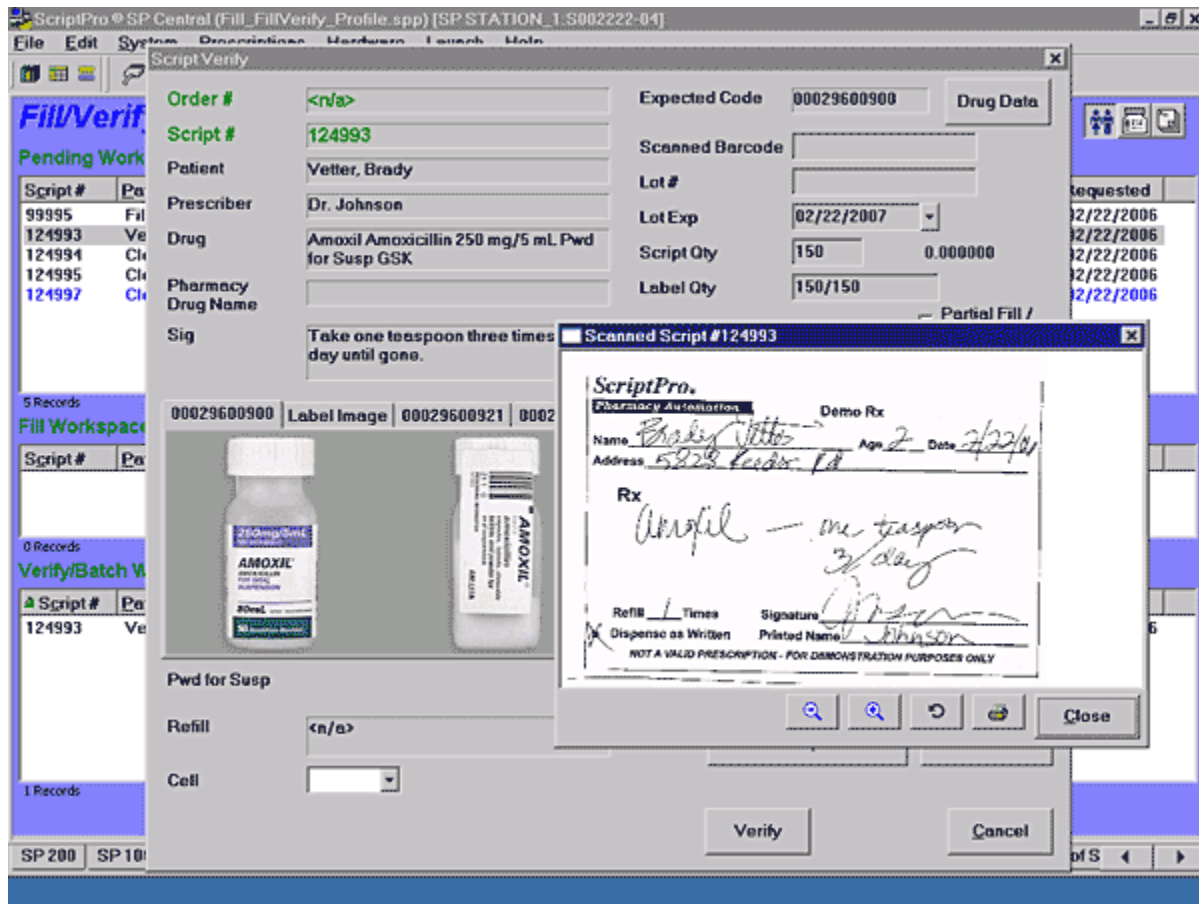


Formula for Patient Safety

ScriptPro has designed robotic filling and computerized workflow systems to reduce prescription errors. A pharmacy that utilizes our technology achieves safety in every step of the prescription dispensing process.

A. Receiving the Prescription Order

Pharmacy staff scans each prescription via the Script Scanner. Then, SP Central Workflow System stores an electronic image of the hard-copy prescription so that it may be referred to for accuracy throughout the filling process. This image also facilitates on-screen verification by the pharmacist.



