Cart Smart – Rethinking Crash Cart Preparedness

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Abstract

Crash carts have been proven to be pivotal to improving code event outcomes. It has been estimated that at least 300,000 cases of in-hospital cardiac arrest occurred in the USA between 2013 and 2018 and that every minute without medical intervention survival falls 10-15%.

In 2010, the Pennsylvania Patient Safety Authority reported 56 cases of outdated or missing medications and/or missing or malfunctioning equipment when crash carts were used in emergency situations. Further, the Joint Commission hospital accreditation service released a bulletin in 2017 emphasizing the importance of crash cart preparedness.

Checklists are proven effective and in use in crash cart preparedness. However, when done on paper the extensive inventories and high volume of daily reviews still leave room for errors and require manual audits.

At the Hospital, we had a rate of issues discovered during codes of ~25%, in spite of a robust paper process.

Objectives

Reduce code cart readiness errors by designing a process that would directly integrate the three aspects of cart readiness – restocking, daily checklist review, administrative audits – leveraging manufacturer barcodes and standardized inventory to streamline restocking process.

Approach:
Consistent, Cohesive, Comprehensive

Replacing existing paper processes with online interfaces in an integrated suite of applications that leverage results from each component to simplify usage and reporting

Results

- Immediate reduction in cart readiness issues
- Significant reduction in cart restock time
- Daily cart readiness digest eliminates need for manual audit of paper logs
- Early warning of upcoming item expirations
- Detailed administrative metrics
- Full campus-wide visibility of cart status from anywhere at any time
- Use of manufacturer barcodes gives complete confidence in individual item readiness