

HEALTHCARE SOLUTIONS

INTEGRATED MEDICATION  
MANAGEMENT SOLUTIONS  
FOR INNOVATIVE HOSPITALS





«SWISSLOG, AN ESTABLISHED  
WORLDWIDE PRESENCE»

## A LONG HISTORY OF INNOVATION IN SAFE AND EFFICIENT TAILORED AUTOMATED DRUG MANAGEMENT SYSTEMS

With over 100 years of experience, Swisslog is a leading supplier of automation solutions for healthcare facilities. We have installed automated materials transport and automated drug management systems in over 3000 hospitals around the world. Swisslog offers total system design, research, development, manufacturing, installation and customer support, providing an integrated solution for lean workflow and operations that enhances information access, patient safety and cost efficiency.

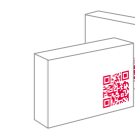
- \_\_\_\_\_  
Patient Safety
- \_\_\_\_\_  
Optimization of Processes
- \_\_\_\_\_  
Cost Reductions
- \_\_\_\_\_  
Lifetime Support
- \_\_\_\_\_  
Better Patient Care

### AUTOMATED DRUG MANAGEMENT SYSTEMS

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Automated Unit Dose Dispensing



Automated Pack Dispensing



Barcoding and Inventory Management

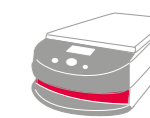
Swisslog pharmacy automation solutions offer complete automation from the packaging of all forms and shapes of medications, to storage, dispensing, and logistics, as well as inventory management software offering control over the entire chain of custody.

