



Improvements in Bar Code Medication Administration for Patients on Isolation

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Abstract

OBJECTIVE: To deploy at the point of care methods for administering medications to patients in isolation settings using handheld devices or cordless scanners to eliminate patient identification or medication administration errors.

BACKGROUND:

In 1998, the Department of Veterans Affairs embraced the National Patient Safety Goal of reducing adverse events by 50% in five years. To support this goal, the Veterans Health Administration implemented the Bar Code Medication Administration (BCMA) system nationwide over six months and received national prominence as a result. The implications to nursing practice are still being studied. The purpose of this presentation is to illustrate the pivotal role of nurses and the vital need for nursing involvement in all phases of program development, implementation and integration with other systems. It is imperative to continue to evaluate the success and barriers of this innovative technology for medication error reduction and improved patient safety by examining technology-related process errors and actual versus near-miss medication error occurrences.

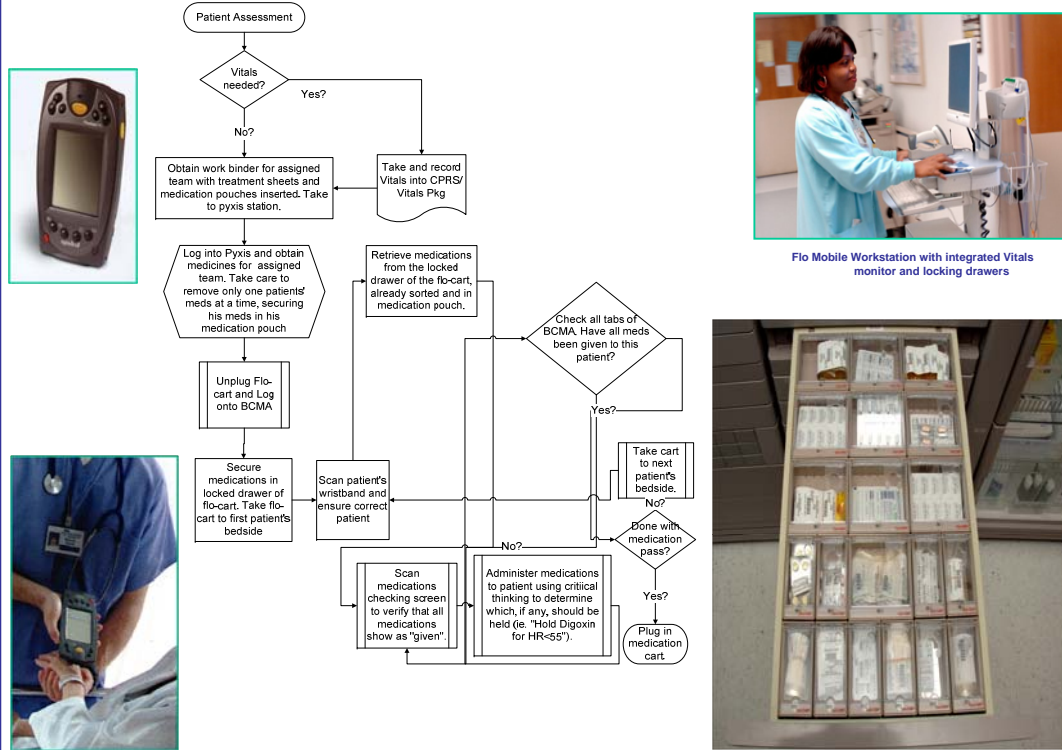
METHODS:

Observe staff for average medication administration cycle time in an isolation setting by recording individual medication administration passes utilizing Pyxis Profile, Flo Mobile Workstations and/or CareFusion Pocket PC's to determine if workflow and adherence to the BCMA Procedure improves and to identify remaining barriers.

RESULTS:

Improved compliance and positive response by staff were the most valuable outcomes. Comments on the BCMA Survey revealed additional issues that may be addressed with future PDSA cycles followed by a 2nd BCMA survey.

Technology-Driven Activity



Flo Mobile Workstation with integrated Vitals monitor and locking drawers



Process Improvement

Plan-Do-Study-Act Model (PDSA)

- P – Plan** Observe medication administration on one unit, one shift (at busy a.m. med pass).
- D – Do** Observe staff performance during medication administration for one isolation patient
- S – Study** Test improvement strategies:
 - Use of CareFusion devices or scanners for patient identification
 - Infection Control practices when administering medications in an isolation setting
 - Scanning medications at the point of care
 - Use BCMA Survey to collect data on barriers to scanning wristband on patient for proper identification and scanning the medications at the point of care in the isolation setting
 - Study the impact of Pyxis Profile on the current medication administration delivery system
- A – Act** Increase number of handheld devices that may be used in isolation rooms (encased in plastic bags or wiped with disinfectant after use);
 - Provide training to all staff and students on the use of the CareFusion Pocket PC's.
 - Facilitate additional Pyxis Profile equipment to augment current equipment to reduce wait time for nurses.

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