PARTNER SOLUTION OVERVIEW

ARUBA & MYSHPHERA

Making the Rounds: Real-Time Location Based Clinical Workflow Optimization

Optimizing workflows in healthcare environments can improve clinical outcomes, boost efficiency, and maximize revenue without adding additional headcount. Simply analyzing the movement of patients, staff, and physicians can reveal ways to optimize scheduling, staff assignments, travel paths, and treatments without check-in delays, queues, and the loss of billable hours.

Real Time Location Services (RTLS) plays an essential role in this process by monitoring the position of people and assets throughout the day. The magic happens when these location data are shared with workflow optimization software. For example, correlating patient status and location with surgeons’ schedules and locations can help minimize idle time between surgeries, increase throughput of operating suites, and maximize the number of billable procedures.

Aruba and MySphera have partnered to tackle the challenge of clinical workflow optimization in hospitals, assisted living, and memory care units. The joint solution collects real-time location data from MySphera’s wearable Bluetooth tags via Aruba 802.11ax (Wi-Fi 6) and 802.11ac access point, and securely forwarding those data to MySphera workflow optimization software.

HOW IT WORKS

Aruba access points are ideally situated to collect real-time location data, with line-of-sight to MySphera wearable tags. The tags are alerted by proximity to staff smartphones and tablets, and trigger requests for patient-related tasks and workflows. Once entered, the information is viewable on MySphera’s real-time dashboards and include:

• Occupation metrics
• Bed management and utilization rates
• Patient status
• Wait times

Figure 1: MySphera wearable Bluetooth tag (left) and real-time dashboard (right)

Why Aruba & MySphera?

• Leverages existing Aruba infrastructure without new capital investments
• Eliminates the need for location gateways resulting in lower total cost of ownership
• Simplifies deployment and management of workflow systems
• Interfaces with existing hospital infrastructure and software using an extensible application platform
• Certified joint interoperability

Staff are notified of the closest patient and next procedural step, and in turn log when the patient has moved to the next clinical phase of care. Out-of-order or incorrect steps prompt alerts, helping to avoid potential errors. Staff can enter updates in real-time, such as “in recovery,” “in preparation,” “equipment in use,” and “equipment needs maintenance.” This creates a fluid and orchestrated process to deliver and track care, improving patient outcomes and reducing the chances of error.

The result is improved surgical outcomes, higher equipment and room utilization rates, faster fact-based decision-making, improved patient safety, and better time management.
CERTIFIED INTEROPERABILITY

We've taken the guesswork out of deploying joint solutions by certifying the interoperability of MySphera wearable Bluetooth tags and workflow optimization software. Set-up is also a breeze. Just select "MySphera" from a drop-down menu on the access point configuration page, select the IP address of the software, and you’re done. This allows joint deployments to be setup faster, and simplifies maintenance of the completed solution.

SUMMARY

Leveraging Aruba wireless infrastructure as an IoT platform to collect MySphera tag data lowers deployment costs, improves the utilization of staff and equipment, and enhances patient outcomes. Together, Aruba and MySphera enable healthcare organizations of any size optimize clinical workflows. Contact your local Aruba sales representative for more information or to schedule a joint demonstration.

To learn more about Aruba healthcare solution, please visit https://www.arubanetworks.com/solutions/healthcare/.

To learn more about MySphera, please visit: https://www.mysphera.com/.

Typical uses cases include:

- Surgical Process Automation: generates events, states, and tasks to coordinate communication among patients, staff, and physicians.
- Asset Utilization Optimization: identifies the real-time location of high-cost portable equipment so it can be used without delay. Eliminating misplaced or lost equipment can lower the rate of needless and redundant equipment purchases by 20%.
- Readily accessible patient data: patient location, bed status, and room occupation are displayed on dashboards at key locations, giving caregivers status updates without manual checks.