

CHIMP: An All-in-One Inpatient Monitoring System with ECG Chest Patch

ASTRI, the Hospital Authority, and Tin Shui Wai Hospital have co-developed CHIMP, an AI-powered inpatient monitoring system. Equipped with a lightweight reusable ECG chest patch, CHIMP offers continuous tracking of vital signs, cardiac events, arrhythmias, falls, and unauthorised patient departures. Real time alerts enable staff to respond swiftly, ensuring enhanced patient safety and better care outcomes.

Industry Challenges

- Unexpected patient deterioration, falls, and abscondments remain key challenges for inpatient caring
- Traditional monitoring systems are often bulky and lack capabilities for real-time health tracking, geofencing, and anomaly detection

Major Benefits

- Significantly enhances in-patient monitoring
- Strengthens patients' sense of safety
- Reduces pressure on frontline clinical staff
- Provides actionable data analysis that could potentially improve patient outcomes

Application Areas

- **Hospital and Elderly Centre:** Remote patient monitoring with real-time abnormality detection
- **Home Care:** Post-screening health monitoring for further clinical analysis

Collaborator(s)

Hospital

Award(s)

Hong Kong ICT Awards, Silver-Hair Tech Competition



CHIMP features a reusable ECG chest patch designed to collect vital signs, motion and location data for real-time remote inpatient monitoring and abnormality detection

