

## Barcode Medication Administration System (BCMA) Errors – A Systematic Review

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Implementation of Barcode Medication Administration (BCMA) improves the accuracy of administration of medication. These systems can improve medication safety by ensuring that correct medication is being administered to the correct patient in correct doses and at the correct time. It becomes easy to generate online patient medication records. However there are some challenges which have been noticed with these systems. The purpose of my project is to do a systematic review of these challenges and try to identify the common issues that that has been identified by the various researches done. Also as part of this project, I am going to participate in a live project with the same objective being undertaken by IU Health North Hospital (IUHNNH). This live project will give a first-hand knowledge and understanding of the problem, as well as help me understand what happens in the “real world” of medication administration. My goal would be to identify if BCMA systems can ensure safe medication administration and if not, what other safety requirements need to be put in place to ensure this safety. Such requirements can be other technology implementation, training of staff using the BCMA system or a wider issue in the medication administration process itself.

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