PillPick is one of the most significant benefits of the system, as the PillPick® system performs the hospital for bedside verification while optimizing the dispensation of drugs. To illustrate, picture a nurse sorting through a dragger of 15 drugs looking for a particular drug, versus having all 15 drugs assembled on a ring, in order of administration. In the latter case, the nurse would look at the PillRing, see that the particular drug is a third drug, schedule it for administration, and flip to the correct unit dose for administration.

The drugs are organized in a way that is very nurse friendly, locating not only the drugs that assembled on the PillRing, but additionally the drugs that are stored wherever such as dispensing cabinets or refrigerators. The ability to customize the PillPick® system supports the optimum workflow within your hospital.

And as an additional advantage, placing drugs on a PillRing dramatically reduces0 borrowing and missing medication. By first organizing the drugs and making them readily accessible, and by capturing them on a ring, it’s less likely for “torn-off” drugs. This in turn benefits the pharmacy, the nurse, as well as the patient. Each unit dose on the PillPick® is checked for accuracy one last time before the ring is sealed and dispensed. This ensures the highest level of safety possible.

Can the system package oral solids, as well other items? E.g. ampoules, vials, syringes, blister packs, etc?

Oral solids typically comprise 70-80% of a hospital’s formulary. Oral solid packages are virtually commodity products, however they do not provide a 100% solution. Some over-wrap products also exist, but they are highly manual. A single drug (ampoule, vial, etc.) is prepared one at a time.

The system is designed to automatically package (or over wrap) items. Without addressing the significant portion of non-oral solids, the automation solution is not optimal. In addition to automatically over wrapping in high volume, the PillPick® can also sort blister cards into individual unit doses and over wrap. This allows these items to be included on the PillRing and provide downstream efficiencies to the administration of medications. This ability to automate the packaging of all drugs in the pharmacy is unique in the automation industry.

What are the benefits of automation to the Pharmacy’s customers; e.g. nursing?

Patient Safety is the primary impetus for the PillPick® system. PillPick® provides a 100% bar-coded solution and through its automated and integrated modules, eliminates many manual steps required by other competitive systems. The guideline is simple – eliminate human intervention and the potential for error is dramatically reduced.

The PillPick system is also quite versatile. It supports centralized, decentralized, and hybrid pharmacy operations. Since the system is also based on modules, it can be adapted to the needs of individual pharmacies. Depending on the system’s ability to over wrap prepackaged items, storage capacity, inbound loading buffers, and up to two dispensing options, further it can grow with the facilities needs without any loss of initial investment.

A highlight of this versatility is the PillPick’s ability to multi-task. The system can perform up to three tasks simultaneously. This allows the operators to compress the cart fill time, or simultaneously produce first doses and additional portions of non-oral solids, the automated and integrated modules, eliminates many manual steps required by other competitive systems. The guideline is simple – eliminate human intervention and the potential for error is dramatically reduced.

On the contrary, very few products exist that can package (or over wrap) other items. E.g. ampoules, vials, syringes, etc)?

Patient Safety is the primary impetus for the PillPick® system. PillPick® provides a 100% bar-coded solution and through its automated and integrated modules, eliminates many manual steps required by other competitive systems. The guideline is simple – eliminate human intervention and the potential for error is dramatically reduced.

Conclusion - Why PillPick?

As PillPick® systems are automatically dispensed, the system simultaneously provides a report of the drugs that are not on the PillRing. These are typically doses that are low in volume and therefore are manually picked, refrigerated drugs, or large size items. With this list the pharmacy technician is able to manually pick the drugs and label them with a bar-coded label provided by the PillPick® system. As an alternative to manually packing medications, Swisslog offers BoxPicker, a storage and dispensing solution. BoxPicker is either integrated into the PillPick® solution, or can stand alone, similar in functionality to a vertical carousel.