### AUTOMATED MATERIAL TRANSPORT SYSTEMS

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Pneumatic Tube Systems

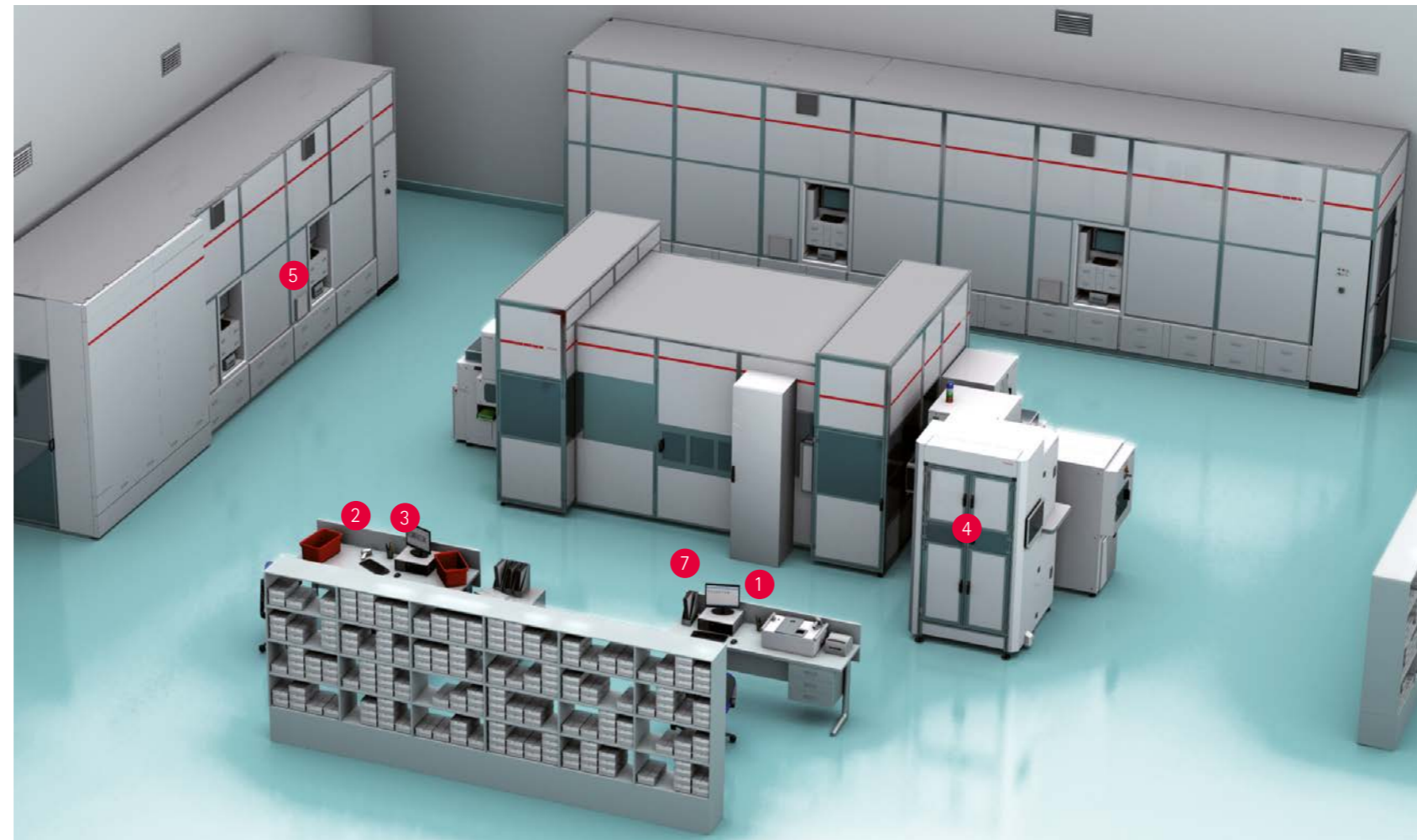


Automated Guided Vehicles

Swisslog offers automated material transport systems for both on-demand and scheduled transport within the hospital. Our systems are designed for the hospital environment, where sterility and highly sensitive transport of goods must be taken into consideration.

