healthdeck

365mesh

Al-assisted operations for safer, smarter care.



Gain real-time visibility into people in care, understand wait times better, optimise workflow and increase safety.

HealthDeck is an all-in-one Internet of Things (IoT) and AI solution developed for hospitals, clinics and aged care facilities. Providing real-time visibility into people in care activity, critical assets, and facility operations, HealthDeck helps to improve safety, optimise workflows, and deliver better people in care and facility outcomes. HealthDeck uses AI-assisted analytics within the 365mesh SaaS platform to improve operational awareness, safety and efficiency always under clinician supervision.

HealthDeck provides clinicians and operations teams with a single, secure dashboard for people in care tracking, cold storage, gas bottles, power systems, environment monitoring, and security.

Key benefits

- → Improve People in Care Safety:
 Al analytics provide real-time
 awareness of people in care
 mobility, supporting faster responses and improved coordination while maintaining clinician
 oversight.
- → Enhance Efficiency: Balance staff allocation using real-time interaction data.
- → Ensure Compliance: Automated reporting for audits and safety standards.
- → Smarter Facilities Management: Monitor power, gases, and critical assets.
- Scalable & Secure: From a single ward to multi-site hospital networks.

Advanced AI & IoT solution that significantly enhances people in care safety and security.

- → Gain predictive insights that improve with clinician feedback.
- → Future proofed solution that scales to wards and sites without redesign.
- → Trusted expertise with proven deployments across critical healthcare and aged care environments.
- → Unified Dashboards displaying people in care, asset and facilities in one secure view. User-friendly dashboard accessible remotely via a web browser.
- → Configure alerts and notifications and reports for each HealthDeck feature.





People in Care Tracking

As an innovative, customisable, and cost-effective IoT platform, HealthDeck helps health and aged care facilities improve the quality of care for people in care by combining location context with physical activity metrics. Our people in care tracking allows clinicians to understand where and how people in care are moving, resting, or at risk, while also enabling high-value clinical research through continuous, precise tracking of people in care movement, posture, and location.

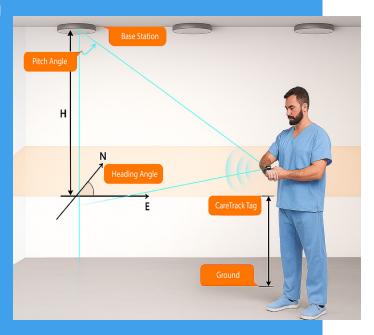


CareTrack, our lightweight wearable is designed to attach to standard people in care wristbands. It incorporates advanced AI and IoT technology for centimetre-level accuracy, an Inertial Measurement Unit for motion and orientation and advanced functions, such as gait speed measurement, step counting, posture detection, and fall detection with automated alerts.

With data available instantly on our dashboards, nurses and clinicians gain a holistic view of people in care mobility patterns and can make timely, informed decisions about care in real time.

Our platform collects real-time data through ceiling-mounted base stations and Care-Track tags, calculating angles and locations to build a clear, accurate picture of people in care

- Mobility Tracking: Wearables feed anonymised mobility and posture data to 365mesh dashboards; AI summarises trends, like time spent active or inactive to support staff planning.
- Posture & Fall Detection: Edge algorithms flag posture changes or inactivity patterns for staff review; all insights remain informational and non-diagnostic.
- Staff Interaction Analysis: Descriptive analytics display interaction patterns; prescriptive Al suggests workload balance options for shift planning.
- → People in Care Proximity Monitoring: Identify when people in care are alone or near others for safety and mental health support.
- → Wandering & Zone Alerts: Alerts when a person in care leaves designated safe areas.





HealthDeck provides real-time information and triggers alert notifications enhancing the quality of care for people in care and improving response times.

To address the requirement for monitoring people in care falls across all private areas, we propose the use of thermal imaging technology utilising thermal sensor units. Unlike conventional CCTV cameras, thermal sensors detect body heat and movement patterns rather than capturing identifiable visual details. This allows for accurate detection of falls and abnormal postures while maintaining people in care's privacy and dignity.

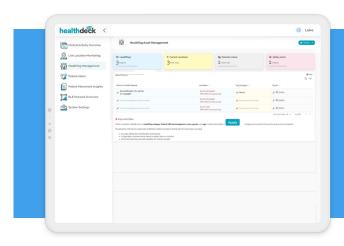


365mesh AI will provide the analytics layer, enabling the system to automatically identify fall-like events and trigger real-time alerts for staff response. This approach ensures rapid incident detection while removing the need to continuously monitor high-resolution video feeds.