B. Preparing the Medication

1. Robotic Filling – The SP 200 Robotic Prescription Dispensing System fills prescriptions based on instructions from the pharmacy's computer system. Barcode scanning ensures that an NDC match is made between the medication that is ordered and the medication that is filled.

a. Medication Loading & Storage: Dispensing cell is originally filled by scanning stock bottle NDC and scanning cell location label. This produces a unique barcode for the drug in the robotics cabinet. (During this procedure, only one cell and one drug should be present on the control center in the vicinity of the barcode scanner.) PIN numbers are recorded throughout this process to record who has made each transaction.

b. Medication Containers: SP 200 cells are marked with a drug content label that is printed upon cell assignment and subsequent cell refilling. This label is applied to the front of the cell and it includes information such as cell ID number, drug NDC number, full drug name, date and time of refill, drug lot number, and drug expiration date.

- Pharmacy staff calibrates cells on-site in less than one minute. Steps include putting one unit in the flowgate area and tightening the thumb screw to the appropriate size. This adjustment maximizes counting accuracy for the medication.

c. Cross-Contamination: The robot dispenses tablets or capsules directly from the drug cell into the vial, avoiding cross-contamination.

d. Lot Number Control: The SP 200 maintains the lot number and drug expiration date associated with each drug in every cell. This information is clearly stated on the cell's drug content label. *The system will not dispense medication from a cell if the lot expiration date has expired.* In the event of a lot number recall, a system report may be generated to show dispensing activity for that particular drug lot number, thus identifying all patients who received it.

The screenshot shows the 'SP 200 Pending' and 'SP 200 Filled' screens. The 'Pending' screen has a table with one record where the status is 'Expired Drug'. The 'Filled' screen has a table with one record where the status is 'SP 200 Filled'. Below these is a 'Drugs Assigned to Cells' table with 4 records.

Script #	Patient Name	Drug Name	Qty	Priority	Status	Requested
787560	Martin, Sarah	Paxil Paroxetine 10 mg Tab GSK	30	Waiting	Expired Drug	04/22/2005

Script #	Patient Name	Drug Name	Qty	Priority	Status	Requested
678879	Smith, Katie	B-Complex Mega Vitamin B Complex Tab Major	30	Waiting	SP 200 Filled	04/19/2005

Cell	Drug Name	Qty	Low	Lot Number	Exp Date	Reorder Code	Product Code
E1-20	B-Complex Mega Vitamin B Complex Tab Major	89	200	56988	06/30/2007		00904418200
G1-14	Clonazepam 0.5 mg Tab Teva	470	200	45698	05/30/2007		00093083200
E1-12	Paxil Paroxetine 10 mg Tab GSK	8030	200	5678	04/23/2005		00029321000
F1-14	Premarin Conj. Estrogens 0.625 mg Tab Ayerst	3658	200	45697	08/01/2006	445-285	00046086700

e. Inventory: The pharmacy software maintains a perpetual inventory of the drugs in every drug cell to ensure quality assurance and facilitate re-ordering. When dispensing occurs, the quantity is subtracted from the cell. A system report will list all the cells where the inventory quantity is low for a particular drug.

f. Removal of Drugs for Dispensing, Return or Waste: The SP 200's dispensing process is tightly controlled through the pharmacy system's interface program, PIN entry, and barcode verification. The combination of these controls promotes operational safety, security, and accuracy. The pharmacy system interface requires an exact NDC number match to select the proper drug, strength, and manufacturer for dispensing. (Without an exact match, the system will prevent the prescription from being filled by the robot.)

During prescription dispensing, the robotic arm moves to the proper cell location and scans the cell's barcode. If the barcode is not read (because the cell is in the wrong location or the barcode is unreadable), the robot will not dispense medication from the cell. Only when the barcode match is made, the medication is dispensed. Then a prescription label, including auxiliary information, a line drawing of the drug and a physical description of it, is applied automatically to the filled vial.

g. Controlled Substances: The Pharmacy Manager will decide whether or not the SP 200 will dispense controlled substances in accordance with applicable state and federal requirements and regulations. The robotics cabinet may serve as a locked cabinet to secure and store controlled medications. Any drug that requires stringent quantity controls may be designated as requiring a manual recount for quantity verification.

