

BEYOND NURSE CALL: SIX WAYS CONNECTED INTELLIGENCE DERIVED FROM REAL TIME LOCATION SYSTEMS DATA IS REVOLUTIONIZING TRADITIONAL CAREGIVER INTERACTIONS

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Nurse call management software has become increasingly sophisticated enabling modern nurse call systems, which were previously manual, to become fully automated through an array of advanced applications.

Among the most important backbone technologies supporting these systems is Real Time Location System (RTLS). Integrating RTLS offers numerous advantages and opportunities to improve efficiencies and patient satisfaction, collect key data and positively impact outcomes. This is especially true with ultrasound-based RTLS systems which provide the highest level of accuracy and reliability. RTLS-enabled nurse call systems have become the gold standard in state-of-the-art healthcare delivery today. The following are six ways connected intelligence derived from Real Time Location Systems data is revolutionizing traditional caregiver interactions:

1. Enhance Nurse Call Interactions

When a patient presses the nurse call button for assistance, the nurse's focus is on attending to the patient's needs vs. pressing the call cancel button which could be difficult to reach depending on the bed location and equipment around it. Additionally, manual nurse call cancellation challenges the ability to accurately report on patient visits and responses to nurse call requests as well as complaints such as "I pressed the button and nobody showed up" if a caregiver forgets to manually log the visit. With RTLS, nurse calls are cancelled automatically as soon as the nurse enters the room. This provides instant, verifiable reporting and eliminates the need for the nurse to perform sometimes heroic physical feats which may be required to find and press a hard-to-reach call button. Automated call cancellation has been shown to improve patient and staff satisfaction at numerous facilities who have integrated RTLS into their nurse call systems. Automated nurse call cancellation is a simple technological innovation that is reaping big rewards among hospitals who have made the move to automate nurse call interactions using RTLS.

2. Reduce miles walked and phone time

Herman Miller Healthcare commissioned a study which showed that nurses walk up to four miles during a typical shift.¹ A great deal of that effort is due to the constant search for people and equipment. With ultrasound-based RTLS, precise locations of both down to the chair level are at the nurse's fingertips via a workstation portal or even via a mobile app on a hand-held device. Nurses spend dramatically less time searching for people and things and more time delivering care.

3. Increase patient satisfaction

Since the advent of the Affordable Care Act and HCAHPS scoring, healthcare facilities must meet or exceed certain patient satisfaction scores to receive the highest level of fee reimbursements. New "fee for outcomes" models have encouraged innovations in patient communication tools used to provide feedback to caregivers. Nurse call technology has benefitted from these advances since it is a primary patient communication tool and can have a positive or negative influence on a patient's satisfaction level. Technology innovators have answered the need to provide immediate patient input by delivering the latest in RTLS technology. Patient response times are measured in real time providing invaluable data for patients, their families and staff. The best nursing departments are in a constant state of process improvement to ensure – and increase – patient satisfaction. Forward thinking healthcare institutions are coming to understand the importance of using advanced RTLS technology.

4. Instant communication of patient and equipment locations

RTLS effectively eliminates the frustration and wasted time when nursing staff cannot locate a piece of equipment or a patient. It also dramatically decreases the inefficiencies and wait time when patients are being transported for tests as well as when equipment is being moved or stored. Patients often are transported by clinical staff to various locations in a clinical setting every day. RTLS enables caregivers to pinpoint the location of a patient or equipment in real-time down to the chair level. The value of this information for nursing staff cannot be overstated. Numerous efficiencies can be achieved, and easily measured, when nurses are not forced to search for people or equipment.

5. Increase safety of staff and patients

Unfortunately, the incidence of health care workplace violence is on the rise. Most assaults on health care workers are by patients or visitors.² More than 70% of emergency nurses reported physical or verbal assaults by emergency patients or visitors.³ RTLS has enhanced staff safety across the board by enabling a duress button on the RTLS tag or badge worn by hospital staff and patients. When pressed, an alert is triggered and the precise location of the wearer is immediately visible to security staff to affect an urgent response. The benefits of incorporating a RTLS-enabled duress application in the nurse call environment are clear: increased sense of staff safety and security reduces turnover

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and increases staff satisfaction, patients have an increased sense of security enhancing overall satisfaction and, importantly, hospital reputation is protected and liability is reduced. The general morale in the facility is improved when staff – and patients – feel they are safe. This feature has been sought after and embraced by health-care institutions as they continue to develop workplace violence strategies and solutions.

6. Improve outcomes and efficiencies with faster, quieter patient interactions

Reducing doctor wait times on the phone, decreasing patient request response times by staff and improving communications between staff members, doctors and patients significantly improves patient throughput and satisfaction which positively impacts overall financial outcomes. With RTLS, it can all be done silently, unobtrusively, automatically and in the background. Reduction in nurse station phone alarms from doctors searching for staff or equipment and elimination of nurse call audible alarms via the RTLS-enabled nurse call technology contribute to the quiet-hospital trend that has shown improvement in patient outcomes and satisfaction.

Conclusion

RTLS is already demonstrating a dramatic impact in the clinical setting where patient satisfaction, staff efficiency, equipment tracking accuracy and safety for all constituents are imperatives. Allowing responding caregivers to immediately address the clinical needs of patients supports better patient and caregiver interactions and outcomes. The technology also supports compliance with statutory requirements and improves ease of logging and reporting. RTLS is enabling nurse call functionality to achieve new levels of efficiency and compliance leading to an ultimately superior level of patient care which directly impacts a health care facility's bottom line.

¹ "Measuring How Far Nurses Walk," HermanMiller Healthcare, 2017.

² "Workplace Safety and Health in the Health Care and Social Assistance Industry" by Jill A. Janocha and Ryan T. Smith, Bureau of Labor Statistics, 2010.

³ "Nothing Changes, Nobody Cares: Understanding the Experience of Emergency Nurses Physically or Verbally Assaulted While Providing Care," Lisa A. Wolf, PHD, RN, CEN, FAEN; Altair M. Delao, MPG; Cydne Perhats, MPH, 2014.