Typically all patient drugs are loaded into carts and transported to nursing units and stored in medicine cabinets or directly in patient rooms, after which the drugs are administered by nursing to the patient. Medications returned from patient floors can be automatically restocked into PillPick and credited to the patient account, if not billing on administration.

Important questions every hospital pharmacy should consider before implementing pharmacy automation.

Amy Arnold, CphP
Pharmacy Automation Product Manager for Swisslog Healthcare Solutions
June 2011

General Pharmacy Work Flow with PillPick

Built pharmaceuticals- first package, bar-coded, and labeled into individual unit doses. Unit doses are then automatically placed into buffer storage for future retrieval and dispensing to patient floors, support for individual patient administration.

On a pharmacy has ordered a drug for a patient, the order is sent to pharmacy for verification before the dispensing process begins. This can be done in an asynchronous or synchronous manner for first doses and simultaneously for first doses and additional portions of non-oral solids. The system is also based on modules, it can be adapted to the needs of individual pharmacies. Among the options is the ability to over wrap prepackaged items, storage capacity, inbound loading buffers, and up to two dispensing options. Further, it can grow with the facilities needs without any loss of initial investment.

Since the system is also based on modules, it can be adapted to the needs of individual pharmacies. The guideline is simple – eliminate human intervention and the potential for error is dramatically reduced.

Important questions every hospital pharmacy should consider before implementing pharmacy automation.

Amy Arnold, CphP
Pharmacy Automation Product Manager for Swisslog Healthcare Solutions
June 2011

Conclusion - Why PillPick?

Patient Safety is the primary impetus for the PillPick® system. PillPick® provides a 100% bar-coded solution and through its automated and integrated modules, eliminates many manual steps required by other competitive systems. The guideline is simple – eliminate human intervention and the potential for error is dramatically reduced.

The PillPick® system is also quite versatile. It supports centralized, decentralized, and hybrid pharmacy operations. Since the system is also based on modules, it can be adapted to the needs of individual pharmacies. Depending on the system’s ability to over wrap prepackaged items, storage capacity, inbound loading buffers, and up to two dispensing options, further it can grow with the facilities needs without any loss of initial investment.

A highlight of this versatility is the PillPick’s ability to multi-task. The system can perform up to three tasks simultaneously. This allows the operators to compress the cart fill time, or simultaneously produce first doses and additional portions of non-oral solids, the automated and integrated modules, eliminates many manual steps required by other competitive systems. The guideline is simple – eliminate human intervention and the potential for error is dramatically reduced.

On the contrary, very few products exist that can package (or over wrap) items. E.g. ampoules, vials, syringes, etc? E.g. ampoules, vials, syringes, etc?

Patient Safety is the primary impetus for the PillPick® system. PillPick® provides a 100% bar-coded solution and through its automated and integrated modules, eliminates many manual steps required by other competitive systems. The guideline is simple – eliminate human intervention and the potential for error is dramatically reduced.

The PillPick system is also quite versatile. It supports centralized, decentralized, and hybrid pharmacy operations. Since the system is also based on modules, it can be adapted to the needs of individual pharmacies. Depending on the system’s ability to over wrap prepackaged items, storage capacity, inbound loading buffers, and up to two dispensing options, further it can grow with the facilities needs without any loss of initial investment.

A highlight of this versatility is the PillPick’s ability to multi-task. The system can perform up to three tasks simultaneously. This allows the operators to compress the cart fill time, or simultaneously produce first doses and additional portions of non-oral solids, the automated and integrated modules, eliminates many manual steps required by other competitive systems. The guideline is simple – eliminate human intervention and the potential for error is dramatically reduced.

On the contrary, very few products exist that can package (or over wrap) items. E.g. ampoules, vials, syringes, etc? E.g. ampoules, vials, syringes, etc?

Patient Safety is the primary impetus for the PillPick® system. PillPick® provides a 100% bar-coded solution and through its automated and integrated modules, eliminates many manual steps required by other competitive systems. The guideline is simple – eliminate human intervention and the potential for error is dramatically reduced.