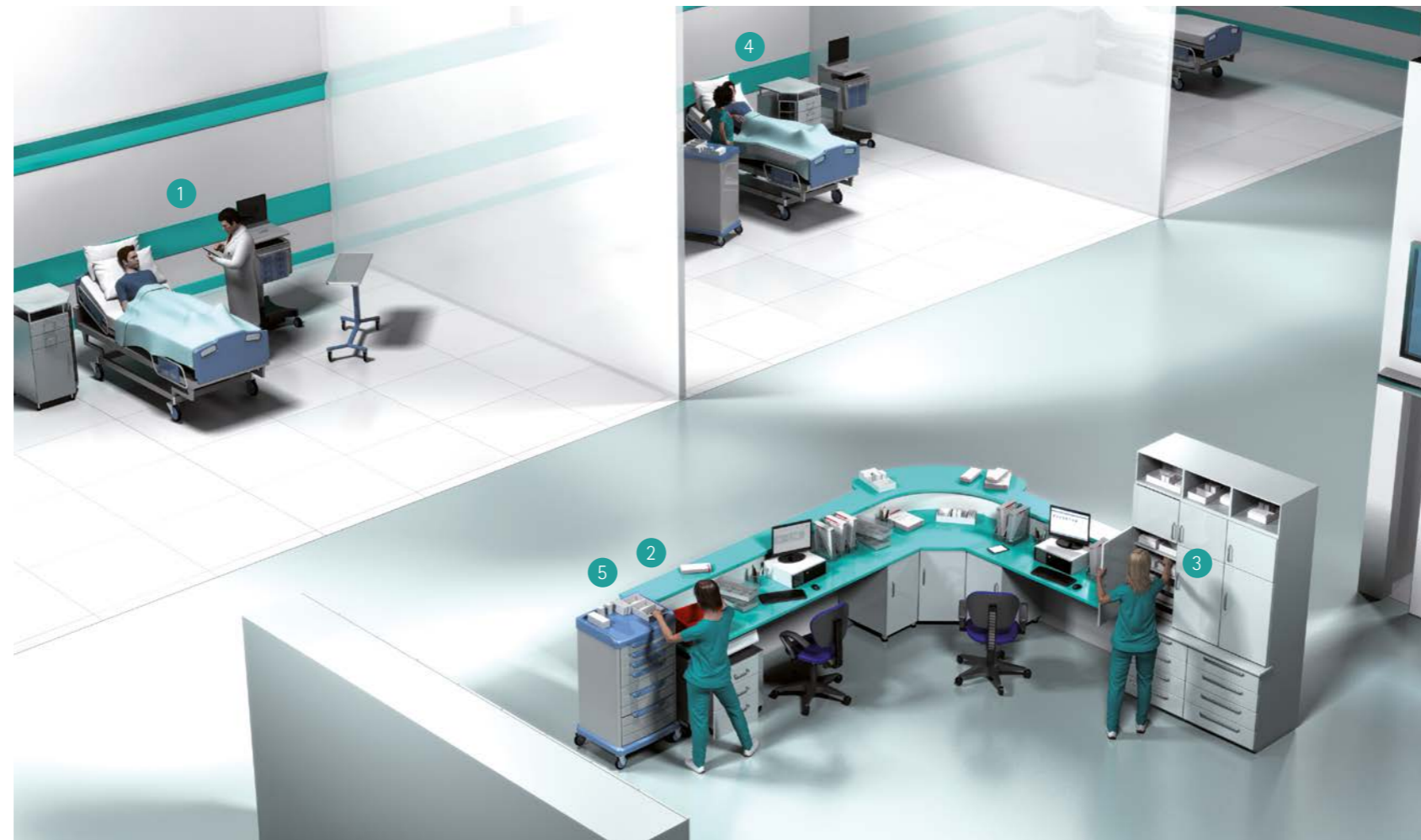
## The Pharmacy

1. Medications arrive from dock and are received via MedPortal™ Inventory Management Software.
2. Stocking is directed into various locations, including BoxPicker™ Automated Pharmacy Storage System, PillPick® Automated Pharmacy Packaging and Dispensing System.
3. A patient order arrives in the pharmacy and is validated by the pharmacists. Pharmacy staff dispenses the requested therapies.
4. Patient-specific unit dose therapies are dispensed from PillPick.
5. The therapies in original package are dispensed from BoxPicker.
6. Medications are transferred to locations outside the pharmacy. Transports are executed whether they're STAT doses, cart fill or cabinet replenishment.
7. Once transferred, inventory is decremented and updated in real-time, for a complete tracking and control of the medication stocks.



## The Ward

1. The doctor prescribes the medication therapy for the patient electronically. The prescription is sent to the pharmacy to be processed.
2. The prescribed medications in unit dose and original package arrive on the ward.
3. Therapies are loaded into carts or ward cabinets for secure storage prior to administration.
4. Administration is supported by barcode scanning to ensure that the right patient receives the right drug at the right time.
5. Unused medications are returned to the pharmacy and inventory is updated.



## Increased hospital efficiency through:

- Reduced medication errors
- Reduced drug management expenditure
- Reduced workloads

"...in a randomly selected ward section... The rate of medication errors significantly decreased between the Ward Stock System period and the Unit Dose Delivering System period (12.6% vs 5.2%). ... Drugs consumptions decreased of 11,527€ a year (11.5%) and cost of nurses time saved was assessed at 24,642€ a year."

Centre Hospitalier de Valenciennes  
Eur J Hosp Pharm 2013;20:Suppl 1 A19 doi:10.1136/ejhp-2013-000276.053.

"In the first six months of using PillPick and BoxPicker, we have been able to decrease our inventory overhead by \$350,000 and missing doses by 40% due to a change in the presentation to nursing. ... We are far more confident in the safety of our medication distribution and our pharmacists also have more time to spend in patient care."

Penn Presbyterian Medical Center  
Nishaminy Kasbekar, Pharmacy Purchasing and Products,  
Vol. 10, July 2013, p. 40.

"After the introduction of Unit Dose Drug Dispensing System the percentage of medicines administration discordances with the medical prescription fell (46% to 18%)."

