



Retail Pharmacy - An Overview



Brief Description

You have probably wondered as what is the Prescription fulfillment process and why we need such a big and complex system to deal with it.

In India, we simply go to medicine shop and provide them our Doctor's prescription. The pharmacy person simply give us our medicines and we pay them and go home. If we have insurance, its we who deal with claim and reimbursement etc. So what is so different in US.

Well Rx system and process is totally different in US and is very strictly regulated and controlled using various systems and check.

In next few slides, we will try to tell you:-

- What is different in US than India
- What happens behind the scene in the overall process
- What are the steps to process prescriptions in a safe and accurate manner

Overview of US Pharmacy System

- A chemist shop is called a pharmacy or a drugstore in the US
- Prescription drugs are available only with a physician's prescription. Over the counter medications are available without a physician's prescription
- Many items that are available without a prescription in other countries are not available without a prescription in the US, e.g. oral contraceptives, sleeping pills, high dose antihistamines etc.
- Most pharmacies don't give the prescription drug right away. They ask you to either wait or come back later. They generally take half an hour or more to fill the prescription.
- Prescription drugs are provided in a bottles known as veils and not strips like in any other countries. A bottle will have information like name of patient, pharmacy name, name of doctor, description of medicine and instructions on use. Additionally a document is provided which have details about how to take the drug, any side effects, and other useful facts you should know.
- Each pharmacy will have at least one trained and licensed pharmacist on duty at any time it is open.

Overview of US Pharmacy System (Cont.)

- In the US, pharmacists are responsible for the provision of safe, effective, efficient, and accountable medication related-care for hospital and health-system patients.
- Pharmacists are directly integrated into interprofessional medical teams. Pharmacists optimize patient outcomes through a variety of channels, including:
 - Providing recommendations for evidence-based medication selection on patient care rounds
 - Offering drug information to other health care providers and patients
 - Monitoring therapeutic responses
 - Reconciling medications as patients transition across the continuum of care
- Unlike India, majority of the drug dispensing done in US are through insurance providers i.e. insurance companies pay for the prescription drug directly to the pharmacy and patient has to pay only a small amount known as "co-pay"

Rx Fulfillment Process



Rx Intake

First Step of the process where prescription is scanned and important information is gathered

- With respect to prescription intake the first thing to address is the means by which the medication itself arrives in the pharmacy. Prescriptions may arrive
 - On a traditional prescription form
 - A fax or phone call from an appropriately licensed prescriber
 - E-prescribing in an outpatient setting, and computerized prescriber order entry (CPOE) in an institutional setting.
- These various means have various federal regulations associated with them and individual states may place additional restrictions on how they are used.
- When a patient first arrives at a pharmacy, the pharmacy team will need to gather/verify various important pieces of patient data including:
 - Gather drug and disease information,
 - Ensure that the pharmacy has the correct name, address, contact information, and any other pertinent data,
 - Document/update allergy information
 - Verify/update medication insurance information

The image shows a sample prescription form with the following fields and labels:

- Doctor Information:** DEAN BORDEN, MD License # 12312344 NPI # 12345678910
- Patient Information:** Name: John Smith, Address: 2 Main Street NY 10000, Allergies: NKDA, Weight: 165 lb, DOB: 12/15/1985, Age: 34, Sex: Male, Race: 4/5/16
- Drug Information:** (Large Rx symbol)
- Signature:** Resident Physician (Signature)
- Dispense as Written / Not Substantive:** (Two checkboxes)

