



Patient Motion Monitoring System

- A patient-activated IoT home rehabilitation monitoring system that safely tracks recovery without intrusive surveillance, using a **leg-worn IMU** and **room radar** to measure activity and detect safety risks.
- **Patient** : the system operates on patient-activated sessions to measure steps, stair climbing, and basic movement states
- **Caregiver** : Simultaneously monitoring for falls and prolonged immobility, when a risk is detected it alerts a caregiver, and the patient can confirm they are okay to cancel the alert.
- **Doctor** : uniquely providing doctors with both a real-time view of the current session and detailed historical summaries that translate raw sensor data into actionable clinical metrics.

Wiring diagram

