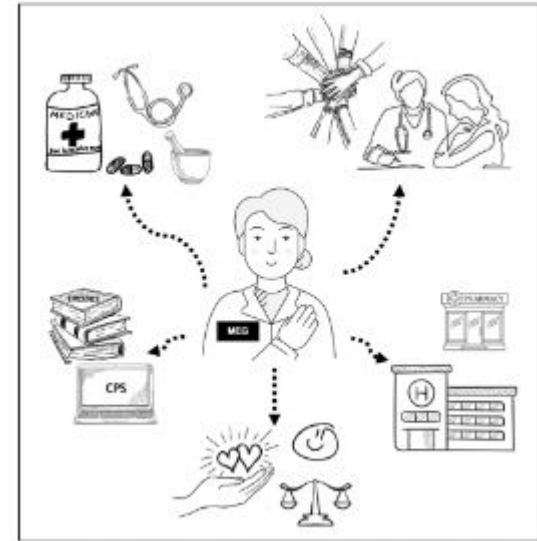


# Using Art to Explore Pharmacy Student Perceptions of Pharmacist Roles

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Credit: Meghan Noyen, PharmD

# Research Question

How do students entering the Doctor of Pharmacy program at the University of Alberta perceive pharmacist roles?

# Method

Draw and write technique, based on the iSquare protocol

See: Hartel, J., Noone, R., Oh, C., Power, S., Danzanov, P., & Kelly, B. (2018). The iSquare protocol: combining research, art, and pedagogy through the draw-and-write technique. *Qualitative Research*, 18(4), 433-450.

# Research Ethics Board Approval

Pro00095356, July 26, 2021

# Data Collection Materials

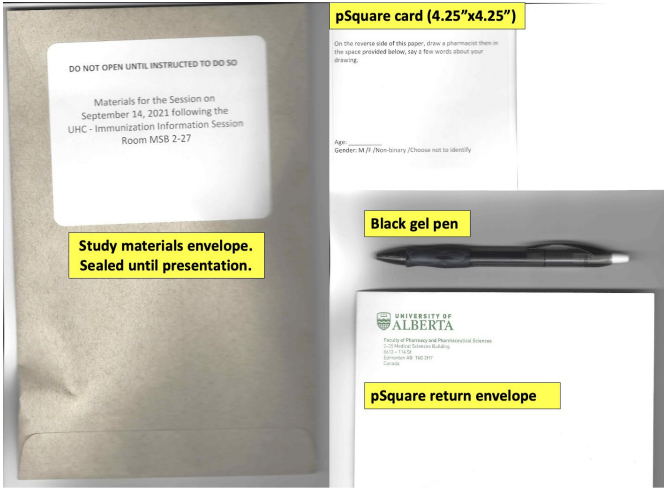
WRITE



4.25"



<p>On the reverse side of this paper, draw a pharmacist then in the space provided below, say a few words about your drawing.</p> <p>Age: _____ Gender: M / F / Non-binary / Choose not to identify</p>	
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DRAW



# Sample

Year 1 Doctor of Pharmacy (PharmD) students, Class of 2025,  
University of Alberta, Edmonton Canada

n= 124

At entry to the program September 2021:

Employed in a pharmacy = 27%

Employed in a related health care field = 41%

Sure” or “very sure” pharmacy is the right career = 66%

Place of residency: Alberta, Canada = 92%

# Results

Data collected on September 14, 2021

## Participants

n=100 submissions (draw and write, squares)

Similar demographics to the Class of 2025 (n=124)

Gender	N=100	N=124
Male	39%	39.5%
Female	59%	59.6%
Non-binary	1%	0.008%
DWTI	1%	0
Age	N=100	N=120
19	6%	7%
20	19%	20%
21	22%	25%
22	28%	22%
23	8%	10%
24	5%	6%
25	4%	3%
26	4%	2%
27	0	<1%
28	3%	3%
29	0	<1%
36	0	<1%
40	1%	<1%

Image ID: **2025-Y1-SAMPLE**

**Image Drawn  
By Student**

**Written text by student:** *the description of the drawing written on reverse side of the pSquare.*

**Self identified gender:** *of the student (options: Male= M, Female=F, NB= non-binary, DNWTI= do not wish to identify)*