- For tracking purposes, the SP 200 can determine when a controlled drug was requested, its script number, the patient's name, script quantity, who filled the script, who verified it and who dispensed it to the patient. The patient's electronic signature can be viewed to see who signed for the medication and when.

h. System Reports: The robot offers a variety of reports that help implement safety procedures in the pharmacy. These reports provide information on:

- System Maintenance – An activity log reflecting the completion of daily and weekly maintenance and other necessary functions, such as the refilling of drugs and vials.
- Inventory – Details information regarding drug cell transactions, including the operator initials associated with each transaction, such as a cell refill. Also shows the drug name, quantity, and cell location for each cell. Records partially filled scripts so that staff can alert patients to the out-of-stock situation. Staff is then aware of which medications need to be ordered, to whom they are owed and how much.
- Discrepancies – Logs any incorrect scan made by a system user. Tracks if the wrong drug product was scanned for storage in a dispensing cell, for example. This report indicates the number of times an incorrect stock bottle was selected to fill a medication dispensing cell—a “Near Misses” report.
- Activity – Shows transactions requiring security authorization, along with the operator initials associated with each transaction.

2. Manual Filling – Based on instructions from the pharmacy's computer system, the SP Central Workflow System routes prescriptions that are to be filled manually to a computerized work station, or SP Station. The SP Station employs barcode technology to ensure that an NDC match is made between the medication that is ordered and the medication that is to be filled.

a. Medication Dispensing: Staff scans the stock bottle barcode at the SP Station to ensure the correct drug was chosen for the prescription. If the drug selected is the correct one this scan brings up an electronic image of the drug for verification purposes. (If the drug selected is incorrect, the system will not provide a label to fill the prescription.) Upon barcode match, a prescription label (with auxiliary information, a line drawing of the drug, and a physical description) is ready for application immediately after scan. Label is retracted automatically if filling process is interrupted, to avoid potential label switching. Pharmacy administrator can set the amount of seconds that label is available to staff before it is retracted.

b. System Reports: SP Central Workflow offers a variety of reports that help implement safety in a pharmacy. These reports provide information on:

- System Maintenance – An activity log reflecting the completion of daily and weekly maintenance and other necessary functions.
- Inventory – Details information regarding prescription processing transactions, including the operator initials associated with each transaction. Also shows the drug name, quantity, and storage location for each drug. Records partially filled scripts so that staff can alert patients to the out-of-stock situation. Staff is then aware of which medications need to be ordered, to whom they are owed and how much.
- Discrepancies – Logs any incorrect scan made by a system user. Tracks if the wrong drug product was scanned for prescription filling. This would indicate the number of times an incorrect stock bottle was selected to fill a prescription—a “Near Misses” report.
- Activity – Shows transactions requiring security authorization, along with the operator initials associated with each transaction.

3. Telepharmacy – ScriptPro offers software and hardware solutions allowing pharmacies to conduct high-quality, safe, and efficient telepharmacy operations. Our telepharmacy product is a live audio/video connection that allows for real-time communication.

a. Filling Prescriptions without a Pharmacist Present: Technician scans the product's barcode and scans the hardcopy prescription, if applicable. The tech then captures an image of the pills or of the unit-of-use item, prints the prescription label, and takes a picture of it. Once all the prescriptions for the patient are ready and batched, the tech calls the off-site pharmacist for prescription verification.

b. Verifying Prescriptions & Counseling: The off-site pharmacist answers the call and the pharmacy tech then shares the prescription information with the pharmacist on-screen so all parties can get a visual of the order. The pharmacist may then verify the prescriptions and release the call. If, however, the patient requests counseling, he or she signs using the Electronic Signature device. Then the on-site technician turns the monitor to the patient so the pharmacist may provide personalized counseling and education. Upon completion of counseling, the pharmacist releases the call, and the technician will dispense the order.

