**Business Requirement Document (BRD)**

**Project Objective**

The objective of this project is to **build a centralized data repository** that serves as a **single source of truth** for **Data Analytics and Data Science teams**. This centralized table will adhere to the **Medallion Architecture** (Bronze, Silver, and Gold layers), ensuring **scalability, data integrity, and optimized performance**.

**Key Considerations:**

1. Medallion Architecture Implementation
   * **Bronze Layer**: Raw, unprocessed data ingestion.
   * **Silver Layer:** Standardized, cleaned, and enriched data with schema validation.
   * **Gold Layer**: Aggregated, business-ready data optimized for analytics and AI models

**Data Dictionary**

**Provider**: This table contains 50 provider information.

* Prov\_id: Provider ID
* Prov\_name: Provider Name
* Prov\_loc\_id: Providers location id
* Prov\_specialty: Provider’s Specialty

**Locations:** This table contains location information for patients’ visit and providers’ location

* Loc\_id: Location ID
* Loc\_name: Location Name
* Sa\_name: Service Area Name

**Patient:** This table contains patient information

* Unique\_Patient\_id: Patient unique ID
* Gender\_c: Patient’s Gender (“M”,”F”)
* Birth\_date: Patients’ Birthdate
* Pat\_loc\_id: The patient’s primary location

**Pcp:** This table contains patient’s primary care provider information

* Unique\_Patient\_id: Patient ID
* Pcp\_prov\_id: Primary care provider id

**Encounters:** This table contains encounter information

* Enc\_id: Encounter ID for every encounter visit
* Enc\_Patient\_id: Patient ID associated with the encounter
* Visit\_prov\_id: Provider id for encounter
* Enc\_Status\_c: Status of the encounter (“Completed”, “Cancelled”)
* Enc\_date: Date associated with the visit
* Due\_Date: Recorded due date for pregnant patients

**Encounter\_dx** : The table contains diagnosis information related to the encounter

* Enc\_id: Unique Encounter ID
* Line: The line number for the diagnosis associated with this record. Multiple pieces of diagnosis can be associated with this record.
* Icd\_code: ICD 10 diagnosis code regarding to the diagnosis

**Pregnancy\_Diagnosis**: This table contains diagnosis information for identifying pregnancy diagnosis

* Code: Diagnosis code for pregnancy diagnosis