**Technical Exercise Overview**

Attached to this communication is a dataset representing a sample of diabetic population claims. This dataset includes demographic information, ICD-10 codes, Charlson comorbidity index scores, BMI, a de-identified unique member ID, and a de-identified policy number.

The purpose of this exercise is to evaluate the applicant's proficiency in accurately analyzing the provided data. The applicant should demonstrate their ability to perform a thorough analysis and then articulate their insights and conclusions in the form of an analytical report. The report should address the following points:

* Preprocess the raw data to prepare it for analysis.
* Conduct descriptive analytics to summarize the data.
* Demonstrate any quality or plausibility concerns.
* Identify any significant patterns or trends from the analysis.
* Apply advanced analytical techniques such as predictive modeling, clustering, or machine learning methods.
* Propose strategies to address any identified gaps, and share insights and reflections based on the analysis.
* Describe the methodology and tools used in the analysis.

This exercise is an opportunity to showcase analytical capabilities and strategic thinking.