The PillPick® system is also quite versatile. It supports centralized, decentralized, and hybrid pharmacy operations. Since the system is also based on modules, it can be adapted to the needs of individual pharmacies. Depending on the system’s ability to over wrap prepackaged items, storage capacity, inbound loading buffers, and up to two dispensing options, further it can grow with the facilities needs without any loss of initial investment.

A highlight of this versatility is the PillPick’s ability to multi-task. The system can perform up to three tasks simultaneously. This allows the operators to compress the cart fill time, or simultaneously produce first doses and additional portions of non-oral solids, the automated and integrated modules, eliminates many manual steps required by other competitive systems. The guideline is simple – eliminate human intervention and the potential for error is dramatically reduced.
Medication Errors

Automated packaging and dispensing systems for filling patient orders are becoming common in hospitals because of reductions in personnel knowledge related to medication errors and an increase in automated solutions. The Institute of Medicine reports up to 1.5 preventable medication administration errors occur each year in our country alone. While the majority of the medication errors result from incorrect orders and transcription errors, an estimated 40% of medication errors result from dispensing errors or administration errors. When addressing medication errors, it is not as important as via was involved with the error, as much how it can it can be avoided.

How can medication errors be reduced?

Bar-coding initiatives have the potential to dramatically reduce medication errors during dispensing and administration. According to the Health and Human Service Secretary Tommy Thompson, “The keys can help nurses, and hospital staff make sure they give their patients the right drugs in the appropriate dosage.”

In a centralized distribution system, 20 to 30 percent of all drugs dispensed are returned to the pharmacy. This is a result of patient discharges, transfers, discontinuance of medications, or orders that have been changed. Further, as in male hospitals, the return process can be very time-intensive. If a hospital is not utilizing an administration system that is capable of handling the return process, the pharmacy must sort all of the returned items and verify the patient before returning medications to stock.

More often than not, problems attributed to the lack of a return system result in the potential for human error. Additional costs will occur if the returned medications are held in the pharmacy, thus preventing the return of overstock, as well as the cost of maintaining a return system. The potential for increased costs is not limited to the increased costs of maintaining a return system.

Reducing Medication Errors Through Pharmacy Automation

The PillPick system, a product within Swisslog’s Automated Drug Management System (ADMS) portfolio, is a fully automated unit-dose packaging, storage, and dispensing system that provides many advantages to the pharmacy operation. These advantages include improved accuracy, improved productivity, and enhanced patient safety. This paper introduces the PillPick system and describes the unique benefits and features, as well as potential opportunities for pharmacies to improve operations within their pharmacy operations in order to meet the needs of their patients.

Seven Questions to Ask When Choosing a Robot

Is it multi-tasking?

Many pharmacies offer activity with packaging, cart fill or cabinet refilling, first doses, returns, IV prep, etc. Is the robot capable of executing a broad range of tasks that are completed on demand? For example, stat orders and first doses must be verified and filled regardless of the time of day. An effective automation solution will optimize these functions and allow the pharmacy to adapt the automation to their dosage workflow.

What is the process for returning drugs?

In a centralized distribution system, 20 to 30 percent of all drugs dispensed are returned to the pharmacy. This is a result of patient discharges, transfers, discontinuance of medications, or orders that have been changed. Further, as in male hospitals, the return process can be very time-intensive. If a hospital is not utilizing an administration system, the potential for human error is increased.

What are the staffing implications of pharmacy automation?

In some cases, automation is sold on the return-on-investment approach. While an automated solution provides 100% error-free dispensing of patient medications, it is a “soft” vs. “hard” return process. For example, an automation solution may save pharmacy check time, however, this typically does not result in a reduction of FTEs, rather it allows staff to be re-skilled to more value-added activities. While an automated solution provides 100% error-free dispensing of patient medications, it is a “soft” return process. Therefore, if 100 drugs are packaged, up to 1000 pharmacist checks are required. When PillPick, a Swisslog PillBot is included in a solution, it reduces time spent on the return process versus 1000 checks.

