

# Development of Medication Barcoding & Surveillance Process within Pharmacy

## The Problem

In preparation for an electronic medication administration record (eMAR) and barcode medication administration (BCMA), there was the need to develop a system within the pharmacy to ensure all medications are dispensed with an accurate, legible barcode. Significant workflow changes would need to be initiated at least six months in advance of eMAR/BCMA go live, and were focused in these three major areas:

- Medication receiving from wholesaler/manufacturer
- Medication order processing and handling within the pharmacy
- Dispensing medications to inpatient nursing units

## Aim/Goal

Every medication dispensed from the pharmacy department will have an accurate, legible barcode on it. Furthermore, these medications will be processed and dispensed in a manner that promotes success at the bedside upon BCMA and documentation within the eMAR.

## The Team

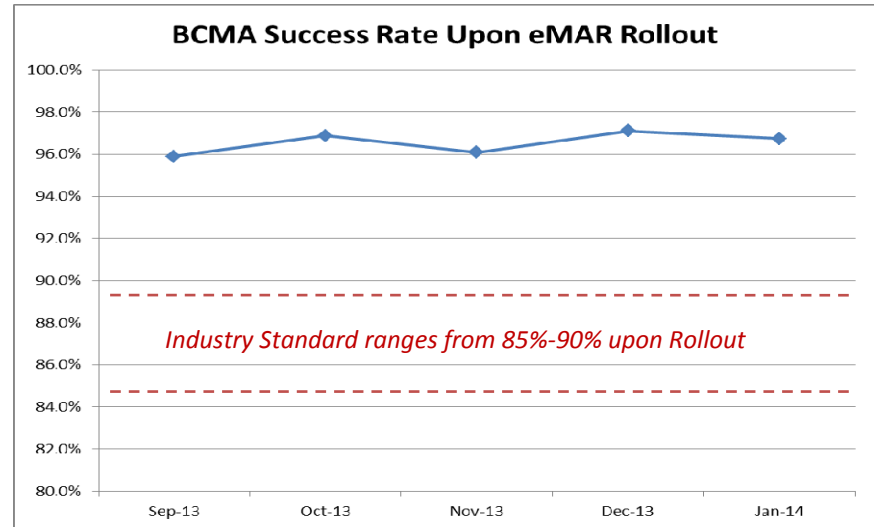
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## The Interventions

- Creation of a quarantine process upon medication intake from wholesaler/manufacturer to identify and add new barcodes to the pharmacy database **prior to** any stocking and dispensing of the medication.
- Development of a repackaging center, of which responsibilities include the preparation of certain “problem meds” known to other eMAR/BCMA systems. Examples include: ~40,000+ “half-tablets” annually, and medication drip kits
- Programming changes within the pharmacy system to allow for the ability to print barcode labels upon processing/dispensing of medications.
- Changes in the processing, preparation, labeling, and dispensing of medications to set up for success at the bedside.
- Upon go-live, ongoing surveillance of bedside barcode scanning and any medications administered without barcode verification.

## The Results/Progress to Date



## Lessons Learned

- Frequent monitoring of eMAR/BCMA reports is critical in being able to troubleshoot problems as they arise and ultimately improve success rates.
- Moving to a new electronic medication administration system exposes some of the vulnerabilities that existed and gone unnoticed within the previous system. Examples include various elements of Provider Order Entry (POE), Pharmacy Databases, Clinical Documentation, and workflows.
- Developing a homegrown eMAR/BCMA system is an iterative process, requiring the ability to Plan-Do-Check-Adjust along the way.

## Next Steps/What Should Happen Next

- The importance of these processes within the pharmacy will become even more crucial as eMAR/BCMA expands and we encounter more complex medication order types and other areas.
- Certain changes will need to be made within POE and the Pharmacy system in order to promote future success as eMAR/BCMA expands
- Increased surveillance and quality assurance of the processes will be necessary to ensure the success of eMAR/BCMA.