**Executive Summary**

*Our country’s health system has taken several changes over the last few years. This project’s goal is to assess different aspects of how insurance coverage, clinics and population demographics interacted with this change over time relative to the care our citizens receive. While healthcare is a broad subject, we will delve into a subset of data that contains the diabetic and require insulin. The broad assumptions are insurance coverage/re-imbursement information as well as % population that are insured and uninsured are generally precise.*

**Motivation**

*I ask myself every day, are insurance companies fair to individuals when we pay one of the highest premiums in the world to manage our health risk as we age. How will our treatment or costs differ when I am into my retirement? As an intelligent nation, are we heading in the right direction to leave a better system for our children?*

**Data Question**

*Have our physician practices grown over time in the region?*

*What is our ratio of population to physicians? Has it improved or deteriorated over time?*

*A common chronic disease such as diabetes has grown, how affordable has a simple product like insulin faired over time in terms of pricing.*

**Minimum Viable Product (MVP)**

*A dashboard that would represent some insightful data that has changed over time in our healthcare system. Present any correlations to various aspects of our healthcare. We all know insulin usage has increased with time but by how much? How has affordability played in the aspect over time?*

**Schedule (through <date of demo day>)**

1. Get the Data (May 25, 2020)
2. Clean & Explore the Data (June 5, 2020)
3. Create Presentation of your Analysis (Jun 19, 2020)

* Should be a presentation, but could include a Jupyter Notebook or dashboard in Excel, Tableau, or PowerBI

1. Internal demos (<June 26, 2020)
2. Demo Day!! (<date of demo day>)

**Data Sources**

*Currently in exploring the sources of data. Have identified*

1. *US Census: Regional/Division Mapping including Population*
2. *Medicare data*

**Known Issues and Challenges**

*Challenges include finding precise data against insulin and various insurance plans and to determine what percentage of the population is insured. However, Medicare data may help support a certain age set of the population. There is a possibility for API request option that may be require for insulin data. These data sets are anticipated to be large and may be to be cleaned in several times and a subset may be utilized.*