What is the process for returns?

In a centralized distribution system, 20 to 30 percent of all drugs dispensed are returned to the pharmacy. This is a result of patient discharges, transfers, discontinuance of medications, or orders that have been changed. Further, as in male hospitals, the return process can be very time-intensive. If a hospital is not utilizing an administration system, the potential for human error is increased.

Is Simple but, the entire human intervention, the greater the pharmacists, the more error-prone this type of system is. The new pharmacy practice is to return the patient medication errors for human error. In addition, the time required for manual processes does not add value, and therefore could be evaluated in terms of time and money.

The PillPick’s integrated approach allows for full automation. The Stephane drugs are filled and verified, it is not touched by human hands until it is dispensed in a PillBot. Other systems have independent packaging systems that are not integrated into the storage unit. This means that a technician must perform the packaging and dispensing tasks, which is the individual unit dose, and then the doses are prepared to be stored.

With PillPick, instead of checking each single unit dose, the entire batch is performed to verify (PillPick) or up to 1000 oral solids. Not only does this save valuable pharmacist time, but it is potentially the error prone method of checking each individual unit dose.

What is the potential for error?

The automated system provides 100% accuracy and minimizes the potential for human error. However, the potential for error can increase if the pharmacist is not properly trained or if the pharmacist is not properly utilizing the system.

In a centralized distribution system, 20 to 30 percent of all drugs dispensed are returned to the pharmacy. This is a result of patient discharges, transfers, discontinuance of medications, or orders that have been changed. Further, as in male hospitals, the return process can be very time-intensive. If a hospital is not utilizing an administration system, the potential for human error is increased.

What is the potential for error? How much of the packaging, storage, and dispensing is automated?

In some cases, automation is sold on the return-on-investment approach. While an automated solution provides 100% error-free dispensing of patient medications, it is a “soft” vs. “hard” return process. Therefore, if 1000 drugs are packaged, up to 1000 pharmacist checks are required. When PillPick, a Swisslog PillBot is included in the solution, it reduces time spent on the return process versus 1000 checks.

As stated earlier, the return process is simple, safe, and efficient. The unit doses are simply placed onto the return conveyor as the return window. As stated earlier, the return process is simple, safe, and efficient. The unit doses are simply placed onto the return conveyor as the return window.
Can the system package oral solids, as well other items? E.g. ampoules, vials, syringes, blisters, etc?

Oral solids typically comprise 70-80% of a hospital’s inventory. Oral solid packages are virtually commodity products, however they do not provide a 100% solution. Some over-wrap products also exist, but they are highly manual. A single drug (ampoule, vial, etc.) is prepared one at a time.

On the contrary, very few products exist that can package for over-wrap items. Without addressing the significant portion of non-oral solids, the automation solution is suboptimal. In addition to automatically overwrapping in high volume, the PillPick can also cut blister cards into individual unit doses and over wrap. This allows these items to be automatically placed on the PickRing and provide downstream efficiencies to the administration of medications. This ability to automate the packaging of all drugs in the pharmacy is unique in the automation industry.

What are the benefits of automation to the Pharmacy’s customers; e.g. nursing?

The PickRing is one of the most significant benefits of the system, as the PickRing prepares the hospital for bedside verification prior to the dispensing process. By capturing them on a ring, nursing is less likely to “borrow” or misplace medication. In the latter case, the nurse would look at the PickRing label, see that the particular drug is the third drug scheduled for administration, and flip to the correct unit dose for administration.

The drugs are organized in a way that is very nurse-friendly: locating not only the drugs that are on the PickRing, but additionally the drugs that are stored elsewhere such as dispensing cabinets or refrigeration. The ability to customize the PickRing again supports the optimum workflows within your hospital.

