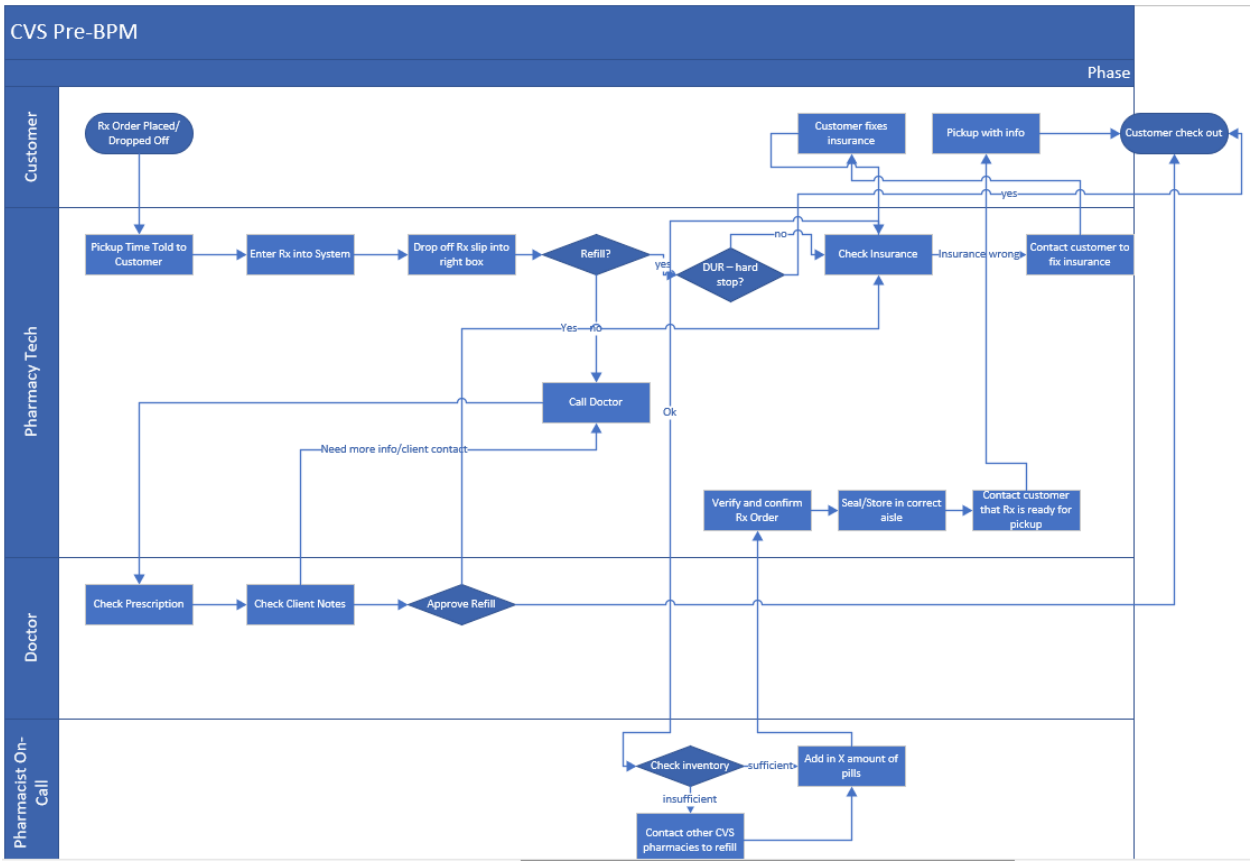
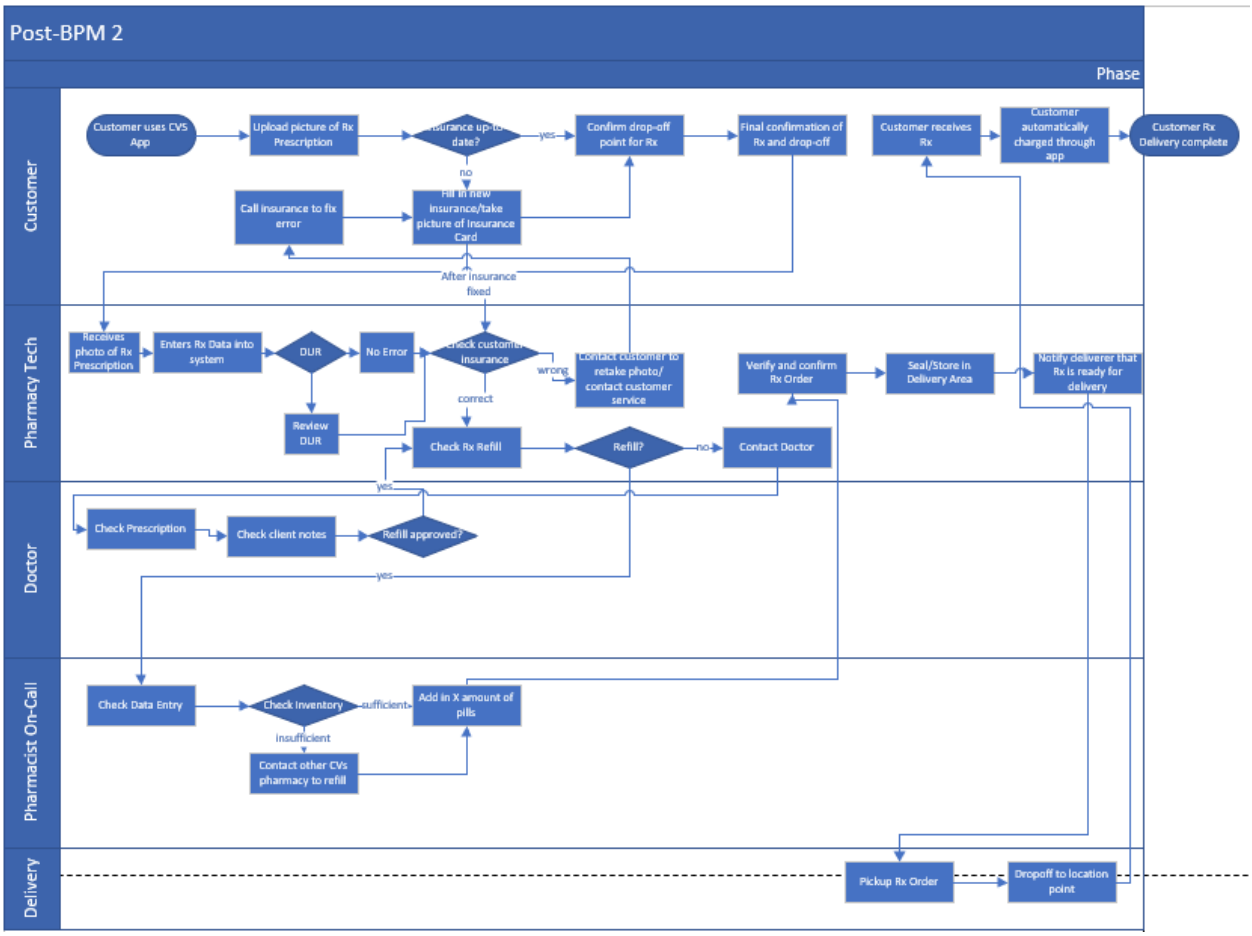
1. The best way to optimize the process would be by having the customer download the app so they're eligible to get delivery of the Rx. Of course the driver would have to be certified and hired directly by CVS for security purposes (with an extensive background check as well), so this way the Rx prescriptions would definitely make their way to the customer. The app would ease the process of giving the Rx to the pharmacy by only needing to upload a photo of the Rx prescription note to the app, and the CVS pharmacy that the customer goes to regularly would receive the notification (the customer can also upload a photo of their insurance ID once it expires or they switch to a new medical insurance). This way the customer doesn't even need to go in, and only if there's an issue the customer will be contacted (pretty much contactless until delivery). The delivery would also be made before 9PM usually (or whatever time the customer put in), so that way the customer will still be awake when they receive the Rx, sign it off on the app in front of the driver for security, and then the customer will be automatically charged once the delivery is made.
