**HealthLink SDOH Analytics Project Report**

# Project Overview

Project Title: Leveraging Social Determinants of Health (SDOH) Analytics to Address Healthcare Disparities in The Gambia  
  
Organization: HealthLink Analytics  
Internship: AMDARI Work Experience – Data Analytics  
Focus: Social Impact and Healthcare  
  
This project aims to integrate Social Determinants of Health (SDOH) into a centralized analytics platform, enabling data-driven decision-making and informed intervention design. It incorporates data from diverse sources—demographic, geographic, health indicators, and social factors—to highlight healthcare disparities across different regions in The Gambia. Using Power BI and Power Automate, the dashboards provide stakeholders with timely, actionable insights.

# Objectives and Rationale

The project addresses four key issues:  
- Data fragmentation across clinical and social datasets  
- Manual data processing inefficiencies  
- Lack of real-time insights  
- Inability to geographically target interventions  
  
By utilizing SDOH data analytics, the project enhances resource allocation, facilitates real-time reporting, and informs targeted community interventions based on comprehensive socioeconomic and health factors.

# Technology Stack & Dataset Description

• Tools: Excel, Power BI, Power Query, Power Automate  
• Data Cleaning and Transformation: Performed using Excel Power Query  
• Visualization: Power BI dashboards with filters and parameterization  
• Automation: Power Automate for syncing data updates and triggering alerts  
  
Datasets include:  
- Demographics (age, gender, ethnicity)  
- Geographic data (region, urban/rural, transport access)  
- Health indicators (admission, chronic diseases, care visits)  
- Social factors (education level, housing stability, income, employment, health literacy)

# Key Insights from Dashboards

1. Employment & Education: 65.3% of the population is employed; however, primary education is most common (39.94%), with 10.56% having no formal education.

2. Income & Literacy: 43.12% have moderate income, but 40.68% have low health literacy, indicating a gap in education despite income levels.

3. Access & Housing: Poor transport access (34.04%) and temporary/overcrowded housing (~41%) suggest vulnerability in housing security.

4. Chronic Disease: Malaria is most prevalent (30.2%), followed by HIV/AIDS (25.3%) and Diabetes (24.58%).

5. Admission Rates: Highest in Basse (65.84%), often linked to urban settings with low health literacy.

6. Preventive Care: Regions with higher health literacy and transport access show better preventive care visits.

# Recommendations

• Implement community-based health education programs targeting areas with low literacy.  
• Increase investment in transport infrastructure in underserved regions.  
• Focus on early intervention strategies in regions with high chronic disease and admission rates.  
• Scale digital health solutions with real-time dashboards for ongoing monitoring and stakeholder communication.  
• Continue integrating SDOH analytics in policy planning to ensure equitable healthcare delivery.

# Dashboard Snapshots