As PickRings are automatically dispensed, the system is highly manual. A single drug (ampoule, vial, blister, etc.) is prepared one at a time. With the Swisslog PillPick system, centralized and decentralized hospitals can benefit from a faster turnaround time, increased productivity, and greater patient safety at a lower cost of operation.
Reducing Medication Errors Through Pharmacy Automation

Medication Errors

Automated packaging and dispensing systems for filling patient orders are becoming common in hospitals because of the increased knowledge related to medication errors and an increased interest in pharmacy automation. The Institute of Medicine reports up to 1.5 preventable medication administration errors occur each year in our country alone. While the majority of the medication errors result from incorrect doses and administrations, a pharmacist can be a valuable contributor to the reduction of dispensing errors or administration errors.1 When addressing medication errors, it is not an important issue as was involved with the error, as much as how it can be avoided.

How can medication errors be reduced?

Pharmacies that utilize technology in the dispensing and administration of drugs to patients. According to the Health and Human Service Secretary Tommy Thompson, “bar-codes can help doctors, nurses and hospitals make sure they get their patients the right drugs at the appropriate dosage.”

In a typical administration cycle utilizing bedside verification, a nurse must verify that the “five rights” are met: right patient, right drug, right dose, right route, and right time. Right patient is ensured by scanning the patient’s wristband in order to ensure that the “five rights” are met: right patient, right drug, right dose, right route, and right time. The PillPick system addresses many pitfalls of the return process since the canisters of drugs are returned for their pharmacy operation, and it is fully integrated into the pharmacy drug distribution system. Other systems function separately, and patient safety is not ensured. This paper introduces the PillPick system, the benefits of pharmacy automation, as well as producing a pharmacist check time, but this typically does not result in a reduction of errors if the pharmacist is not fully optimizing the pharmacy supply chain (downstream of the packaging) process. The PillPick system places a serial number embedded in the barcode on each and every unit dose. This serial number provides tracking through the entire potential for error. A system that minimizes human error and improves safety will result in a reduction of errors if the pharmacist is not fully optimizing the pharmacy supply chain (downstream of the packaging) process. The PillPick system places a serial number embedded in the barcode on each and every unit dose. This serial number provides tracking through the entire returns, IV prep, etc. While the majority of returns, IV prep, etc. While the majority of

What is the process for returned drugs?

In a centralized distribution system, 20 to 30 percent of all drugs dispensed are returned to the pharmacy. This is a result of patient discharges, transfers, discontinuation of medications required. As each bag is scanned, PillPick determines whether the dose should be returned or not. The returned drug exists.

The return process can also create potential for error. Lot codes should be checked for drug expiration dates. Expiration dates must be checked and each unit dose should be reviewed to determine whether it should be returned to storage or discarded. If one of these steps is missed, the potential for administration of a recalled or expired drug exists.

The PillPick system has the capability of holding up to 50,000 unit doses and as many as 5,000 line items. Further, it can store oral solids, ampoules, vials, syringes, and other items. For items that are too large or prone to break under the PillPick system, Swisslog provides other automated solutions to provide the 100% bar-coding solution as well as the automated storage and dispensing of these items. In this manner, PillPick provides a complete automated barcode solution.

What are the staffing implications of pharmacy automation?

In some cases, automation is used to displace part-time staff, while in other cases, automation is used to displace personnel who are using manual processes. For example, an automation solution may save pharmacy check time, but this typically does not result in a reduction of errors if the pharmacist is not fully optimizing the pharmacy supply chain (downstream of the packaging) process. The PillPick system places a serial number embedded in the barcode on each and every unit dose. This serial number provides tracking through the entire return conveyor via the return window with the barcodes facing out. The robot completes the return process with its sorting or grouping of medications required. As each bag is scanned, PillPick determines whether the dose should be returned to stock or discarded. If the facility is holding patient complaints and dispensing administration, the patient is also credited.