2. Business, Operational, Technical Definitions:
    a. Business Definitions:
        i. CVS App Adoption Rate: Percentage of customers who use the app to upload photos of Rx and insurance ID, and are also eligible for delivery with the app.
        ii. Customer Experience: Customers' review of using the CVS App, its deliveries, and the ratings of each service provided by CVS on their app specifically.
        iii. Data Efficiency: The effectiveness of the data been sent through the CVS app to the CVS pharmacy, and how accurate the data is that is being processed.
    b. Operational Definitions:
        i. CVS App Efficiency Rate: How much time and money is being saved by customers using the app, instead of coming in to the CVS.
        ii. CVS App Turnover Rate: Amount of customers who decide to not use the app and instead decide to drop off/pickup Rx Prescription in person. This should be an indication to look into reasons why customers refuse to download the app.
        iii. CVS App Usage Rate: Percentage of customers who decide to use the app on a consistent basis, and using the delivery service provided by the CVS app exclusively.
    c. Technical Definitions:
        i. CVS App Update Frequency: How often the CVS app gets updated (to prevent bugs, mix-ups of Rx, and inconsistencies) by app developers/engineers of CVS.
        ii. Customer Data Accuracy: Accuracy percentage of Rx prescriptions and drop-offs of customers using the CVS app, as well as refills approved and updated.

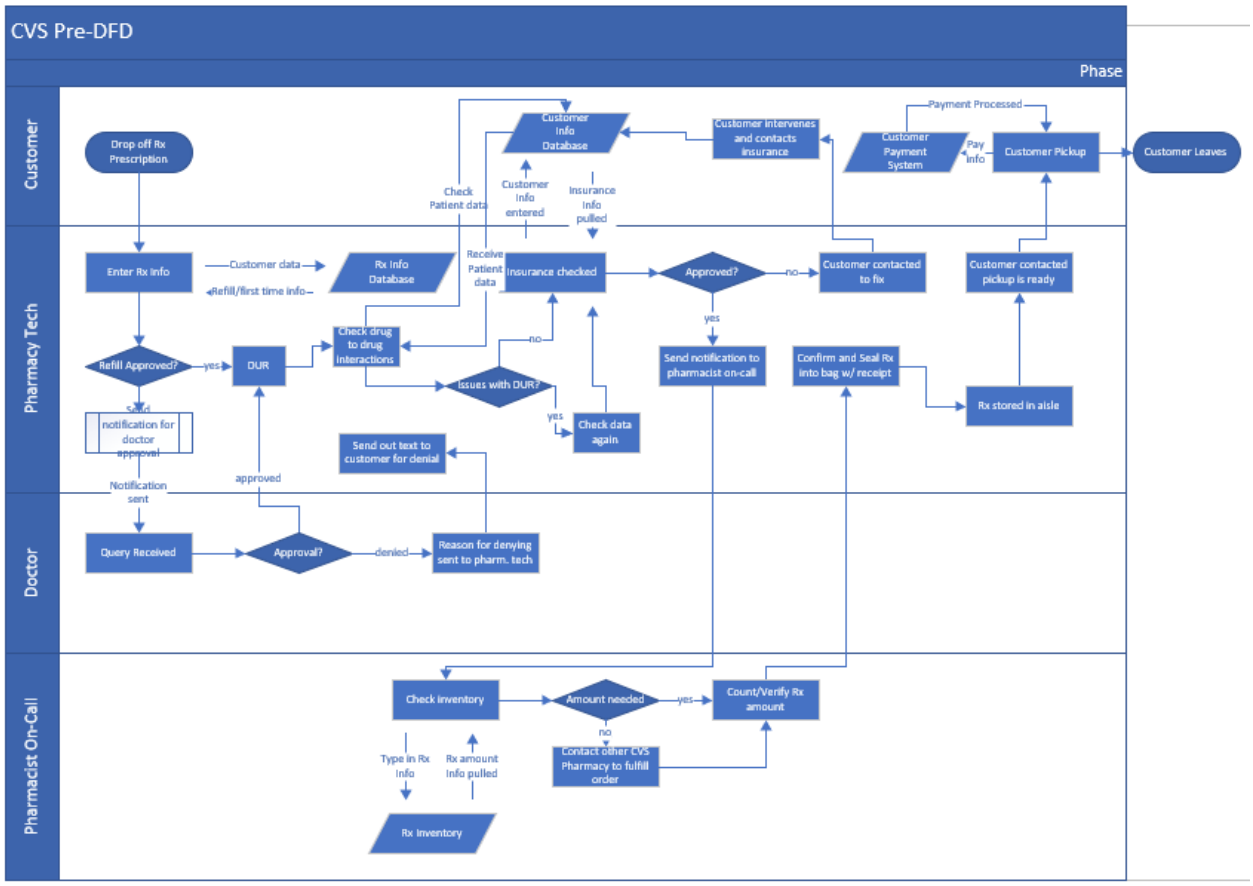
iii. Rx Inventory Update/Refill Frequency: How often the Rx inventory gets replaced so that the CVS pharmacy doesn't need to contact separate CVS pharmacies to fulfill the orders.

