# Healthcare Industry Analysis Project: Team Roles & Responsibilities

## I. Project Summary

This document outlines the roles, responsibilities, and key deliverables for each team member participating in the Healthcare Industry Analysis Project. The project focuses on transforming raw healthcare data into structured reports and interactive dashboards covering **Financial, Operational, Demographic, and Clinical performance** for various key stakeholders.

## II. Detailed Roles and Responsibilities

| Team Member | Primary Focus Area | Key Deliverables |
|---|---|---|
| **Mustafa Ahmed** | Financial Performance & Data Architecture | Financial Performance Dashboard, Provider's Report, Database & Data Models, Final Presentation Slides |
| **Rahma Hani** | Operational Performance & Data Quality | Operational Performance Dashboard, Patient's Report, Cleaned Dataset, Final Presentation Slides |
| **Rawda Atef** | Demographic Analysis & Producers Reporting | Demographic Analysis Dashboard, Producer's Report |
| **Yassin Waleed** | Clinical Analysis & Regulatory Reporting | Clinical Analysis Dashboard, Regulator's Report |

## III. Individual Responsibility Breakdown

### Mustafa ahmed: Financial Performance & Data Architecture

Mustafa is responsible for the foundational data infrastructure and the comprehensive analysis of the project's financial aspects.

#### Data Architecture

**Detailed Responsibilities:** Designing the database schema, creating data models, and managing data insertion processes to ensure a robust and efficient data environment.

## Measure Creation

**Detailed Responsibilities:** Developing all **Financial Measures** and **Comprehensive Measures** (e.g., Total Revenue, Average Revenue Per Patient, TR vs Last Year, Avg LOS vs Last Quarter, etc.) as detailed in the Financial Performance data structure.

## Dashboarding

**Detailed Responsibilities:** Designing, implementing, and validating the **Financial Performance Dashboard**.

**File:** Financial.pbix

## Reporting & Presentation

**Detailed Responsibilities:** Compiling the **Provider's in healthcare Report** and contributing slides/content for the final project presentation.

**Key Deliverables:**

- Cleaning script
- dim_doctor.ibd
- dim_hospital.ibd
- dim_InsuranceProvider.ibd
- dim_patient.ibd
- staging_heathcare.ibd
- Financial.pbix
- Final_presentation
- Providers In healthcare.pdf

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# Rahma Hani: Operational Performance & Data Quality

Rahma's primary focus is data integrity and the analysis of day-to-day operational efficiency.

## Data Cleaning

**Detailed Responsibilities:** Conducting thorough **Data Cleaning** procedures to ensure data accuracy, consistency, and usability across all project reports.

## Measure Creation

**Detailed Responsibilities:** Developing all **Operational Measures** (e.g., Average Length of Stay, Patients per Doctor, Elective Rate, Emergency Count, etc.) as detailed in the Operational Performance data structure.

## Dashboarding

**Detailed Responsibilities:** Designing, implementing, and validating the **Operational Performance Dashboard**.

**File:** Rahma_heathcare.pbix

## Reporting & Presentation

**Detailed Responsibilities:** Compiling the **Patient's in healthcare Report** and contributing slides/content for the final project presentation.

**Key Deliverables:**

- **Patient's in healthcare Report**
- Rahma_healthcare.pbix
- Final_presentation

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# Rawda Atef: Demographic Analysis & Producers Reporting

Rawda is responsible for analyzing patient demographics and compiling insights relevant to industry producers.

## Measure Creation

**Detailed Responsibilities:** Developing all **Demographic Measures** (e.g., MalePatientsCount, FemalePatientCount, PatientsCountByDoctor, PatientTotal, etc.) as detailed in the Demographic Analysis data structure.

## Dashboarding

**Detailed Responsibilities:** Designing, implementing, and validating the **Demographic Analysis Dashboard**.

**File:** Rawda_heathcare.pbix

## Reporting

**Detailed Responsibilities:** Compiling the **Producer's in healthcare Report**, focusing on population trends and characteristics that impact healthcare supply and demand.

**Key Deliverables:**

- **Producers in healthcare Report**
- rawda_healthcare.pbix

# ☐ Yassin: Clinical Analysis & Regulatory Reporting

Yassin is tasked with the analysis of clinical outcomes and the creation of reports for regulatory bodies.

## Dashboarding

**Detailed Responsibilities:** Designing, implementing, and validating the **Clinical Analysis Dashboard** (the final dashboard focused on clinical outcomes).

**File:** clinical.pbix

## Reporting

**Detailed Responsibilities:** Compiling the **Regulator's in healthcare Report**, which will focus on compliance, quality metrics, and clinical safety indicators.

**Key Deliverables:**

- **Regulators in healthcare Industry  Report**
- Clinical.pbix

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## IV. Project Deliverables Summary

### Dashboards (Power BI)

- Financial Performance Dashboard (Financial.pbix)
- Operational Performance Dashboard (Rahma_heathcare.pbix)
- Demographic Analysis Dashboard (Rawda_heathcare.pbix)
- Clinical Analysis Dashboard (clinical.pbix)

### Reports

- Provider's in Healthcare Report
- Patient's in Healthcare Report
- Producer's in Healthcare Report
- Regulator's in Healthcare Report

### Data Assets

- Cleaned Dataset
- Database Models and Schemas
- Data Architecture Documentation

## Presentations

- Final Project Presentation Slides (all team members contributing)

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# V. Collaboration Framework

All team members work collaboratively to ensure:

- **Data consistency** across all analyses
- **Comprehensive coverage** of financial, operational, demographic, and clinical dimensions
- **Professional presentation** of insights to stakeholders
- **Timely delivery** of dashboards, reports, and presentations

Each team member's work feeds into the final project deliverables, creating an integrated view of healthcare industry performance across multiple dimensions.