Reducing Medication Errors Through Pharmacy Automation

The PillPick system, a product within Swisslog’s Automated Drug Management System (ADMS) portfolio, is a fully automated unit dose packaging, and dispensing system that minimizes the potential for human error and automatically transfers to the storage and dispensing module. In this manner, the facility is held responsible for the return process since the canisters of drugs are returned for their pharmacy operation, and it is fully integrated into the pharmacy drug distribution system. Other systems function separately, and patient safety is not ensured. This paper introduces the PillPick system, the benefits of pharmacy automation, as well as producing a pharmacist check time, but this typically does not result in a reduction of errors if the pharmacist is not fully optimizing the pharmacy supply chain (downstream of the packaging) process. The PillPick system places a serial number embedded in the barcode on each and every unit dose. This serial number provides tracking through the entire potential for error. A system that minimizes human error and improves safety will result in a reduction of errors if the pharmacist is not fully optimizing the pharmacy supply chain (downstream of the packaging) process. The PillPick system places a serial number embedded in the barcode on each and every unit dose. This serial number provides tracking through the entire return conveyor via the return window with the barcodes facing out. The robot completes the return process with its sorting or grouping of medications required. As each bag is scanned, PillPick determines whether the dose should be returned to stock or discarded. If the facility is holding patient complaints and dispensing administration, the patient is also credited.

How much of the packaging, storage, and dispensing is automated?

The PillPick system has the capability of holding up to 50,000 unit doses and as many as 5,000 line items. Further, it can store oral solids, ampoules, vials, syringes, and other items. For items that are too large or prone to break under the PillPick system, Swisslog provides other automated solutions to provide the 100% bar-coding solution as well as the automated storage and dispensing of these items. In this manner, PillPick provides a complete automated barcode solution.

How much of the formulary will the robot accommodate?

The highest percentage of the formulary that is automated, the more effective the solution. For example, if a patient requires 15 drugs for a 24-hour period, and 5 of the drugs are dispensed on an automated solution, the other 10 items must be manually picked. As a result, the pharmacy is not fully optimizing the work flow and most importantly, the pharmacist has the potential to create opportunities for errors. On the other hand, if all 15 of the patient’s drugs are automated, the opportunity for an error is eliminated and the pharmacy operates efficiently.

Automated packaging and dispensing systems for filling patient orders are becoming common in hospitals because of the increased knowledge related to medication errors and an increased interest in pharmacy automation. The Institute of Medicine reports up to 1.5 preventable medication administration errors occur each year in our country alone. While the majority of the medication errors result from incorrect doses and administrations, a pharmacist can be a valuable contributor to the reduction of dispensing errors or administration errors.1 When addressing medication errors, it is not an important issue as was involved with the error, as much as how it can be avoided.

In a typical administration cycle utilizing bedside verification, a nurse must verify that the “five rights” are met: right patient, right drug, right dose, right route, and right time. The PillPick system addresses many pitfalls of the return process since the canisters of drugs are returned for their pharmacy operation, and it is fully integrated into the pharmacy drug distribution system. Other systems function separately, and patient safety is not ensured. This paper introduces the PillPick system, the benefits of pharmacy automation, as well as producing a pharmacist check time, but this typically does not result in a reduction of errors if the pharmacist is not fully optimizing the pharmacy supply chain (downstream of the packaging) process. The PillPick system places a serial number embedded in the barcode on each and every unit dose. This serial number provides tracking through the entire potential for error. A system that minimizes human error and improves safety will result in a reduction of errors if the pharmacist is not fully optimizing the pharmacy supply chain (downstream of the packaging) process. The PillPick system places a serial number embedded in the barcode on each and every unit dose. This serial number provides tracking through the entire return conveyor via the return window with the barcodes facing out. The robot completes the return process with its sorting or grouping of medications required. As each bag is scanned, PillPick determines whether the dose should be returned to stock or discarded. If the facility is holding patient complaints and dispensing administration, the patient is also credited.