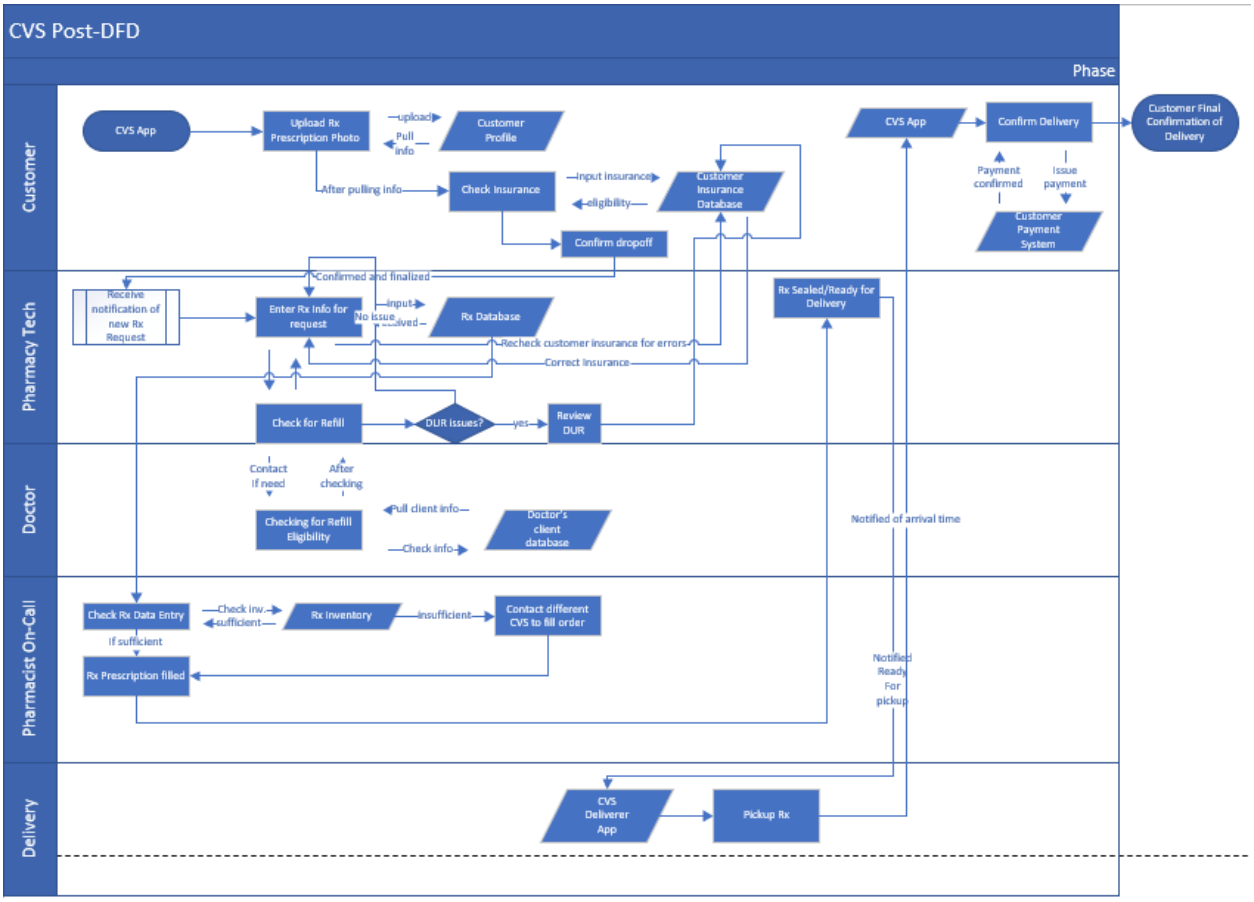
3. The reporting data would pretty much be a method of sustained reports of customers and Rx with data that shows: numbers of customers who use the CVS app, number of deliveries made/pickups made if decide to not do delivery, amount of money made by CVS for customers using the app, time stamps of when deliveries are made based on chosen times by customers, times of how long it takes for Rx prescriptions to be filled and sealed, and how many people decide to use the CVS App vs. coming into the pharmacy. The data would implement different types of charts (bar graphs, line graphs, circle charts) to show best visualization of the data needed to be shown. It should definitely be easy to read so the executives of CVS can read it and explain the data to shareholders.
4. The KPI I would establish are: CVS App reviews (online), average prescriptions filled per day, average sale per transaction, inventory turnover frequency, and dispensary errors.
    a. CVS App reviews: This is a necessity because if CVS wants their pharmacy app to thrive, they need good reviews and incentives for people to use the app. If people also see that the app has a low review on the app store, people will decide to instead just come in and not use the app at all.
    b. Avg Rx filled per day: This KPI is basically what it says it is. This is to check the pharmacy's success from revenue of selling prescriptions. It can show how many prescriptions are filled per day on average, and then can estimate the rest of the year (and serve as a baseline target for CVS).
    c. Avg sales per transaction: This is needed to record the data on how much on average the pharmacy receives per transaction to develop an idea of the pharmacy's revenue. It should improve over time, and if it stays stagnant or falls, then a new strategy needs to be implemented to increase sales.
    d. Inventory turnover frequency: This shows how often inventory is sold and replaced. This gives CVS Pharmacy a better understanding of how often to replace the inventory, and how much is being spent/gained through the inventory. Low or excess inventory turnover is bad for sales (drop in sales usually), and high or insufficient inventory turnover is an increase in sales or can mean that not enough inventory is available.