with How to Read a Doctor's Prescription

Data Entry

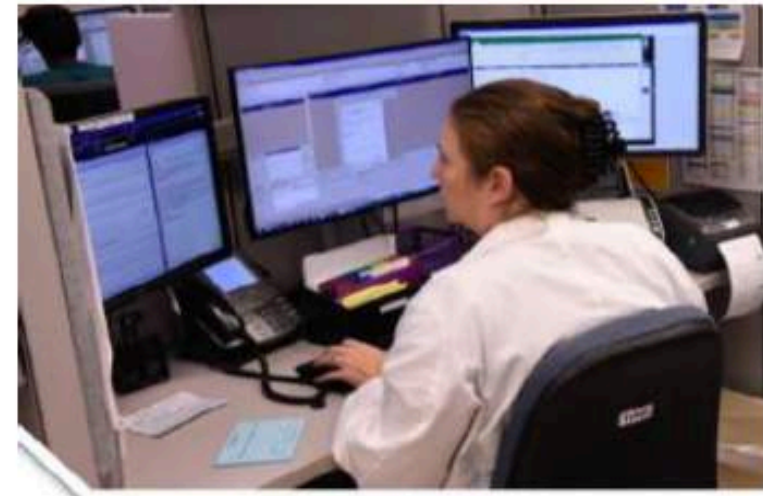
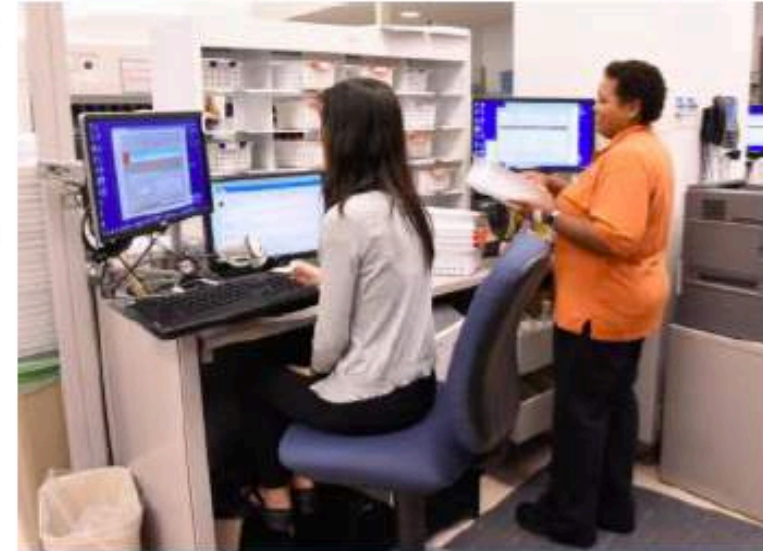
Second Step of the process where pharmacy staff will need to enter information in order to process the prescription and generate a Rx number and put it in a queue.

- Prescriber information - This typically includes the prescriber's name, address of practice, contact information, medical license number, DEA number, and National Provider Identifier (NPI).
- Third-party payor - This includes coverage type (primary, secondary, etc.), insurance name and bank identification number (BIN), group number, and member number.
- Patient information - The patient information should at least include name, date of birth, address, contact information, allergies, and payment type (cash vs. insurance). Often, pharmacies will request information on concurrent use of other medications and dietary supplements, preferences with respect to safety lids, verification that the patient has received notification of the pharmacy's privacy policy.
- Prescription information - While many items on a prescription are important the system should record as a minimum the date the prescription was written, superscription, inscription, subscription, signature, refills, prescription origin code, and it should generate a unique prescription number that should appear on the prescription label as well.
- DAW codes - Dispense as written (DAW) codes need to be entered into the computer as well. Most prescriptions allow for generic substitution and patients are glad to receive the more affordable version, therefore the default DAW code is typically set to '0'. If a physician requires a specific medication to be dispensed, they will typically note this on the prescription. This is considered a DAW code of '1'. Sometimes a patient may request that they receive a brand name product even if a prescriber allowed for generic substitution. This would be classified as a DAW code of '2'. Other DAW codes are less frequently used. The following is a succinct list of the other DAW codes; 3 = substitution allowed - pharmacist selected product dispensed, 4 = substitution allowed - generic drug not in stock, 5 = substitution allowed - brand drug dispensed as generic, 6 = override, 7 = substitution not allowed - brand drug mandated by law, 8 = substitution allowed - generic drug not available in marketplace, and 9 = Other.
- Drug information - At a minimum, drug information should include the drug name, the medication's National Drug Code (NDC), the manufacturer, and an ability to check for interactions and contraindications. Often this drug information will include information on auxiliary labels, specific lot numbers and expiration dates, stock availability, pricing, and medication guides.

