

1. What type of process is the above one: order-to-cash, procure-to-pay, application-to-approval, or issue-to-resolution?

- From the point of view of the customer, the above process is described as order-to-cash wherein the transaction starts when a customer places an order and ends when the customer provides the payment for the completion of the order transaction.

2. Who are the actors in this process?

- Customer or patient, pharmacy technician, pharmacist and the doctor are the actors in this process.

3. Who are the customers?

- Customers in this case are the patient.

4. What are the tasks of this process?

There are two different types of process mentioned in the article, one is simplified and another a more complicated.

A. Ordering in front counter

1. Customers drop off their prescriptions in the front counter of the pharmacy.
2. Customers wait to receive their order
3. Payment is made when medicines are received.

B. Drive-through process

4. Customers drop off their prescriptions in the drive-through counter.
5. Pharmacy technician process as follows:
 - a. Asks customer for the pick-up time.
 - b. Puts prescription in the time labeled boxes with one hour preceding the pick-up time
 - c. Picks up prescription due to be filled in current hour.
 - d. Enters prescription details such as doctor's details, patient's detail and medication details into the pharmacy system
6. Pharmacy system performs task as follows:
 - a. Performs automated check called Drug Utilisation Review (DUR). The check includes conflict with other drugs taken in the past, or inappropriateness of drug to the patient based on the detail entered in the system.
 - b. Provides alarm when there are incompatibilities.
7. Pharmacist conducts a more thorough checking including a call to the doctor who issued the prescription to confirm it.
8. Pharmacy system continue to checks as follows:
 - a. Checks customer's insurance policy if the purchase is covered in full or partial.
 - b. Checks for an alternative medicine that is covered by the customer's insurance policy
9. Pharmacist calls the doctor and/or the patient if the alternative medicine provided by the system can replace the original prescription.
10. Pharmacy technician continues with the following process:

- a. Collects the drugs/medicine from the shelves and puts them in the bag with the prescription stapled to it.
 - b. Passes the bag to the pharmacist
11. Pharmacists:
- a. Conduct quality check by double-checking if the prescription has been filled correctly
 - b. Seals the bag and put it in the pick-up area.
12. Customer arrives to pick-up the prescription
13. Pharmacy technician retrieves the prescription and request for payment if the prescriptions are not fully covered by the customer's insurance policy.

5. What value does the process deliver to its customers?

The process provides the following value to the customer:

- 14. Time saving by providing an option for drive-through and pick up prescriptions in the time that is most convenient for the customer
- 15. Checking if the prescription has any conflict with other drugs taken in the past.
- 16. Checking if the drug is inappropriate to the patient based on his/her current details.
- 17. Providing alternate medicine validated by the doctor that will be covered by the insurance policy to reduce customer's cashing out.

6. What are the possible outcomes of this process?

The process is quite efficient and customer friendly. The pharmacy provides two options to the customers whether to go into the pharmacy or to pick up their orders at a later time whichever is more convenient to them.

7. Taking the perspective of the customer, what performance measures can be attached to this process?

The performance measures that can be attached to this process are:

- 18. Savings per purchase made based on the alternate medicine provided
- 19. Accuracy of the items received
- 20. Timeliness based on the nominated time for pick up and the availability of the prescriptions.

8. What potential issues do you foresee this process might have? What information would you need to collect in order to analyze these issues?

Unavailability of the prescribing doctor to receive calls and validate the alternative option offered by the system is one of the potential issue in this process. To address this, doctor's answered calls for validation and acceptance of the replacement alternative should be recorded and used for future analysis. Also the data about the frequency or number of times a doctor agree with the system's proposed alternative drugs should be analysed to determine the efficiency of the system in providing available alternatives.

9. What possible changes do you think could be made to this process in order to address the above issues?

The process should include the system accepts recording and saving doctor's accepted replacement drug and other restrictions such as until when it is applicable either depending on the age or the number of days a medicine is allowed to be taken. This option should also be checked against the "approved by" customer's insurance policy so that the pharmacist need only one time to call the doctor if there's any verification to make.