design new products in time?

5 Applying Relevant Sections of APS

6 Conclusion

Q&A

# Application of APS

## **Actuarial Practice Standard 34 (APS 34)**

APS 34 is general standard. It applies to all the actuarial services performed by an actuary unless an element of guidance is explicitly superseded by another standard such as practice- specific standard or by law.

## **Other relevant APS Applicable: APS 1**

APS 1 is actuarial practice standard that is applicable to work of appointed actuary, as guided by its section B.4 there are certain sections that are also **applicable to other actuaries holding a managerial or other position of authority in the company.**

# APS 34

## 2.1 Acceptance of Assignment

2.1.1. When providing actuarial services, the actuary should confirm with the principal the nature and scope of actuarial services to be provided, including:

- a. Role of principal
- b. Any limitations or constraints on the actuary
- c. Any requirements that actuary is required to satisfy
- d. Identification of the schedule and expected cost or resources needed

# APS 34

2.1.2: In accepting an assignment for actuarial services, the actuary shall:

- c. Have reasonable assurance of **time, resources**, access to relevant employees of the principal and other relevant parties, access to documentation and information, and the right of the actuary to communicate information, as may be necessary for the work.

**Application:** Need to be transparent with management regarding lack of appropriate experience and data for short term health product pricing.

# APS 34

## 2.2. Knowledge of Relevant Circumstances

- a. The actuary should have or obtain sufficient knowledge and understanding of **data** and other information available, including the relevant **history, processes, nature of the business operations, law, and business environment** of the subject of the actuarial services, to be appropriately prepared to perform the actuarial services required by the assignment.

**Application:** ABC need to be aware of approach to price short term health products, regulations bidding pricing of health insurance products, applicable APS like APS 34 and APS1 etc.

# APS 34

## 2.5 Data Quality

**2.5.1 Sufficient and Relevant Data-** The actuary should consider whether sufficient and reliable data are available to perform the actuarial services. Data are sufficient if they include the **appropriate information for the work**. Data are reliable if they are **substantially accurate**. If sufficient and reliable data are not available, then actuary should follow the guidance in paragraph below.

# APS 34

**2.5.2 Data Validation-** The actuary should take reasonable steps to review the consistency, completeness, and accuracy of the data used. These might include:

- a. Underwriting reconciliations against audited financial statements, trial balance, or other relevant records, if these are available.
- b. Testing the data for **reasonableness against external or independent data**;
- c. Testing the data for **internal consistency and consistency with other relevant information**;
- d. Comparing the data to those for a period or periods.

# APS 34

**2.5.3 Sources of Data for Assumptions-** To the extent possible and appropriate when setting assumptions, the actuary should consider using **data specific to the organization** or the subject of the actuarial services. Where such data are not available, relevant or sufficiently credible, the actuary should consider **industry data, data from comparable sources, population data, or other published data**, adjusted as appropriate. The data used, and the **adjustments made, should be described in any report.**

**Application:** ABC can refer to information from Statistical Handbook of IRDAI, Statistics by Insurance Information Bureau of India, data from existing products with morbidity exposure.



# APS 34

**2.5.5 Deficiencies in Data:** The actuary should consider the possible effects of a data deficiencies on the results of the work. If such deficiencies in the data are **not likely to materially affect** the results, then deficiencies need not to be considered further. If actuary cannot find a satisfactory way to resolve the deficiencies, then actuary should consider..:

- a. Decline to undertake or continue to perform the actuarial services.
- b. Work with the principal to **modify the actuarial services or obtain appropriate additional data** or other information; or
- c. ....perform the actuarial services as well as possible and **disclose in any report the data deficiencies.**

# APS 1

**Note:** As per Section B.4 The requirement of paragraph (3) above also applies to any other actuary holding a managerial or other position of authority in the company.

## **3. Considerations affecting the position of Appointed Actuary**

... but in such cases appropriate arrangements must be made for the Appointed Actuary to have **recourse on a professional and formal basis to an actuary who has such knowledge and experience ...**

# APS 1

## 6. Premium rates and policy conditions for new products and existing products on sale

- 6.1. The Appointed Actuary must be satisfied **that premium rates for new business are appropriate**, that is to say sufficient in due course to enable the company to meet its liabilities.
- 6.3. ...If need be, **he/she should indicate limits on the volume of sales that may prudently be accepted and/or how much capital is required** and gain reassurance from the Board of Directors that the required level of capital will be available and not earmarked for other purposes.

# Agenda

## 1 Case Study Synopsis

### Key Issues to Address

2 Options available to ABC in order to address this issue?

3 Implications of the offer given by DEF to ABC?

4 Steps needed by ABC to design new products in time?

5 Applying Relevant Sections of APS

6 Conclusion

Q&A

# Conclusion

- On ethical grounds, ABC shouldn't accept DEF's conditions
- Expectation should be made clear with DEF regarding work, bonus, promotion etc.
- These need to be benchmarked with other employees and should be as per company's policy
- ABC can utilize him in various aspects of product designing basis publicly available data and own judgement.

# Q&A

# Thank you!