

RTLS: What to know for today's senior care communities

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The accommodations of modern senior care communities are designed to appeal to adults and seniors with a wide range of abilities and interests. To help ensure the best possible care is provided to this diverse population, skilled nursing facilities and their staff assist residents in rehabilitation after knee or hip replacements, strokes, traumatic injuries, neurological conditions, or other health setbacks. In addition, facilities are increasingly dedicated to providing family members relevant information about their loved ones.

What sets forward-looking institutions apart is their emphasis on continuous improvement, including a willingness to adopt new technologies to inform and drive that process. To retain current residents, attract new ones, and drive return on investment, long-term care industries must constantly explore innovative ways to achieve the most effective and efficient care models possible.

To this end, one of the exciting and innovative technologies that many facilities have recently adopted is a Real-Time Location System (RTLS).

Meeting real needs in real time

In the past, RTLS was associated primarily with locating equipment and managing assets. With the advent of increasingly reliable and accurate RTLS performance, application of this technology has expanded to include even more substantial care-related uses such as patient/resident monitoring, safety and security measures, staff workflow applications, and time-stamped visibility and understanding of specific milestones in the care process.

RTLS solutions provide data-based insights that are necessary to align staff levels to cyclical needs, manage resources more efficiently, and attain the maximum patient/resident satisfaction through fast response and attention to individual needs. The most advanced of these RTLS solutions are built on ultrasound indoor positioning technology that delivers precise and immediate location and event-based information for any tagged object or badged individual.

Wireless tag and receiver technology provides indoor positioning accuracy (to specific chairs, beds, rooms, or area levels) by seamlessly transmitting and communicating location data to front end visualization and reporting software platforms.

The data generated by these systems allows healthcare facilities to make informed decisions regarding equipment location and staffing levels throughout assisted living facilities that are best suited to deliver a higher level and quality of care. It also yields important insights into many other factors which have tremendous influence on patient and resident health, safety, and satisfaction.

Better aligning staff levels

Before institutions can effectively implement any staffing changes, they need to understand work flow and patterns throughout their facilities.

RTLS can deliver the necessary data to help institutions identify staff patterns by time-stamping personnel related events and locations to triage the durations of their various tasks,

among other things. In these ways, such technology provides real-time answers to vital questions including:

- What daily events cause peaks and valleys in staffing needs?
- Which staffing levels are required for routine activities such as bathing and meals?
- How is patient/resident satisfaction impacted by staff capacity?
- How are staff levels balanced based on when staff is most often with residents (time of day, day of week, etc.)?
- What are staff response times and the frequency of visits?

With the data provided by integrated RTLS installations, staff and management of assisted living and long-term care facilities can gain valuable insights about workflow, including where additional staffing and equipment is required, and when staff response times are lagging so that they can put actions in place that will benefit both staff and patients/residents.

These insights not only allow them to optimize staffing, increase institutional efficiency and return on investment, but above all help increase staff responsiveness, resident care, and patient safety.

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Ensuring resident health and safety

Indoor ultrasound positioning technologies provide immediate and measurable improvements to patient care in many ways. Many benefits can be derived from the analysis of data obtained from such systems, these can include giving staff the ability to call for assistance without leaving a resident's side, allowing caregivers to quickly view performance metrics, and limiting the impact of outbreaks of flu or other illnesses by monitoring interactions between residents and caregivers.

RTLS can also provide discrete and flexible solutions to assist with situations that are potentially harmful to patients/residents such as patient wandering and access to unauthorized or sensitive areas. Real-time indoor positioning systems help locate individuals who have wandered or entered unauthorized areas by immediately and accurately pinpointing their exact location. This provides institutions the confidence they need to discretely keep patients safe without compromising freedom of movement.

RTLS can contribute to the prevention of any abuse and neglect conditions. Reliable room-level and sub-room level location technology accurately detects residents, staff, visitors, vendors and equipment within the rooms of the facility, which can provide necessary enabling information for security and safety.

Maintaining stakeholder relationships

Naturally, family members take a keen interest in the level and quality of care provided. Recognizing and honoring that, assisted living and long-term care facilities must focus on improving ways to understand the level of care each resident receives and to share that information with family members.

Since RTLS automatically provides specific, time-stamped data associated with unique resident locations and/or tags, the information is always readily available and can be clearly conveyed through reports including visual representations. This enables care providers to produce detailed logs of caregiver attendance and other care metrics to share with family members as well as regulatory agencies.

Satisfaction and consumer ratings

The increased visibility of this information not only delivers peace of mind to family members, but also gives directors and staff the confidence to know that through their hard work and attentiveness they are delivering the best care they can.

Perhaps most important in terms of resident (and family) satisfaction is the potential for RTLS to help improve response times when a resident calls for staff, given that the efficiency of RTLS systems can "create" more time for staff by driving operational efficiencies. So much of a facility's consumer ratings hinge on this single factor and now assisted living and long term care have a powerful technology for measureable improvement. The reputation of a facility often rests on this, and attracting and retaining residents is key to a financially viable business.

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