

CASE STUDY

PYCUBE, INC.

Asset Management in Healthcare

Hospitals are an integral part of every community. They're the first stop for broken arms, illnesses, and for patients who are looking to find hope in their medical cases. And yet, there's an odd paradox many hospitals are facing in today's age.

People understand the importance and need for hospitals, and hospitals themselves see anywhere from hundreds to thousands of patients in a given day. Hospitals, however, are consistently seeing a loss in their revenue and are known to only see 60% of their total charge on patients. This leaves hospitals scrambling to find ways to cut costs within their facilities and leaving them unable to focus on patient care.

One of the easiest and simplest ways for these hospitals to cut costs? Asset management.



30%

Assets replenished yearly due to loss or misplacement⁽¹⁾



128 HOURS

Average time a year nurses waste looking for equipment⁽¹⁾



42%

Average utilization of mobile devices⁽¹⁾

Hospitals, according to a study conducted by GE Healthcare, lose an average of 20% to 30% of their equipment during day-to-day routines¹. This same study reports that it takes about an average of 21 minutes per nurse per shift to find this equipment. Over the year? That adds up to 128 hours wasted in a year looking for equipment. Most hospitals attempt to solve this problem by buying more equipment – thinking that with a bigger supply source they'll spend less time looking for equipment, but this is rarely the case. Instead, the hospitals are spending more money to only spend more time looking for said items.

¹ Rusian Horblyuk, Kristopher Kaneta, Gary L. McMillen, Christopher Mullins, Thomas M. O'Brien and Ankita Ro. "Out of Control: How Clinical Asset Proliferation and Lower Utilization are Draining Healthcare Budgets." GE Healthcare, 2012.



THE CHALLENGE

A better and effective solution lies in structural and categorical management of assets. Not only does asset management allow the hospitals to manage their assets effectively, it also provides the building blocks for utilization improvement and preventative maintenance for the asset. Through asset management, hospitals can cut costs, improve efficiency and quality care.

In this case study, we'll explore the implementation of an asset management solution for a Massachusetts-based community hospital that is dedicated to excellence in patient care, compassion, and integrity.

THE CASE

The Clinical Engineering team of this major hospital in Massachusetts had challenges in keeping track of telemetry devices. Often, these devices would find themselves within the main soiled linen accumulation areas of the hospital and would be washed away in the sanitation process of these soiled linens. In other

cases, they would be thrown away or accidentally stolen.

A total loss of 30% of these telemetry devices made them start evaluating the value of asset management for their hospital.

This hospital approached Pycube with a request to help them solve the issue of tracking telemetry devices to prevent such a loss. Pycube utilized radio frequency identification (RFID) tags and readers to track when these telemetry devices passed certain ingress points in the hospital. Pycube understood, though, that tracking these devices is not enough and location tracking alone does not necessarily prevent loss or accidental theft. Pycube extended the technologies already used by the hospital and incorporated different platforms using business logic to prevent accidental theft or misplacement. Pycube provided a solution using modular platforms to manage assets and also alerting and presenting the information in a user-friendly way for the staff.



OUR SOLUTION

THE SOLUTION

This solution's biggest benefit for the hospital lies in that it is scalable: the hospital can continue to build and expand on their current technology for a cost-effective price as they continue to notice loss of telemetry devices in new locations. This scalable technology allows the hospital to expand and grow as their community best sees fit. The hospital can also use this solution to better integrate the knowledge they learn throughout all facilities in their hospital.

To summarize, this solution's main benefits for this hospital are:

- Asset management through reliable technology such as RFID's
- Specificity of location is dependent on the hospital's need
- Ability to utilize information gathered and prevent misplacement or accidental theft

- Scalable technology that grows with the hospital's needs

THE RESULT

By implementing the following solution, the standard 445-bed hospital is:

- Cutting \$360 - \$390K over three years by no longer needing to replenish 30% loss of stock of 200 telemetry devices, each priced at an average of \$2,000
- Streamlining search process for the assets while cutting costs by \$200 - 220K, from losing about 3,000+ hours (3-4 hours a week) of searching pains for 5 nurses, avg. salary of \$25/hour, for lost items within three years
- Improving customer satisfaction/expectation as there is more nurse-patient interaction
- Improving operational efficiencies and helping in keeping systems current through scalable technology

THE CONCLUSION



445 bed hospital



\$560 – 610K cut in
personnel and asset costs



3,000+ hours given back
to nurses



Improved patient
experiences and scores

This results in a cost cut of about \$600K for a 445-bed hospital, over three years, by tracking only telemetry devices. Should they decide to track any other medical devices or mobile equipment, the hospital will only continue to see a reduction and be able to better focus on patient care and the patient experience.

CONCLUSION

To summarize: hospital's matter. And how they spend their money matters. Spending to buy more equipment to prevent loss does not improve patient experience, and ultimately hurts the hospital. By implementing such an asset management solution, the hospital can go back to focusing on what matters most: patient experience. Let Pycube provide solutions to cut down the on additional capital expenditures, and let the hospitals focus on building and strengthening relationships with the community that needs them.

*For questions or more information,
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