PillPick® Automated Packaging and Dispensing System

A completely automated solution, from manufacturers' packaging to patient-specific dispensing.

swisslog healthcare

PillPick® Automated Packaging and Dispensing System

PillPick is the only pharmacy automation system that can provide unit-dose packaging, storage and dispensing — making it a completely automated solution, from manufacturers' packaging to patient-specific dispensing.

PillPick allows pharmacies to increase picking, packaging and dispensing efficiency, eliminate medication errors and improve patient safety.

« PillPick is highly accurate and provides our nurses with the barcoded medications they scan to verify the "five rights" at the bedside. PillPick is an important part of our efforts to establish a safe medication-use system.»[1]

SOURCE

1 — Robert Begliomini, Administrator, Pharmacy Services, Lehigh Valley Health Network

PillPick Advantages

— Fully Automated

— Advanced Design

— Serialization

— Overwrap Module

— Verification

Fully Automated

— From manufacturers' packaging to patient-specific dispensing

Advanced Design

— Two robots support task redundancy and productivity

Serialization

— The PillPick system encodes each bag produced with a unique serial number and associated NDC to make a Drug Supply Chain Security Act (DSCSA) compliant Product Identifier

Overwrap Module

— Automates unit dose packaging and bar coding of bulky containers and non-solids for improved control and traceability and associated NDC to make a Drug Supply Chain Security Act (DSCSA) compliant Product Identifier

Verification

— Automatically verify packaging accuracy and store images of each unit dose with the PickView™ Vision System

PillPick Features and Benefits

1 AutoPhial™ Overwrap Module

Boosts pharmacy efficiency by automating the unit-dose packaging of vials, cups, ampoules and syringes

2 High-Density Storage

Securely stores up to 51,060 unit doses*, or 145 doses per square foot

* Indicates maximum capacity, which is not typical for most clients

3 Unit-Dose Packaging

Ensures complete traceability of medication from original packaging to the patient

4 Secure Medication Loading

Verification replaces pharmacist check upon dispense+, reducing workload by as much as 50%[1] errors

+ Where allowed by State Board of Pharmacy

5 Patented PickRing®

Gives quick visual reference of medication orders for caregivers errors

6 Automatic Medication Returns

Eliminate extra processing steps and reduce waste

+ Barcode Verification

Eliminates opportunity for medication errors during packaging and dispensing

+ Discrete Packaging and Dispensing Modules

Support simultaneous processing and improve productivity

+ Archive Process

The PickView Vision System stores images of all medications packaged through the system for future verification

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SOURCE

1 — Nebraska Medical Center case study data

Integrated PillPick System Components:

Package

Canister Workstation
Transfer solid medications from manufacturers' packaging into tamper-proof PillPick Canisters. Canisters are encoded with medication-specific information, written to a radio frequency tag (RFID) and output to a barcode label. Pharmacists verify medications in canisters before they are packaged.

PillPick Canister Loader
Accepts up to 12 canisters to convey into the packager, reducing the need for operator intervention.

PillPick Packager
Packages, bar codes and labels pills into unit doses, with a unique serial number for automated dispensing and beside verification.

AutoPhial™ Overwrap Module
Fully integrated module overwraps vials, syringes, ampoules and cups, allowing these items to be bar coded, stored and dispensed automatically, including on a PickRing.

Store

PillPick Robots
Two robots can run simultaneously, allowing for both multi-tasking and redundancy. One robot loads unit dose bags from the packager into the storage unit and then picks unit dose bags for loading onto the PickRing. The second robot retrieves returned unit dose bags from the Returns window and loads them into the storage unit.

PillPick Storage Unit
The automated, high-density, robotic warehouse that receives, loads, and stores up to 51,060 barcoded unit doses* including a combination of oral solids and vials, cups, ampoules and syringes.

Dispense

PickRing
Each PickRing supplies a 12 or 24-hour supply of barcoded, patient-specific medications on a patented, flexible, plastic ring, labeled for bedside verification. Each PickRing includes a summary label listing each drug.

«[PillPick] increases our efficiency, turnaround time and ultimately, patient safety because medications are not handled by humans and come out of the robot on ready-to-dispense rings, which are verified by barcode.»[1]

SOURCE

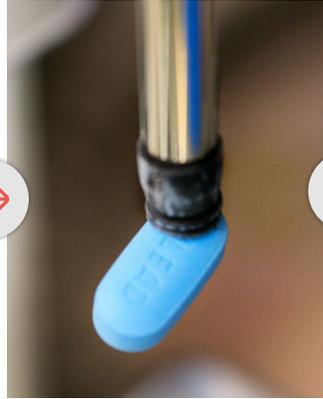1   David Hitchcock, Pharmacy Supervisor, North Kansas City Hospital
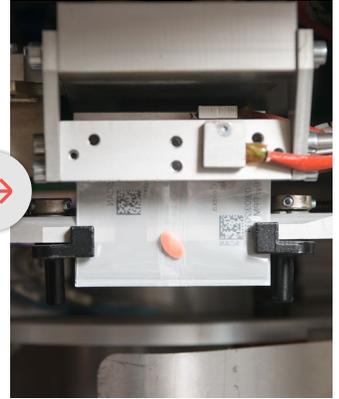
Pharmacy to Nursing

1 · Pharmacist checks medication canisters

2 · Technician loads pill canisters or other drug typologies

3 · PillPick picks and packages pills or other drug typologies

4 · Discards broken, duplicate or incorrect medications

5 · Transfers unit doses to storage

6 · Receives order

7 · Picks and verifies unit doses
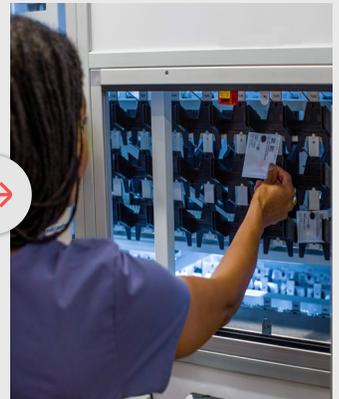

8 · Assembles PickRing

Pharmacy to Nursing (cont.)

9 · Dispenses PickRing

10 · Technician transfers PickRing to patient floor

Nursing to Patient

1 · Locate PickRing and bring to patient

2 · Verify patient bar code

3 · Administer medications

4 · Return unused medications to pharmacy

Pharmacy Workflow Efficiency Gains

Completely automates the dispensing process

Processes and sorts returned medications and credits patient accounts

Eliminates the need for secondary pharmacist check*

Reduces waste due to expired drugs

Nursing Workflow Efficiency Gains

Keeps nurse at the patient's bedside

Can organize patient medication on ring in order of administration time

Minimizes missing doses

* Where allowed by State Board of Pharmacy

PillPick is part of an end-to-end, integrated solution of Swisslog equipment and software that controls and manages medication from wholesaler to patient. Swisslog solutions for medication packaging, storage and dispensing were inspired by the need for safer medication distribution practices:

— Improve legacy automation for medication packaging, storage and dispensing

— Reduce the risk of dispensing and administering the wrong medication

— Create a more efficient pharmacy workflow