The combined solution offers a reliable, privacy-conscious alternative to traditional video surveillance, and can be easily scaled across all common areas while also supporting future use cases such as occupancy monitoring and safety compliance.

Discreet Design for People in Care Comfort

The compact thermal sensor unit can be mounted unobtrusively behind surfaces or recessed into walls, ensuring people in care do not feel constantly monitored. Its small size and discreet installation make it suitable for common areas in medical facilities, delivering safety monitoring without creating an intrusive or "surveillance- heavy" environment.



Al-assisted alerts prioritise based on context scoring, ensuring the most critical mobility or safety events reach staff first.





Critial messaging integration with exisiting communication systems

VitalCare Integration (Nurse Call Solution)

Our fall detection and other general alerts captured from thermal imaging sensors and CCTV cameras can be integrated with VitalCare via APIs, with alerts capable of being set up either by:

- Local breakout All alerts remain on the local LAN, sent from the 365mesh edge Al module to the VitalCare server on premises.
- Cloud breakout Alerts are sent from the 365mesh Cloud platform to the VitalCare Cloud platform.

Both setups ensure secure, reliable, and real-time transmission of alerts, while maintaining local data control and compliance with privacy requirements. All sensors, cameras, and API connections operate seamlessly with the VitalCare system, supporting timely and accurate alerting across the facility.

Integration and encryption

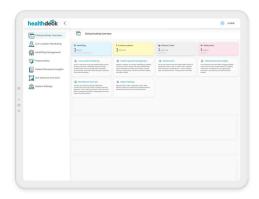
People in Care Tracker, our cameras, thermal sensors and other solutions integrate seamlessly with the 365mesh platform, providing AI-assisted operational visibility across healthcare environments always supportive, never diagnostic.

All data transmission is encrypted end-to-end. Role-based access and anonymisation ensure privacy compliance under HIPAA and TGA.

HealthDeck scales from a single ward to multi-site networks with encrypted cloud connectivity and federated data controls.



HealthDeck is capable of streamlining operations and maintenance by monitoring:



- → Improve people in care response times: Staff are able to receive realtime information about their persons in health.
- → This means if a person in care's vital signs start to deteriorate staff are alerted immediately, allowing for immediate treatment, improving care and recovery.
- → Manage inventory and assets: Our Al monitors equipment health and predicts maintenance windows to prevent downtime.
- → Commercial-grade fridge monitoring: Continuously track temperatures and detect variations,through real-time alerts and ensure compliance with regulations for storing critical items like medications, vaccines, and blood products.





- → Temperature monitoring in key areas:
 Ensure certain areas of the building are kept at optimal temperatures to combat the spread of infection and diseases, slow bacterial and viral growth, and ensure medicines remain safe and effective.
- → Descriptive readings and predictive models maintain optimal environmental conditions supporting infection control.
- → **Detect device malfunctioning:** Detect if key medical devices are about to malfunction, and receive alerts so that preventative measures can be put in place before device failure.





HealthDeck utilises advanced Al and purpose-built sensors to help you make informed decisions in real time.



- → Gas Bottle Monitoring: Track critical medical gas supplies to prevent shortages.
- → 24/7 Real-time monitoring: Instant visibility of gas levels and status across sites.
- → Al-enhanced insights: Predict consumption, optimise refills, and prevent stockouts. Predictive analytics estimate consumption rates, prompting timely refills or service checks
- → Safety & Compliance: Early detection of anomalies, support safety protocols and audits.
- → Monitor and receive a report of your facilities total energy consumption (electricity and water).
- → Receive alerts for when certain power consumption levels are reached.
- → Measure air quality and receive alerts if harmful chemicals are detected in the air.
- → Detect noise and humidity levels accurately to ensure staff and people in care safety.





POWERED BY 365mesh



HealthDeck can provide real-time information relating to security, enhancing the safety of staff, people in care and visitors.

Our enterprise-grade security with encryption, allows for role-based access, and audit trails, and integrates with hospital systems (e.g. people in care management, facilities/BMS) and research databases via APIs. Private cloud deployment options mean data minimisation and anonymisation where appropriate.

Utilise tags and facial recognition to implement facility safety monitoring and automate time attendance, by monitoring and reporting when staff arrive and leave.