4. Robotic Unit-of-Use Dispensing – SP Unit Dispenser (SPUD) fills scripts based on instructions from the pharmacy's computer system. Barcode controls ensure that an NDC match is made between the medication that is ordered and the medication that is filled.

a. Medication Loading, Storing, and Dispensing: SPUD eliminates “place and pick” errors that occur when putting away packages that have similar sizes and looks. System automatically loads and dispenses unit-of-use items using barcode technology to ensure the correct drug and strength of each prescription that is delivered to the pharmacist.

b. Controlled Substances: The Pharmacy Manager will decide whether or not SPUD will dispense controlled substances in accordance with applicable state and federal requirements and regulations. The robotics cabinet may serve as a locked cabinet to secure and store controlled medications.

- For tracking purposes, SPUD can determine when a controlled drug was requested, its script number, the patient's name, script quantity, who filled the script, who verified it, and who dispensed it to the patient. The patient signature capture can be viewed to see who signed for the medication and when.

c. System Reports: SPUD offers a variety of reports that can help implement safety in a pharmacy. These reports include information on:

- System Maintenance – An activity log reflecting the completion of daily and weekly maintenance and other necessary functions.
- Inventory – Details information regarding prescription processing transactions, including the operator initials associated with each transaction. Also shows the drug name, quantity, and conveyor location for each medication. Records partially filled scripts so that staff can alert patients to the out-of-stock situation. Staff is then aware of which medications need to be ordered, to whom they are owed and how much.
- Activity – Shows transactions requiring security authorization, along with the operator initials associated with each transaction.

C. Checking the Prescription

1. Visual Check: The pharmacist or technician performs a check to verify all scripts that are filled by the SP 200 or SPUD as well as those filled manually by the staff using the SP Central Workflow System.

a. The pharmacist or technician scans the system-generated barcode on the filled prescription.

b. This scan produces an [on-screen drug image](#) (front and back) of the medication, so that the pharmacist may easily compare it to the contents of the vial and/or package. (Scripts filled by the SP 200 are left uncapped for easy visual assessment.) All of the prescription information is also on the verification screen.

c. The system records who verifies each prescription in the pharmacy and at what time, by matching Personal Identification Numbers with the initials for that staff member.

D. Medication Dispensing

1. Pick-up

a. Electronic Signature records a patient's counseling decision, third-party insurance message acceptance and a signature. This eliminates the paper trail, including the paper logs, and allows for easy access of information.

b. Electronic Signature also tracks who counsels each patient and when the counseling took place.

c. Additionally, Electronic Signature stores a patient's Notice of Privacy Practice acknowledgement for HIPAA compliance.

- d.** SP Central Workflow System tracks who dispenses prescriptions to patients and who has actually picked up the scripts (ie. spouse, mother, etc.) and at what date and time.
- e.** Pharmacy automation frees up the pharmacist so that he/she has more time for patient counseling to review medications and check for potential drug interactions. This counseling point also serves as a final accuracy check, to be sure that the correct medication has been dispensed.
- f.** Because the prescription label includes auxiliary information, a line drawing of the drug and a physical description of the medication, patients may personally verify that they are receiving the correct medication.

2. Delivery

- a.** Delivery driver uses SP Mobile Checkpoint to record recipient's signature, date and time that the prescription was accepted/received.
- b.** SP Mobile Checkpoint also ensures recipients are receiving all of their medications if they have more than one prescription.

E. Inventory & Medication Tracking

- Both the SP 200 and SPUD track and report on lot numbers and expiration dates for all prescriptions in the pharmacy. Reports may be generated to track recalled medications and who has received them.
- Systems prompt pharmacists automatically for additional recount of controlled medications.

F. Miscellaneous

- All ScriptPro systems receive updates weekly to their Drug Database as new drugs are released to the market.
- The SP 200 and SPUD combined with the SP Central Workflow System promote a more organized dispensing environment in the pharmacy. This reduces the stress level, and pharmacy staff are less prone to make errors that are the result of being overworked.