

Go Beyond RFID to Get the Most from Assets

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In hospital and healthcare IT circles, RFID technology has become synonymous with asset tracking and asset utilization. Given the large amount of interest expressed, and the potential savings, vendors have swarmed into this market space at a rapid rate. In their zeal and need to differentiate themselves, however, they have focused on technology – or whose technology can locate an asset to nearest centimeter – and not on process. While this is an impressive technical feat, it is not important in helping to improve asset utilization.

In fact, a close examination of the root causes of low asset utilization will show that RFID technology in general can provide only a partial solution for increasing asset utilization. Any effort to boost use must recognize the importance of process improvement. Assets are physical and cannot be digitized and sent over an Ethernet network.

Therefore, true asset utilization requires a solution for physically recovering and delivering assets, supported by an information component for locating them.

WHAT CAUSES LOW ASSET UTILIZATION?

The popular answer trumpeted by RFID vendors is that low asset utilization is caused by not knowing where the assets are. The truth is we do know where hospital assets are. Expensive equipment is underutilized, cluttering hospital hallways, violating regulations on egress and preventive maintenance and costing hospitals more in capital purchases and emergency rentals than is necessary.



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Nurses are accused of exacerbating the problem by hoarding, but don't blame them. They've grown impatient waiting for equipment to be delivered when they need it and have lost confidence in the materials staff ability to do it efficiently. Instead, acting in the best interest of their patients, nurses have created their own system to ensure they have the assets they need when they need them by maintaining their own "local" inventory.

Nurses fear if they return assets, they will never get them back. (Can you blame them? Do you check your luggage when taking a flight?) Considering all the assets "hiding" in plain sight in hospital hallways, their concern is valid. There is a serious lack of transportation resources for delivery and pickup. Otherwise, these precious assets would be collected for the sake of increasing asset utilization, not to mention compliance with JCAHO regulations on egress and preventive maintenance.

The ability to effectively recover and deliver assets is the real reason for assets under-utilization. The assets are not lost or hidden; they have been intentionally removed from the general inventory to compensate for a weakness in the supply chain. Using RFID will only tell us what we already know – that assets aren't where they are supposed to be. The original problem remains unsolved – how to get them to where they are needed.

Increasing asset utilization requires a focus on process, not technology. Simply put, the velocity of the asset has to increase. It needs to be moved from use to use (and through the required cleaning and calibration) and at a faster rate. To accomplish this, hospitals need to invest in automating the transportation process to increase the frequency and reliability of asset deliveries and pickups.

At the same time, the improved logistics will instill the necessary confidence in nurses and other clinicians so that they change their habits, which is essential in achieving improved utilization. An RFID system used to “police” assets without the proper resources to enable the required physical changes is not only a waste of money, but likely to result in nurse dissatisfaction and possibly even compromise patient safety.

A COMPARISON OF PROCESSES

A good example of asset tracking technology overshadowing process is apparent in the assumptions most vendors make about how their systems will be used. For instance, a nurse in search of a piece of equipment for a patient will go to the nursing station to log onto the asset tracking system... The nurse identifies the desired equipment and its location as a dot on the screen. Then, the nurse proceeds to get that piece of equipment. The story ends there with the nurse supposedly much happier than before because the needed equipment was able to be found, although it's unclear why anyone would want to use certain types of equipment on another patient if the prior use is unknown.

Wouldn't it be better if the nurse could simply pick up the phone (either in the patient's room or using a portable VOIP phone) and call central supply (or the appropriate department) and ask for the equipment to be delivered?