Hospices Civils de Lyon, Groupement Hospitalier Est  
Eur J Hosp Pharm 2013;20:A85 doi:10.1136/ejhp-2013-000276.238

# CLOSED-LOOP MEDICATION MANAGEMENT

## FROM DOCK TO PHARMACY TO WARD TO BEDSIDE

Providing patients with the right drug therapy at the right time is an integral part of advanced quality standards of care.

In the hospital equipped with Swisslog solutions, pharmacy staff work more efficiently and safely using advanced automation to avoid errors, while nurses may spend more time with their patients.

Integrated solutions for increased efficiency and improved patient care with reduced expenditure.



**CENTRAL WAREHOUSING**  
Modular, dynamic and efficient solutions for storage and retrieval for logistic centers and hospital warehouses.



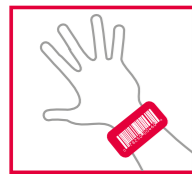
**PACKAGING AND STORAGE**  
Drugs are packaged, stored and controlled, ready to be automatically picked from the system.



**DRUG BARCODING AND TRACEABILITY**  
Drugs are identified with a barcode that contains all drug related information and guarantees traceability during the entire process.



**RETURNED MEDICATION**  
Returned drugs are automatically managed and accredited into inventory.



**BEDSIDE VERIFICATION**  
Drugs dispensed by PillPick and BoxPicker are barcode labeled to allow cross check via patient/drug barcode scanning.



**AUTOMATED TRANSPORTS**  
Pneumatic Tube Systems and Automated Guided Vehicles deliver items quickly and reliably, reducing manual labor and wait times.



**DISPENSING PERSONALIZED THERAPIES**  
With PillPick, drugs in unit dose are automatically dispensed and arranged in a plastic ring for the patient-specific therapy. With BoxPicker, medications are dispensed in their original packages.



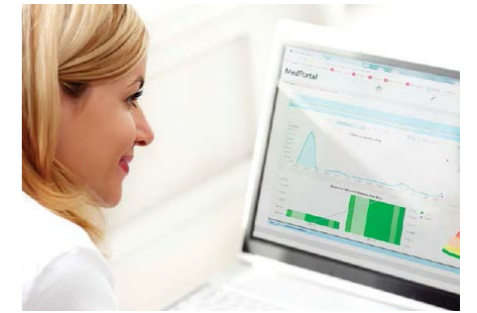
**SOFTWARE INTEGRATION**  
The Swisslog software interfaces with all kinds of hospital applications (e.g. HIS, CPOE, etc) and receives all prescriptions.

## SWISSLOG AUTOMATION SOLUTIONS



### PILLPICK

Modular system that automatically generates and stores unit dose medications allowing pharmacies to increase picking, packaging and dispensing efficiency, eliminate medication errors and improve patient safety.



### MEDPORTAL

Web-based software to manage medications through the pharmacy supply chain, from the warehouse to dispensing, including stock level maintenance, remote inventory management and multi-location replenishment.



### BOXPICKER

Fully automated, high density storage and dispensing system for medications in their original package. Secure and controlled storage of ambient, refrigerated and narcotic drugs, allowing pharmacy staff to improve workflow efficiency by expediting the picking process.



### UNIPICK 2

Automated system for managing drug in original packages at very high dispensing speed. Fully applicable to large outpatient pharmacies or for inpatient pharmacies dispensing high quantity of drug in original packages for traditional ward stock replenishment.



### CENTRAL WAREHOUSING SOLUTIONS

Warehouses and distribution solutions for logistic centers and hospital warehouses. Modular and dynamic automation that offers efficient and reliable storage and retrieval management.



### AUTOMATED TRANSPORT

Automated transport systems for material handling inside the hospital. Pneumatic Tube Systems and Automated Guided Vehicles deliver items quickly and reliably, reducing manual labor and wait times.

**Authorized Partner of  
Swisslog Healthcare Solutions in Australia:**

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**swisslog**  
*inspired solutions*

