**Frontend Visualization**

The dashboard provides **interactive, actionable insights**:

1. **Risk Tier Distribution**
   * Shows the number of members in each risk tier using **bar charts or pie charts**.
2. **Population Trends**
   * Tracks changes in risk distribution over time (30/60/90 days) with **line charts**.
3. **Key Predictors of Risk**
   * Highlights features driving member risk using **feature importance charts or SHAP values**.
4. **Member-Level Trajectories**
   * Displays individual member risk trends over time, allowing care teams to monitor **progression or improvement**.
5. **Conceptual Interventions**
   * Demonstrates which interventions could be applied per risk tier.
   * Examples: outreach calls, wellness programs, preventive care suggestions.
6. **ROI Simulation**
   * Estimates potential cost savings and intervention impact for hospitals or payers.
   * Shows how targeted actions can reduce complications and hospitalizations.

**Single Dashboard with Tabs**

**Dashboard tab 1: Population-Level Overview**

**Purpose:** Give stakeholders a **bird’s-eye view** of the member population and overall risk trends.  
**Features:**

* **Risk Tier Distribution:** Bar or pie charts showing counts per tier.
* **Member Trajectories:** Aggregate trends over 30/60/90-day windows.
* **Feature Importance / Drivers:** Highlight top predictors influencing risk (using SHAP or feature importance).
* **Intervention ROI Simulation:** Show potential cost savings per tier or for the whole population.

**Benefit:** Helps hospitals or payers understand **overall risk patterns and intervention impact** without diving into individual members.

**Dashboard tab 2: Member-Level Details**

**Purpose:** Show **individual member risk, trajectory, and suggested interventions** for detailed analysis.  
**Features:**

* **Predicted Risk Scores:** 30/60/90-day predictions for the selected member.
* **Risk Trajectory Chart:** Line chart showing risk over time.
* **Suggested Interventions:** List of conceptual interventions tied to the member’s risk tier.
* Optional: **ROI estimate** for this specific member.

**Benefit:** Allows care managers or stakeholders to **drill down** into specific members to see actionable insights.

**Why This Works Well**

1. **Clarity and Organization:**
   * Tab 1: **Population Overview** → risk distribution, member trajectories, feature importance, and ROI simulation.
   * Tab 2: **Member Details** → predicted risk scores, individual trajectories, and suggested interventions.
2. **Prototype-Friendly:**
   * Keeps the interface simple and easy to navigate.
   * Avoids managing multiple dashboards while still clearly separating **population-level vs. member-level insights**.
3. **Scalable for Production:**
   * Later, you can add more tabs, filters, or drill-downs without redesigning the layout.
4. **User Experience:**
   * Stakeholders can quickly **switch between overview and individual insights**.
   * Easier to present predictive power and actionable insights in one place.