RTLS and the Affordable Care Act: An ROI beyond equipment tracking

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The advantages of implementing Real-Time Location Systems (RTLS) in healthcare facilities have become increasingly apparent in recent years.

RTLS is best known for tracking equipment, and is increasingly recognized for optimizing patient flow, optimizing staff utilization and workflow, accelerating room turnover, decreasing emergency room wait times, expanding OR capacity and throughput and many other operational functions.

A growing number of sophisticated RTLS applications like these contribute significantly to improving the broadest issues of the health-care industry.

As measures adopted by the Centers for Medicare and Medicaid Services (CMS) as part of the Affordable Care Act effect the healthcare industry, it is clear that the increased efficiency delivered by RTLS solutions can also help to avoid penalties, improve quality ratings, and thereby maximize return on investment in the new pay-for-performance financial environment.

CMS payment reforms and their impact

New quality and safety incentive programs are changing the ways Medicare pays hospitals. Everyone understands that reimbursements are no longer only determined by the number of services alone, but also by metrics that include rewards and penalties based on quality of service. Such incentives are already in play. Over the last three years, many hospitals have earned rewards based on high quality ratings in the value-based payment system. At the same time, a number of facilities have been penalized on their CMS reimbursements, and higher penalty rates are expected to be imposed in the future. It is worth noting that those penalties are very public and have a harmful effect on an institution's reputation and market position.

Both the positive and negative repercussions of these value-based determinants will have a growing impact on the Medicare income of all hospitals. All aspects of provider management must come under scrutiny in efforts to meet these new standards and deliver services of higher quality and value.

Based on recent CMS payment rates, areas of particular concern are hospital-acquired condition scores, readmission rates, and patient satisfaction measures. RTLS solutions can play a powerful role in improving outcomes in all of these areas and more.

Avoiding Hospital-Acquired Condition (HAC) Penalties

Among the most stringent controls imposed by the Affordable Care Act is the levy of reimbursement penalties for incidences of HACs. Based on a 1 percent payment reduction, penalized facilities have lost as much as $364 million annually.

RTLS technologies can provide informative data to better characterize the potential causes of HAC so that actions and processes can be implemented to reduce the risk of HAC. This can include monitoring staff members and their movements, for instance at hand-washing stations, but also the movements of patients and equipment to determine the time and location they may be subject to possible exposures.

RTLS can also be used to manage patient placement to avoid unnecessary exposures to high-risk patients. Software programs can generate reports tracking chains of contacts after individuals or mobile medical equipment have been exposed, and determine where potential challenges and opportunities for process and behavioral improvements exist.

Avoiding readmission penalties

CMS metrics also target readmissions. The Affordable Care Act authorizes Medicare to reduce payments to acute care hospitals with excess readmissions.

In 2015, hospitals can be penalized for excessive 30-day readmissions up to 3% of revenue from base operating diagnostic-related group payments by the CMS. This was an increase in the readmission penalty from 0.35% in 2014.

In addition to providing critical data to help characterize and potentially reduce incidences of HACs that can lead to

higher readmission rates, RTLS solutions improve care efficiency comprehensively. Using these location tracking and event monitoring tools, doctors, nurses, and other staff are able to operate much more effectively because confusion about locations, patient flow, basic measurements such as temperatures, emergency conditions, is eliminated.

By following high definition maps generated by RTLS data, they are able to clearly visualize the state of caregiving in real time and quickly determine the best management strategies.
These advancements allow staff to concentrate on the most important matters: spending more time with patients, obtaining better patient responses, and improving clinical outcomes. Overall, improved clinical awareness through technology means that fewer errors will be made and readmission rates will drop as a result.

Increasing patient satisfaction measures

Naturally, these improvements lead to higher patient satisfaction which is at the core of the new standards. CMS incentive payments or penalties are now tied directly to patient experience surveys (HCAHPS). Medicare reimbursements can now either increase or drop 1.5% based in part on published patient satisfaction indexes. In fiscal year 2017, this will increase to 2%.

Medical facilities, including hospitals, EDs, and outpatient clinics, which have installed and implemented RTLS technology experience markedly increased patient satisfaction.

One of the key factors behind higher HCAHPS scores is reduced waiting time. Optimizing workflow ensures that staff are much better able to attend to patients smoothly, from admission to care to discharge. In addition, knowing where patients are both physically and in the process of their care means that staff are able to give much better HIPAA-compliant patient status information to waiting family and friends, another important factor in satisfaction surveys. This is especially important in hospital EDs where many community members first experience and form impressions of the institution, and are most likely to experience long wait times which can be especially distressing. Deployment of RTLS in hospital EDs can not only help reduce wait times in the ED, but can also help improve and accelerate admission processes, when needed, to find available patient rooms and beds

Well organized and timely patient care process, i.e. the right caregivers, the right equipment with the right patient, on-time and at the right location, as aided by RTLS,

can provide a level of confidence and help lessen anxiety for patients, family, and friends, potentially improving their satisfaction with their health care services.

Closing

High-definition RTLS- enabled solutions provide the basis for real time operational visibility of the patient care processes and enable efficient capacity alignments which drive better productivity and patient satisfaction.

Utilizing the newest RTLS technology serves to enhance patient experience, reduce readmission rates, potentially reduce hospital acquired infections (HAI), maximize workflow, and improve clinical outcomes. All of these are self-evident benefits that improve overall patient care.

But they are also important factors in the new era of performance-linked reimbursement. The immediate advantages of heightened accuracy in positioning staff and other assets lead to fundamental improvements in healthcare quality, better compliance with the CMS, and higher returns on investment.