TEAM CONTROL CYCLE PROJECT OUTLINE

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The report will be split into the following sections:

1. Objectives (Aazeen & Yuhan)

- The focus of this project is to develop a health incentive program which will assist in reducing expected mortality of citizens of Lumaria and increase life insurance sales for SuperLife.
- Given that the incentive is to be paired with longer-term life insurance offerings, our team's proposed timeframe to monitor the success of the program will be 1-2 years, to provide sufficient time for adequate data to be collected.

2. Program Design (Aazeen, Alex & Divena)

The health incentivised program will aim to:

- Reduce expected mortality: achieve this by selecting the programs that have the best mortality reduction qualities and encouraging participation of individuals into this program.
- Increasing life insurance sales and revenue: propose marketing strategies to promote SuperLife and include the CMO in the operations.
- Improve product marketability and competitiveness: aim to construct a final product that is accessible to all age groups and benefits a variety of individuals, but at the cost of potentially providing less benefits to each individual.
- Incentivise healthier behaviour: conduct research on programs that encourage citizens of all ages to adopt a healthier lifestyle such as more walking-based programs.

An outline of short term and long-term horizons will be made to evaluate the program:

- Proposed short-term and long-term time frames are 5 years and 30 years respectively.
- These time frames allow adequate time for accurate and reliable results to be observed.

3. Pricing/Costs (Alex & Helen)

- Implement our proposed model over the past 20 years to determine potential mortality savings and economic significance of the proposed program.

4. Assumptions (All)

Assumptions will be made about the lifestyle and independence of individuals, inflation and interest rates and during the data cleaning process as certain data is censored.

- Proposed interest and inflation rate assumptions: use average of past 10 years.
- Some NA variables were noticed which are attributed to censoring (i.e. death dates prior to 2000 are included as NA values)
- NA values in the indicator functions for lapse and death are flagged as 0 (i.e. lapse or death did not occur)

5. Risk and Risk Mitigation Considerations (Aazeen & Divena)

- Identify potential key risks during the data analysis and order them by how significant their impacts are.
- After predicting the model, use bull and bear cases to analyse the sensitivity of the assumptions used (by adding + or - %). This will help in quantifying risks and identifying which ones cause more of a financial impact.

6. Data and Data Limitations (Divena, Helen & Yuhan)

- Given the censoring of data, currently the data may cause certain limitations when the analysis is being conducted, however as the data is further examined and the group makes progress more limitations could be identified which will help in deciding which data sources are more appropriate to be used.