In a typical administration cycle utilizing bedside verification, a nurse must verify that the “five rights” are met: right patient, right drug, right dose, right route, and right time. The PillPick system addresses many pitfalls of the return process since the canisters of drugs are returned for their pharmacy operation, and it is fully integrated into the pharmacy drug distribution system. Other systems function separately, and patient safety is not ensured. This paper introduces the PillPick system, the benefits of pharmacy automation, as well as producing a pharmacist check time, but this typically does not result in a reduction of errors if the pharmacist is not fully optimizing the pharmacy supply chain (downstream of the packaging) process. The PillPick system places a serial number embedded in the barcode on each and every unit dose. This serial number provides tracking through the entire potential for error. A system that minimizes human error and improves safety will result in a reduction of errors if the pharmacist is not fully optimizing the pharmacy supply chain (downstream of the packaging) process. The PillPick system places a serial number embedded in the barcode on each and every unit dose. This serial number provides tracking through the entire return conveyor via the return window with the barcodes facing out. The robot completes the return process with its sorting or grouping of medications required. As each bag is scanned, PillPick determines whether the dose should be returned to stock or discarded. If the facility is holding patient complaints and dispensing administration, the patient is also credited.

Seven Questions to Ask When Choosing a Robot

Is it multi-tasking?

Pharmaceuticals bring with activity, packaging, cart-fill or cabinet restructuring, first doses, returns, stat orders, etc. Up to three tasks can be coordinated, there is no minimum task that can be scheduled, there are no tasks that are competed on demand. For example, stat orders and first doses must be verified and filled regardless of the time they arrive. An effective automation solution will optimise these functions and allow the hospital pharmacy to adapt the automation to their dosage work flow.

The PillPick system is highly efficient. The unit doses are simply placed onto the return conveyor via the return window with the barcodes facing out. The robot completes the return process with its sorting or grouping of medications required. As each bag is scanned, PillPick determines whether the dose should be returned to stock or discarded. If the facility is holding patient complaints and dispensing administration, the patient is also credited.
Reducing Medication Errors Through Pharmacy Automation

The PillPick system, a product within Swisslog's Automated Drug Management System (ADMS) portfolio, is a fully automated unit dose packaging, storage, and dispensing system that streamlines the workflow and minimizes the opportunity for error. On the other hand, if all 15 of the patient's drugs are returned, the potential for administration of a recalled or expired drug exists.

What is the process for returned drugs?

In a centralized distribution system, 20 to 30 percent of all drugs dispensed are returned to the pharmacy. This is a result of patient discharges, transfers, discontinuation of medications, or order changes. Further, pre-packed bags (PPDB), if part of the pharmacy's centralized distribution, comprise a significant percentage of the return.

The return process can be time intensive. If a hospital is not utilizing advanced verification, the pharmacist must sort all of the returned units and verify the patient before returning medications to stock. Many, if not most, of the returned medications will require manual intervention by a pharmacist, and in some cases, by multiple pharmacists. ANS In some cases, automation is sold as a return on investment approach. While an automated solution provides 100% hands-off return of any excess and automatically transfers to the storage and dispensing module. In this case, this efficiency is obvious – one check per 1000 average 1000 checks.

As stated earlier, the return process is simple, safe, and efficient. The units are simply placed onto the return conveyor as the return is completed. No scanning of the unit dosage and dispensing systems, each package requires a pharmacy label, which is then provided for the pharmacist to verify, scan into the system, and then the returned smart card is verified into the unit. The entire process is completed with no human intervention.

The next step is to study the return process and consider how the return process could be simplified and improved. The automated return process is simple, easy to use, and reduces the potential for error. In fact, the return process takes less time than the manual process. However, there is still room for improvement. For example, the return process could be simplified by reducing the number of checks performed. In this case, the efficiency is obvious – one check per 1000 average 1000 checks.

What are the staffing implications of pharmacy automation?

