

Q: What was the most challenging part of the workflow? Why?

The most challenging part of the workflow was the data preprocessing and feature engineering stage. Medical data often contains missing values, inconsistent formats, and complex relationships that aren't immediately obvious. Additionally, simulating real-world healthcare logic (like "priority" or "readmission risk") required careful thought to avoid oversimplifying clinical realities.

Q: How would you improve your approach with more time/resources?

With more time and resources, I would:

Collaborate with healthcare professionals to define clinically meaningful features.

Integrate external medical datasets to enhance generalization and reduce bias.

Use automated tools like AutoML for hyperparameter tuning and Fairness auditing frameworks like AIF360 to continuously monitor performance and bias.

Deploy the model with a real-time dashboard to visualize predictions, explanations, and alerts for clinicians.

AI Workflow Diagram

Below is a sketch of a typical AI development workflow for this healthcare task:



