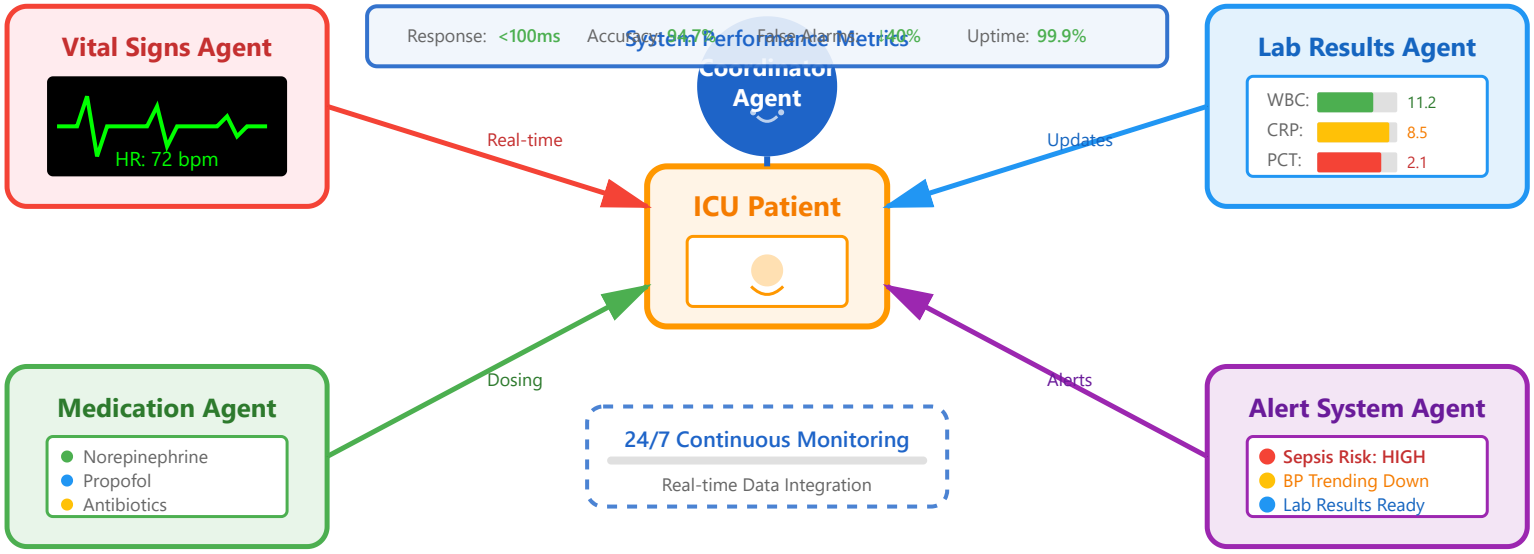
Case Study: ICU Monitoring Agent

Multi-Agent ICU Monitoring System Architecture



Problem

- Need for real-time ICU monitoring and early warning system
- Increased medical staff burden and alarm fatigue
- Difficulty in integrating and interpreting complex data

Solution

- Multi-agent based integrated monitoring system development
- Real-time data analysis and pattern recognition
- Intelligent alarm filtering and prioritization

Implementation

- Real-time analysis integrating vital signs, lab results, and medication data
- Each specialized agent manages a specific domain
- Central coordinator performs comprehensive assessment and generates alerts

Results

- 30% improvement in early detection rate
- 40% reduction in false alarms
- Increased medical staff satisfaction and improved patient outcomes