Ascom RSSI and low frequency location technologies – smart, cost-efficient location of residents in need of assistance

Resident mobility is encouraged by assisted-living facilities and resident care homes, as it can improve general health and wellness and enable social interactions that enhance day-to-day life. This mobility, however, can add to the workload of staff, who may have to search for a resident when a call for assistance comes from a location not obvious to the caregivers or the resident moves away from the original location of the alert.

To help senior care organizations respond to this challenge, teleCARE IP provides two types of resident location technologies that can be deployed for different situations and use cases. Combined, they keep track of your residents – indoors and out, at all times – for quick response to those needing assistance and greater staff efficiency.

**Solution: teleCARE IP RSSI (Received Signal Strength Indication) and low frequency location technologies**

- Enhance resident safety and staff efficiency with low-cost, simple location of residents
- Improve resident quality of life and independence with an outdoor location option
- Enable faster response to resident calls with location information included in the wireless alert message
- Bring reassurance to residents and their families
- Invest in your facility’s future with low-cost, high-value technology that helps promote resident safety, security and independence
RSSI: How it works
When a resident places a call from their personal transceiver, the location is approximated based on the radio signal strength received by multiple system base stations. This general location information, delivered with the alert, will greatly reduce staff time spent searching for the calling resident.

This allows residents to maintain valuable mobility to improve their quality of life. Without this capability, residents face either confinement restrictions or risk being away from help for longer periods of time.

LF beacon technology: How it works
Low frequency (LF) beacons can be placed throughout the facility in hallways or in a resident’s room to provide room-level location information. Beacons can be added to individual rooms based on resident or facility need.

When a resident passes any beacon, that information is stored in their personal transceiver. When the resident presses the button on their transceiver, the location information is included with the call for assistance to help improve response time by staff.

Which technology is right for you?
For outdoor, general location information, RSSI is the perfect solution. It also works well indoors for small buildings and is an effective low-cost choice for single-floor buildings. For multi-floor facilities, RSSI can be combined with LF beacon technology to provide the highest level of location accuracy.

Key features:
• Scalability from cost-efficient general location information to room level detail
• Easy installation, with minimal software configuration required and no calibration needed
• An installed base that can be upgraded by a simple license
• Solutions available for indoor and outdoor use

Key benefits:
• Enhanced resident safety and security, while providing a sense of comfort, freedom and independence through greater mobility
• Improved response times to mobile resident alerts by providing location information to staff members
• Better use of caregivers’ time

Example:

<table>
<thead>
<tr>
<th>ROI on location of residents</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total number of residents</td>
<td>100</td>
</tr>
<tr>
<td>Number of residents that are subject to elopement</td>
<td>20</td>
</tr>
<tr>
<td>Number of times a caregivers has to look per day</td>
<td>4</td>
</tr>
<tr>
<td>Average time that takes to find the resident (minutes)</td>
<td>5</td>
</tr>
<tr>
<td>Time looking for residents (hours per day)</td>
<td>6.7</td>
</tr>
<tr>
<td>Average labor cost (per hour)</td>
<td>$25.00</td>
</tr>
<tr>
<td>Average cost per day (16 hours only)</td>
<td>$167.00</td>
</tr>
<tr>
<td>Average cost per year</td>
<td>$60,833.00</td>
</tr>
</tbody>
</table>

Cost of complete teleCARE IP solution | $55,000.00
Return on investment (year) | 0.9

Caregiver hourly rate (last visited 2016-06-2, 14:19): http://www.payscale.com/research/US/Job=Caregiver/Hourly_Rate

*This Return on Investment chart is meant to serve as an example. Variations will exist based on facility size and requirements. Please contact your Ascom sales representative to receive a customized look at what the ROI could be for your organization.