

Team Members Names:

1. Omar Emam
 2. Sohila Ayman
 3. Rana Emad
 4. Yasmeen Ahmed
 5. Mahmoud Ahmed
-

Project Goals:

1. **Improve Patient Outcomes:**
Use predictive models to identify patients at risk of complications, enabling early interventions and personalized treatment plans.
2. **Reduce Hospital Readmissions:**
Analyze patterns to predict which patients are likely to be readmitted and implement strategies to prevent unnecessary returns.
3. **Optimize Resource Allocation:**
Forecast demand for medical staff, equipment, and beds to enhance operational efficiency and reduce waste.
4. **Early Disease Detection:**
Leverage historical and real-time data to detect early signs of diseases such as diabetes, heart disease, or cancer.
5. **Enhance Decision-Making:**
Support clinicians and administrators with data-driven insights to improve clinical and managerial decision-making.
6. **Cost Reduction:**
Identify high-cost patients and high-risk procedures to develop cost-effective care strategies without compromising quality.
7. **Personalize Patient Care:**
Segment patients based on risk factors and tailor interventions to individual health profiles.
8. **Monitor Population Health Trends:**
Track and predict health trends across communities to inform public health initiatives and policy.