Gee whiz it's time; implement GTIN

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Background

Regina Qu'Appelle Health Region (RQHR) Pharmacy Informatics team created a project to ensure all formulary items had a machine readable barcode. Matrix (3D) barcoding was selected as the preferred standard due to increased information storage. New barcode printing capabilities were also required for items not unit dosed by RQHR Pharmacy. This list included ampoules, vials, ointments, creams, inhalers and other similar items.

Rationale & Objectives

- Barcodes were implemented in RQHR pharmacy to facilitate implementation of Swisslog BoxPicker.
- Having medication barcoded will permit our health region to move into electronic bedside medication verification and use of eMAR, which are planned future projects.
- Position RQHR Pharmacy to move into electronic inventory management
- Improve efficiency and safety through machine readable checking of selected doses.
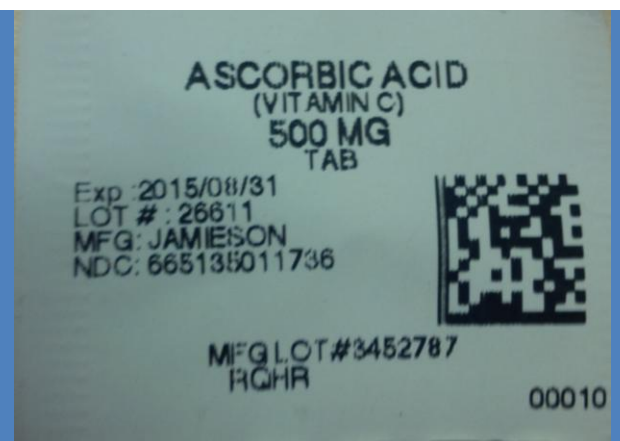
Implementation

- The team purchased a GS1 Company Prefix Licence to create a Global Trade Identification Number (GTIN) for each item in the RQHR pharmacy.
- A Macro was used to create and track the unique GTINs
- Unit dose packagers, TCG-Rx ATP and Healthmark WinPack-6 strip packer, were given software updates to print barcodes.
- RQHR pharmacy implemented (first in Canada) the Codonics CLS system to create barcode labels for ampoules, vials and other items not packaged in our department.
- Barcodes were printed onto unit dose packaging at least 3 months prior to implementation of Swisslog BoxPicker.
- Each barcode label was readable and generated the correct product when read.

CSHP 2015 Goal 5 Increase the extent to which hospitals and related healthcare settings apply technology to improve safety of medication use

CSHP 2015 Objective(s) Highlighted

Objective 5.1: 75% of hospitals will use machine readable coding to verify medications before dispensing.

Results & Evaluation

- Swisslog BoxPicker was successful built and installed and is currently operational at the Regina General and Pasqua Hospitals.
- Successful implementation was possible because of barcoded unit of use and multi-dose medications.
- Safe distribution of medications from our pharmacy has been enhanced through electronic verification of the medication placed in and removed from the BoxPicker.
- Manual checking of BoxPicker removal will end in the near future
- Machine readable codes improve safety and efficiency in the pharmacy and readiness to expand into e-MAR and point-of-care verification systems