

# Distribution Shift Monitoring (Distribution Shift Monitoring)



## Monitoring Metrics

- Input distribution: Patient demographics, test value distributions
- Output distribution: Prediction probability distribution, diagnosis frequency
- Feature importance: Feature importance changes
- Prediction confidence: Confidence score distribution



## Alert Thresholds

- Yellow Alert: 10% performance degradation
- Orange Alert: 20% performance degradation or distribution shift
- Red Alert: 30%+ performance degradation, immediate action required
- Critical: Safety issue, model suspension



## Time Series Change Tracking

- Rolling Statistics: Moving average, standard deviation
- Trend Analysis: Trend analysis, seasonal decomposition
- Anomaly Detection: Anomaly detection

- Baseline Comparison: Comparison with baseline performance