

Rfid tags

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RFID Tags Introduction RFID is radio-frequency identification. It is a technology that uses radio-frequency electromagnetic fields to identify and track tags that are attached to the objects. RFID is used for inventory control to record the presence of object with the help of radio signals. RFID applications are used in healthcare to improve patient identification, tracking high-cost items and instruments.

Cost-benefit analysis

The adoption of RFID technology in the healthcare sector has gained more publicity because of its potential to enhance the productivity and process of tracking patients and medical instruments (Goundrey-Smith, 2012). The pivotal reasons behind the adoption are high operating costs and numerous stakeholders for the delivery of services. One way to overcome these challenges is the effective use of RFID. Covered cost-benefits of the RFID are labor cost savings, reduction of inventory, reduction of capital expense, increase patient management and reduce operating cost. RFID provides accurate inventory. The replacement cost of the lab supplies can be reduced by RFID. Unnecessary rush orders and lost equipment can hamper the cost-benefit of the healthcare. The cost of the RFID technology is higher. The stolen or misplaced equipment means lost data and time-consuming. The access of lost clinical and financial records can be expensive.

Ease of use

The use of RFID applications in the healthcare makes the process of tracking equipment and inventory quite easier (McDonnell & Sheard, 2012). It helps to provide accurate information of each item that is being tracked. The tracking of medical instruments is much more secure and efficient. The possibility of human error is reduced by the use of RFID. It is an automated

technology that can quickly capture multiple assets with a single pass. Some problem in hardware can lead to lost financial and clinical data. The use of RFID can be expensive for small enterprises.

Consumer privacy

The use of RFID in the healthcare helps to provide better protection to the vulnerable patients. RFID wrist bands are provided to patients to track their movement in the facility. The privacy of the consumers is recorded in the RFID tags. The common problem of RFID is tag collision. All the information of the patients is stored in the RFID chip and can only be viewed through company scanners. Some of the RFID tags that are used in the healthcare can be readable approximately to 100 meters. This eventually raises the privacy concern. Sensitive information can be collected by any unwilling source.

Short-term effects and long-term effects

The use of RFID technology can be highly adaptable and it can help to manage mobile assets. In the healthcare industry, it is vital to implement technology that can provide better accuracy and reduce error proofing processes. Both short and long term benefits of the application of RFID is to provide better protection to the patients and increase revenue by reduction of lost supplies and replacement costs. RFID technology can be expensive in short-term basis. The high evolving of technology can replace RFID in future.

Conclusion

The emergence of RFID technology has accelerated the revolution of healthcare industry. RFID tool is the best possible technology that can continuously monitor the inventory to notify the precise stock. The application of RFID has offered healthcare sector to provide more advanced

patient tracking capabilities.

References

Goundrey-Smith, S. (2012). *Information Technology in Pharmacy*. New York: Springer.

McDonnell, G., & Sheard, D. (2012). *A Practical Guide to Decontamination in Healthcare*. New Jersey: John Wiley & Sons.