    e. Dispensary errors: CVS Pharmacists are people too, they make errors. But these errors can have terrible consequences for the customer/patient. This is a KPI that's needed immensely to make sure that the staff is competent, and that they're not overworked (which can lead to more mistakes over time). If these errors are consistent or at least more than the norm, it's time to have a staff meeting to re-evaluate practices.
5. Opportunities or concerns?

    a. I think the opportunity here is that the need for the front area pharmacist/tech to take Rx prescriptions and give prescriptions to customers can be negated, and instead have it all done via the app and delivery. This can allow for pharmacists and pharmacy techs to focus only on the Rx prescriptions, without having their train of thought broken by someone waiting at the front counter.
    b. The concerns that I have for this area is that there needs to be an immense amount of trust for the delivery drivers (which is where the background check comes in), since this is for peoples' health. The app will also have to work flawlessly to not accidentally upload a different photo of the Rx to a different customer info database, and even having issues with insurance could cause monetary problems for either CVS or the customer themselves. It must be seamless and constantly updated to prevent bugs and errors.
6. The changes are justified through the increased output of inventory sales and transactions, as well as also making sure that pharmacists can focus on what they went to school for – prescriptions. By not needing to having a front counter or desk, pharmacists can spend more time on refilling prescriptions needed – and when people are doing the same thing it becomes pretty much autonomous and lessens the chance of errors. The Rx photo upload and delivery can also save time on dealing with customers and instead the prescriptions can be packaged/sealed faster for faster delivery (or pickup if the customer wants). The amount of customers who will use the app after seeing continued success can bring CVS pharmacy great changes, like increased revenue and inventory turnover (better sales in this situation).