Data Review

Third Step of the process where pharmacist will review the information entered and checks for the DUR or any other issues. Pharmacist tries to resolve all the issues and DURs in this step

- Every new prescription is reviewed by a pharmacist for drug interactions, duplication of therapy, and appropriate dose.
- Drug Utilization Reviews (DUR), also referred to as Drug Utilization Evaluations (DUE) or Medication Utilization Evaluations (MUE), are defined as an authorized, structured, ongoing review of healthcare provider prescribing, pharmacist dispensing, and patient use of medication. DURs involve a comprehensive review of patients' prescription and medication data before, during, and after dispensing to ensure appropriate medication decision making and positive patient outcomes.
- DURs are classified into three categories:
 - Prospective - evaluation of a patient's therapy before medication is dispensed
 - Concurrent - ongoing monitoring of drug therapy during the course of treatment
 - Retrospective - review of therapy after the patient has received the medication
- DURs afford the managed care pharmacist the opportunity to identify trends in prescribing within groups of patients such as those with asthma, diabetes, or high blood pressure.
- Pharmacist also check If there is an issue with your prescription and pharmacist need to get clarification from your insurance provider or prescriber.



Filling

Fourth Step of the process where pharmacist will now fill the medication order.

- A label will be generated to put on vial and information on the label will be verified as it should be correct and complete
- Pharmacist will fill it with the appropriate medication, package it properly, and validate that everything has been done correctly
- When it comes to packaging a product before it leaves the pharmacy, the prescription label is only one part of that. The packaging must be suitable for maintaining the stability of the product and offering suitable safety to both the patient and others that may have access to the medication (i.e., children). With this in mind, we need to consider whether or not the packaging provides adequate light resistance, temperature for long term and short term storage, as some products will react to some plastics you need to consider PVC vs glass containers, child safety lids are concern to protect unintentional poisonings but this needs to be balanced by sufficient ease of use for the patient, some products will require syringes (either oral or injectable) and a degree of knowledge about the intended dosage and dosage route of the medication will help with this decision.



Product Review

Fifth Step of the process where pharmacist will now do a product review and make product available for pickup

- After the medication is filled, the pharmacist verifies that it was filled with the right medication and again checks to make sure the dose, directions, and day supply are appropriate.
- At this point, any drug information is printed out with the receipt.
- Pharmacist also checks whether patient needs consultation and if he asked for consultation etc.
- Also there are several means that may be utilized to provide proper product validation including the use of NDCs, barcode scanning technology, and a final visual verification.
- The pharmacy management software will have recorded a specific NDC for the medication that is being dispensed. It is a good practice to check the NDC in the computer against the product being dispensed to ensure both accuracy and to avoid any kind of billing fraud.
- The oldest and most common form of verification is visual inspection. Traditionally this is the pharmacist that provides this role, but in some states pharmacy technicians under specific conditions are allowed to perform tech check tech. This visual verification should be looking for an accurate interpretation of the information from the original prescription to the prescription label, that the patient information on the product is correct
- The product is packaged in an appropriate manner, and that the correct drug is being dispensed.



Product to Patient

Sixth Step of the process where product will now be dispensed to the patient and patient will now pickup the order

- The finished medication orders are bagged and scanned into bins at the pick up area.
- Once the medication has been filled and checked it is ready for the patient to pick it up which usually involves any payments (including copays), the offering of medication counseling, and the proper recording and filing of dispensed prescriptions.
- Patient is provided with instructions on prescriptions and then consultation is provided



Consultation

Last Step of the process where patient is provided with consultation on their prescription and other important information

- Pharmacists are mandated by state and federal statutes to provide consultations for prescription medications.
- The consultation is to include
 - Results of potential drug use review: Completed by the pharmacist to see if the prescription is appropriate and needed for the patient. The pharmacist checked for therapeutic duplications, interactions with the patient's medical history, drug or food interactions, what the drug is being prescribed for, allergies, correct dosing, and risk for abuse or misuse of the medication.
 - Standard patient counseling: The pharmacist provides specific information to the patient consisting of the name, type, and dosage of the medication; how to take the medication; how to store the medication; what the medication is being prescribed for; and how to request refills.





Thank You