In a centralized administration cycle utilizing bedside verification, a nurse will scan the bar-code on the unit dose and scan the patient's chart or grouping of medications required. As each bag is scanned, PillPick determines whether the dose should be returned, dispensed, or grouped together in a convenient format. However, when these drugs are returned to the pharmacy, the pharmacist must sort all of the returned units and verify the patient before returning medications to stock. Many, if not most, of the returned medications will require manual intervention by a pharmacist, and in some cases, by multiple pharmacists. ANS In some cases, automation is sold as a return on investment approach. While an automated solution provides 100% hands-off return of any excess and automatically transfers to the storage and dispensing module. In this case, this efficiency is obvious – one check per 1000 average 1000 checks.

As stated earlier, the return process is simple, safe, and efficient. The units are simply placed onto the return conveyor as the return is completed. No scanning of the unit dosage and dispensing systems, each package requires a pharmacy label, which is then provided for the pharmacist to verify, scan into the system, and then the returned smart card is verified into the unit. The entire process is completed with no human intervention.

As a result of these PillPick features, the required staff for operating the system is lower than any other solution on the market.
General Pharmacy Work Flow with PillPick

Bulk pharmaceutical items are first packaged, bar-coded, and labeled into individual unit doses. Unit doses are then automatically placed into buffer storage for future retrieval and dispensing to patient floors, support for individual patient administration.

Once a physician has ordered a drug for a patient, the order is sent to pharmacy for verification before the dispensing process begins. This can be done in an asynchronous manner for first doses and cart fill respectively.

The PillPick Manager software receives the electronic patient account, if not billing on administration. Medications returned from patient floors can be automatically restocked into PillPick and credited to the pharmacy's customers; e.g., nursing? E.g. ampoules, vials, syringes, blisters, etc.

As PickRings are automatically dispensed, the system simultaneously provides a report of the drugs that are not on the PickRing. These are typically drugs that are low in volume and therefore are manually picked, refrigerated drugs, or large-size items. With this list the pharmacy technician will manually pick the drugs and label them with a bar-coded label provided by the PillPick system. As an alternative to manual picking medications, Swisslog offers BoxPicker, a storage and dispensing solution. BoxPicker is either integrated into the PillPick system or can stand alone, similar in functionality to a vertical carousel.

Typically all patient drugs are loaded into carts and transported to nursing units and stored in medicine cabinets or directly in patient rooms, after which the drugs are administered by nursing to the patient.

Conclusion - Why PillPick?

Patient Safety is the primary impetus for the PillPick system. PillPick provides a 100% bar-coded solution and through its automated and integrated modules, eliminates many manual steps required by other competitive systems. The guideline is simple – eliminate human intervention and the potential for error is dramatically reduced.

The PillPick system is also quite versatile. It supports centralized, decentralized, and hybrid pharmacy operations. Since the system is also based on modules, it can be adapted to the needs of individual pharmacies, drawing from the options of any wrap prepackaged items, storage capacity, inbound loading buffers, and up to two dispensing options. Further, it can grow with the facilities needs without any loss of initial investment.

A highlight of this versatility is the PillPick’s ability to multi-task. The system can perform up to three tasks simultaneously. This allows the operators to compress the cart fill time, or simultaneously produce first doses and label them with a bar-coded label provided by the PillPick system.

In addition the drugs that are stored together such as dispensing cabinets or refrigerators. The ability to customize the PillPick again supports the optimum workflow within your hospital.

And as an additional advantage, placing drugs on a PickRing dramatically reduces boredom and missing medications. By first organizing the drugs and making them readily accessible, and by capturing them on a ring, missing is less likely to happen. This in turn benefits the patient, the nurses, as well as the pharmacy.

Each unit dose on the PickRing is checked for accuracy one last time before the ring is sealed and dispensed. This ensures the highest level of safety possible.

Printed on paper containing a minimum of 30% post-consumer recycled fiber.