**Hospital Dalinde Project:**

**Pharmaceutical Inventory Optimization**

**Team Members:**

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**Business Overview**

Dalinde Medical center is a tertiary referral hospital with more than 70 years of experience supplying healthcare services. Dalinde Hospital has cutting edge technology in all of its areas, in order to bring both physicians and patients the best tools for giving a precise diagnostic and timely treatments.

Dalinde is located at Roma district in Cuauhtémoc borough. The medical center has 4 towers that offer:

· 16 specializations, in areas like fertility, eye, and neurosciences.

· 13 medical units, such as medical imaging, radiotherapy, and ICU.

· 10 surgical specializations, like hemodynamics, plastic surgery, gynecology, and general surgery.

· 6 clinical services.

· 7 hospital care services.

**The Data Science Challenge**

Nowadays, Dalinde Hospital has a suboptimal inventory and pharmaceutical supply procedure where they want to develop a model that predicts when certain medicines and medical supplies will ran out, in order to have their inventory at optimal conditions. Also, we need to analyze if there is clear need to connect between accounting, and storage processes that would allow to read almost in real time current inventory levels.

**The Data Sets**

To solve this problem, we will have access to Dalinde’s databases that have information that we’ll lead to analyze the case properly. Next Tuesday we will have meeting the logistics, IT, and administrative directors to get the datasets. We are assuming that Dalinde has this information:

- Costs purchase registers. According with the information of their Accounting System.

- Inventory. Registered in Dalinde’s System or try to consolidate with registers in papers.

- Number of patients.

- Pharmaceutical consumption.

- Diseases.

- Seasonal behavior.

- Drug usage dataset by order patterns, reorder point, and out-of-storage point.

- Drugs received in storage for tracking. Bar code scan in and outs. Drug ID, date received, date ordered.

- Establish ROI Metrics and efficiencies for users.