CVS Pre-BPM
Phase
Customer
Pharmacy Tech
Doctor
Pharmacist On-Call
Rx Order Placed/ Dropped Off
Customer fixes insurance
Pickup with info
Customer check out
yes
Pickup Time Told to Customer
Enter Rx into System
Drop off Rx slip into right box
Refill?
yes
no
DUR – hard stop?
no
Check Insurance
Insurance wrong
Contact customer to fix insurance
Yes
no
Call Doctor
Ok
Need more info/client contact
Verify and confirm Rx Order
Seal/Store in correct aisle
Contact customer that Rx is ready for pickup
Check Prescription
Check Client Notes
Approve Refill
Check inventory
sufficient
Add in X amount of pills
insufficient
Contact other CVS pharmacies to refill


Post-BPM 2
Phase
Customer
Pharmacy Tech
Doctor
Pharmacist On-Call
Delivery
Customer uses CVS App
Upload picture of Rx Prescription
yes
Confirm drop-off point for Rx
Final confirmation of Rx and drop-off
Customer receives Rx
Customer automatically charged through app
Customer Rx Delivery complete
no
Call insurance to fix error
After insurance fixed
Receives photo of Rx Prescription
Enters Rx Data into system
DUR
No Error
wrong
correct
Review DUR
Check Rx Refill
Refill?
no
Contact Doctor
Verify and confirm Rx Order
Seal/Store in Delivery Area
Notify deliverer that Rx is ready for delivery
yes
Check Prescription
Check client notes
Refill approved?
yes
Check Data Entry
Check Inventory
sufficient
Add in X amount of pills
Insufficient
Contact other CVs pharmacy to refill
Pickup Rx Order
Dropoff to location point


CVS Pre-DFD
Phase
Customer
Pharmacy Tech
Doctor
Pharmacist On-Call
Drop off Rx Prescription
Customer Info Database
Customer intervenes and contacts insurance
Payment Processed
Customer Payment System
Pay Info
Customer Pickup
Customer Leaves
Check Patient data
Customer Info entered
Insurance Info pulled
Enter Rx Info
Customer data
Refill/first time info
Rx Info Database
Receive Patient data
Insurance checked
Approved?
no
Customer contacted to fix
Customer contacted pickup is ready
yes
Refill Approved?
yes
DUR
Check drug to drug Interactions
no
Issues with DUR?
yes
Check data again
Send notification to pharmacist on-call
Confirm and Seal Rx into bag w/ receipt
Rx stored in aisle
Send notification for doctor approval
Send out text to customer for denial
Notification sent
approved
Query Received
Approval?
denied
Reason for denying sent to pharm. tech
Check inventory
Amount needed
yes
Count/Verify Rx amount
no
Contact other CVS Pharmacy to fulfill order
Type in Rx Info
Rx amount Info pulled
Rx Inventory


CVS Post-DFD
Phase
Customer
Pharmacy Tech
Doctor
Pharmacist On-Call
Delivery
CVS App
Upload Rx Prescription Photo
upload
Pull info
Customer Profile
After pulling info
Check Insurance
input insurance
eligibility
Customer Insurance Database
Confirm dropoff
CVS App
Confirm Delivery
Customer Final Confirmation of Delivery
Payment confirmed
Issue payment
Customer Payment System
Confirmed and finalized
Receive notification of new Rx Request
Enter Rx Info for request
input
No issue arised
Rx Database
Recheck customer insurance for errors
Correct Insurance
Rx Sealed/Ready for Delivery
Check for Refill
DUR issues?
yes
Review DUR
Contact if need
After checking
Checking for Refill Eligibility
Pull client info
Check info
Doctor's client database
Notified of arrival time
Check Rx Data Entry
Check inv.
sufficient
Rx Inventory
insufficient
Contact different CVS to fill order
If sufficient
Rx Prescription filled
Notified Ready For pickup
CVS Deliverer App
Pickup Rx