# UPMC Presbyterian Inpatient Pharmacy Practicum Experience

# **Inpatient Pharmacy Description**

The Inpatient Pharmacy provides 24 hour service to patients in the hospital. Pharmacists and pharmacy technicians work closely with physicians and nurses to assure that patients are receiving appropriate medications while hospitalized.

Hospital pharmacists and technicians are responsible for the compounding of many pharmaceutical products for patient administration.

Picture of the entrance of the inpatient pharmacy which is in an isolated area of the hospital.



## **UPMC Presbyterian Inpatient Pharmacy**

I choose this site because I wanted experience in a hospital setting. I was already certified as a pharmacy technician and hoped to get a part time paying job.

My goal is a career in the medical field, I believe majoring in psychology and viewing my practicum through a psychology point of view would enhance my experience and knowledge to further my career.

Not only did I learn about working in a large team but I also learned from pharmacists, nurses, technicians, and other students. Utilizing the education I learned from my major really allowed me to relate it to my practicum experience in the hospital.

# **UPMC** Inpatient Pharmacy

The UPMC Presbyterian Pharmacy Department has nearly 300:

- Pharmacists
- Pharmacy techs
- Residents and interns
- Support staff

#### Medical units and services include:

- Cardiology
- Cardiovascular ICU
- Coronary Care Unit
- Cystic Fibrosis
- Heart Failure ICU
- Heart Transplant
- Infectious Diseases
- Internal Medicine
- Liver Transplant
- Lung Transplant
- Medical ICU
- Nephrology and Kidney Transplant
- Neurosurgery ICU
- Neurology
- PACU
- Surgical ICU

## **Duties:**

Line fill: Gather and fill any first dose orders

Robot: Make sure the medication dispensing robot is working. Disperse med folders to the delivery bins. Process and gather "batch" large quantity of medications designated for different doses for a particular time.

Delivery: Technicians are designated certain units of the hospital and deliver medications to the med rooms every hour.

- Presbyterian
- Montefiore

IV room: A designated area within the pharmacy that has a controlled environment. It is completely sterile. All compounding happens in there.

**Ante**: A technician will gather medications and supplies and sterilize them to enter the IV room.

**Tech A**: Compounds all first doses including stats as well as tech A batch

**Tech B**: Compounds tech B batch and helps tech A with first doses

**Tech C**: Takes inventory on stock medications and replenish the count.





Presbyterian Robot

Pros: a large amount of prescriptions are filled by these robots

Cons: The technical difficulties that occur on the robots happen at least once a week, sometimes it can be shut down for a day and really affect the work flow of the pharmacy.



Med Carts: Used by the delivery technicians to help transport medications

Acudose 1: Behind the med carts. House medications that are not in the carousels



Delivery bins: Checked meds that are placed in the appropriate unit bins so they can be organized easily for delivery technicians.

#### Med Rooms:

Each unit of the hospital has a medication room where they house patient specific prescriptions, stock supply medications, and refrigerated medications.

This image is an example of the general set up for a med room. The machine with the monitor is called an acudose machine, each "cell" will open when the medication is chosen and inventory is constantly being checked as well as expiration dates. Controlled medications are also located in the acudose machine and there has to be a witness when delivering any controlled medication.

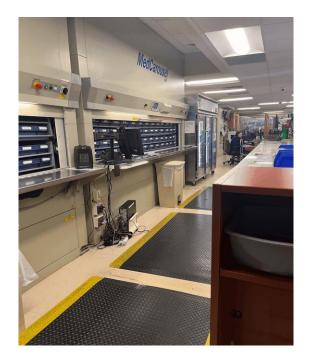
The shelf located on the further side of the acudose machine is where each room of that unit is separated so that patient specific medications can be easily organized and retrieved.

Below the cabinet is the refrigerator that is also organized into sections of each room and an area for stock medications.