- → Alert staff immediately if criminal activity or staff misconduct occurs, and if any unusual activity occurs or if people in care are in distress.
- → Detect if unauthorised personnel enter or restricted facilities, like pharmaceutical and medicine storage areas. Al pattern recognition highlights irregular access without biometric decisioning. All personal data encrypted.
- → Manage visitor access more efficiently through proactive monitoring.
- → Provide continuous oversight of critial areas, like ICU.

- → Identify people of interest and track their whereabouts throughout the hospital to keep people in care safe and reduce the risk of criminal behaviour (like stealing equipment or supplies).
- Monitor outbuildings and transformer or distribution boards / cabinets for intrusion detection and theft.





HealthDeck enhances safety and security through perimeter security monitoring.

CCTV cameras can be strategically installed to enhance site security and monitor the movement of staff, residents, and visitors. Through a combination of high-performance Bullet and Dome Cameras, security staff receive clear, reliable imagery in all lighting and environmental conditions for 24/7 monitoring. Bullet Cameras are ideal for long-range and perimeter surveillance, while Dome Cameras offer a robust, discreet solution for general site coverage – ensuring optimal coverage while supporting a safer, more secure, and seamlessly connected environment across the environment.

Bullet Camera



The 365mesh OB-5MP-VF Bullet Camera delivers exceptional 5 MP resolution surveillance, ensuring clear and detailed imagery in various lighting conditions. It provides superior performance day and night. Its robust design guarantees durability against harsh weather and physical impacts. Integrated deep learning analytics enable advanced detection and classification of humans and vehicles, enhancing security measures. With built-in cybersecurity features and edge storage capabilities, the OB-5MP-VF is a reliable choice for comprehensive surveillance needs.

Drone Camera

The 365mesh **OD-5MP-VF Dome Camera** is a 5 MP Alpowered outdoor dome camera designed for versatile surveillance needs. It offers a horizontal field of view ranging from 104° to 34°, and a vertical field of view between 76° and 26°, allowing for flexible coverage of various environments. Its advanced features allow for enhanced low-light performance, clear images in challenging lighting conditions, and effective night-time surveillance. The camera's robust design is IP66-rated for weather resistance and IK10-rated for vandal resistance, ensuring reliable operation in demanding outdoor settings.







Use Cases

All our features are presented centrally on a user-friendly dashboard and can be accessed remotely via a web browser. HealthDeck gives you the possibility to configure alerts and notifications, as well as reports for each feature.



Cold Room and Freezers

Monitors temperatures, humidity in regards to the food stored in freezers, refrigerators and cold rooms.



Waste Management

Capture data in remote locations, improve inventory control, like recognising when bins need to be emptied, and validate the success of recycling programs.



Liquid Spillage

Monitors and alerts liquid spillage autonomously, maintaining safety and OHS standards.



Temperature Monitoring

Measures temperature of indoor/outdoor, fridges and similar, with real-time alerting and reporting.



Energy Consumption

Understand how your facilities and appliances drive energy consumption at your hospital or clinic.



Environment Monitoring

Measures and alerts on air quality, noise levels, light quality, OHS parameters.



Security

Monitors surveillances and detects people in unauthorised areas.



Compliance Reporting

Generates and exports reports required for industry compliance purposes and audits.



Smart Parking Bays

Uses IoT sensors to track real-time bay occupancy and generate analytics for parking efficiency.



Noise Monitoring

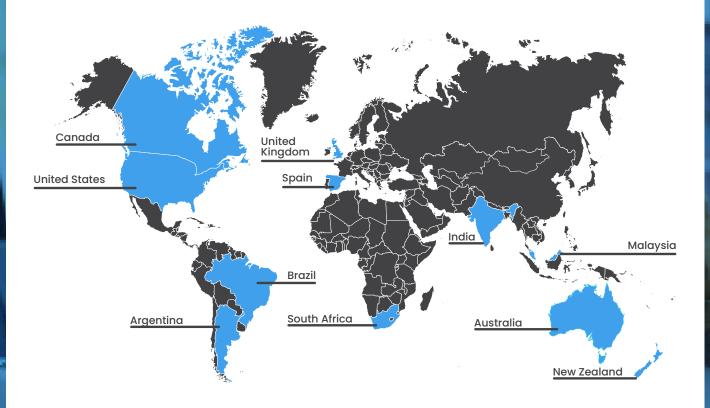
Measures and alerts on noise levels.



Get real-time visibility, insights and enhance the quality of care for people in care and improve facilities with 365mesh IoT portal.



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or alternatively, we will introduce you to a relevant skilled 365mesh integration partner in your region.

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