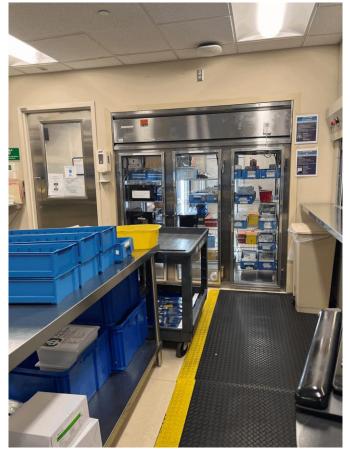






Line Fill prescription printers Carousel 1
Carousel 2 and line fill area with refrigerator

Line Fill: The three pictures above are essentially the main areas of line fill A. The two printers in the first picture are where prescription labels are printed. The one all the way to the left are for STAT labels and have a red line down the side. The other printer are for the regular labels. Once the pharmacist approves a medication it is sent to the printer, once it is printed the medication will show up in which ever carousel it is located in. On the computer it will register the carousel to move and stop in the position for the technician to gather the medication. The label will be attached and sent down to the checking pharmacist. Once it is checked it will be added to the deliver bins to be delivered.



Outside the Ante room where some supplies are located and refrigerated med



Carousel 4 where most med stock is located for compounding

### IV Room: Garb and Sterilization

Before you enter the IV room there is the Ante room. Another sterile room but not a completely controlled environment. You have to enter with a hair net or a scrub cap.

To begin garb you have to first wear scrubs that are non shedding material. A scrub cap and knee high booties that are "Scrub cap" material. A surgical mask and another head cover that covers your whole head besides the eye area. Next you walk over to the sink and with water and soap you use the nail pick to clean under the nails and then use the soap to wash your arms and hands and wipe with a cloth napkin. After that you get ready to enter the "sterile zone" but before, you get another set of booties once one is one step in the zone and put the other one on. Next you will grab a gown that should go past your knees and zipped up. Sanitize hands and put on surgical gloves once the gloves are on you are now allowed to enter the IV room.

The image on the right is me fully garbed.



## **Order of events:**

The doctor, physician assistant or nurse practitioner messages or calls the pharmacist. They discuss proper medication treatment for a patient. Next the prescription is written and it is decided how stat the medication is by a time slot. The prescription label prints in the ante room and the ante technician determines if it is a stock med ready to send to the unit or if it needs to be compounded. If it is already made then they will attach the label to the medication and have it checked by the pharmacist and it is sent to the unit.

If the medication is not previously made, then they will gather the medication vial and send it into the IV room with the label. Once it is in the IV room then tech A will compound it. There are machines in the room called IVX. There is bar code on the label if it scans then the machine will take you step by step on compounding while taking pictures for the pharmacist to check the process of the compounding. If it is not logged into IVX then the technician will either do the math to compound or there will be written instructions. All materials used need to be saved and sent in for the pharmacist to check. Any needle or sharps will be disposed of properly.

## The IV Room



- The cart in the middle has all supplies that one may need.
- In front of the cart, closest to the chair is where tech A works. On the other side of the cart is where tech B works.
- The machines or robots to the left of the picture create stock of specifically Vancomycin and Sodium Phosphate.

#### Overall experience:

My overall experience was educational. I learned how an inpatient pharmacy works and the contribution it has on the rest of the hospital. I learned about UPMC Presbyterian and the units that they have and the work that they do for trauma patients. It was very cool to learn about compounding medications and learning the inner workings of the hospital.

Personally, I wish I would've chosen a practicum that had more direct patient interaction. But learning about a different areas of medicine was very interesting. Psychology can be applied in all sectors of the hospital. Whether it is understanding how to have bedside manner, speaking to the staff, and how to handle situations and process them internally.

## Recommendations

I would only recommend this type of setting if a student is interested in pharmacy or medicine. As a psychology major there is always a setting that psychology can be applied. Depending on what field of psychology one wants to go into or have interest in, this type of setting is more pharmacological and medical. I would also recommend this type of setting if you want to be in the medical field but do not wish to have very much patient interaction on a day to day basis.