Text: I drew a pharmacist working at retail & handing out a pill to patients

Gender: chose not to identify

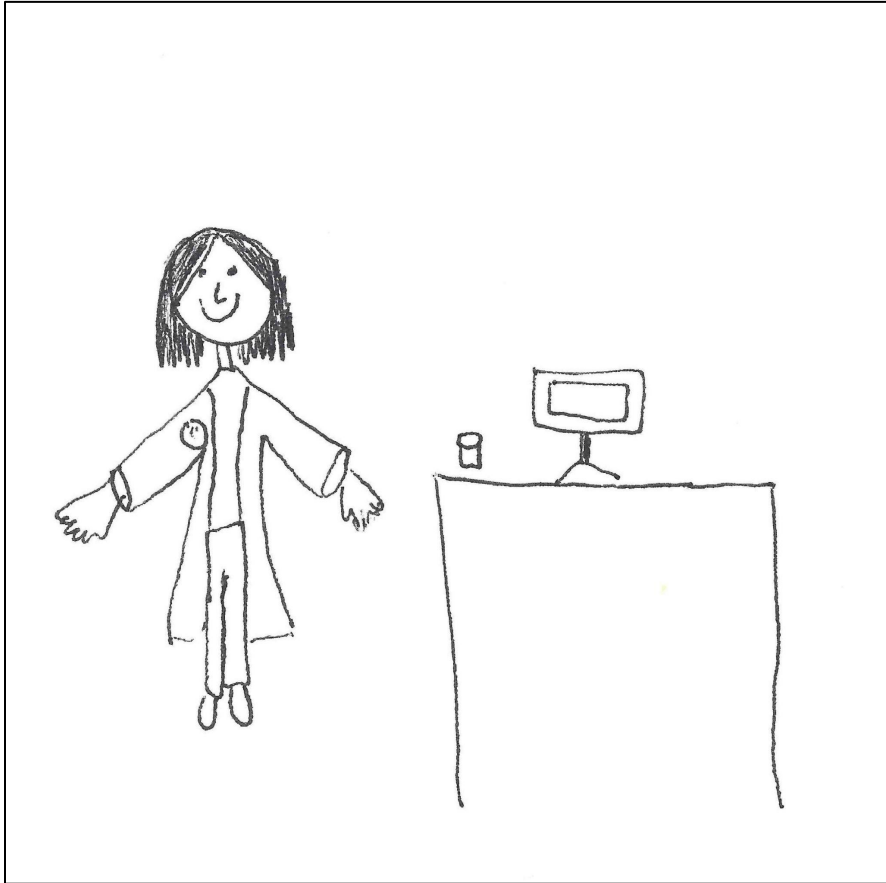


Dispensing, advising, educating,  
counseling, making therapeutic  
decisions, primary care provider,  
knowledgeable

Text: Dispensing, advising, education,  
counseling, making therapeutic decisions,  
primary care provider, knowledgeable

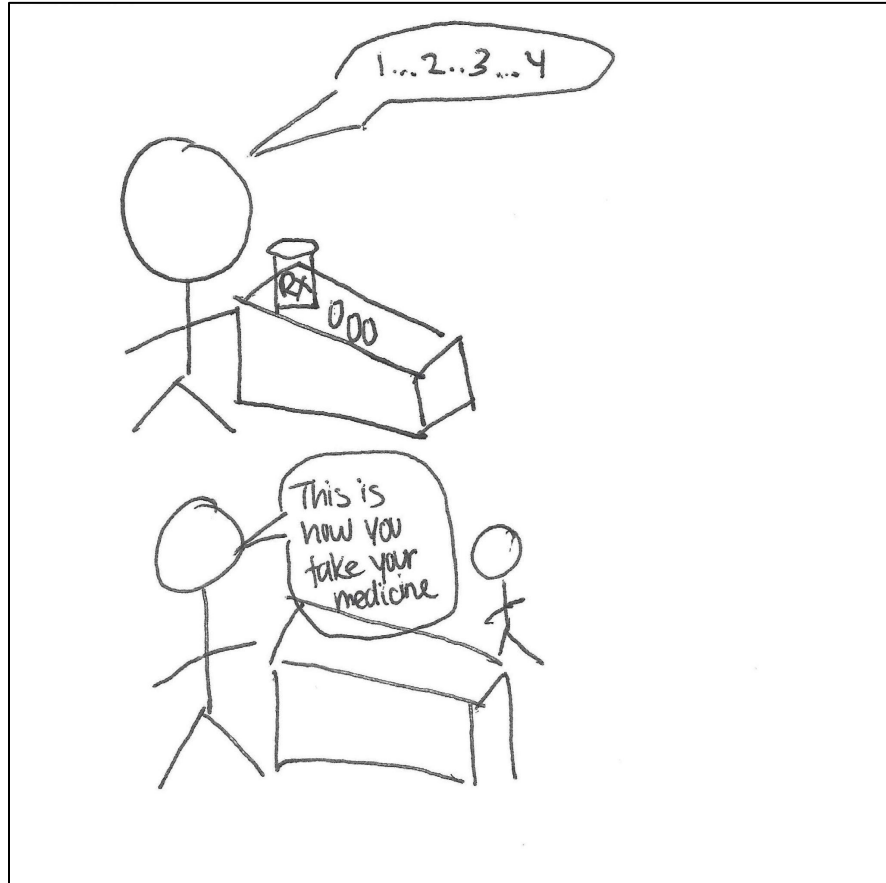
Gender: M





Text: I drew a pharmacist next to a vial and computer. The vial represents the pharmacists medication knowledge. The computer represents patient information collected by a pharmacist.

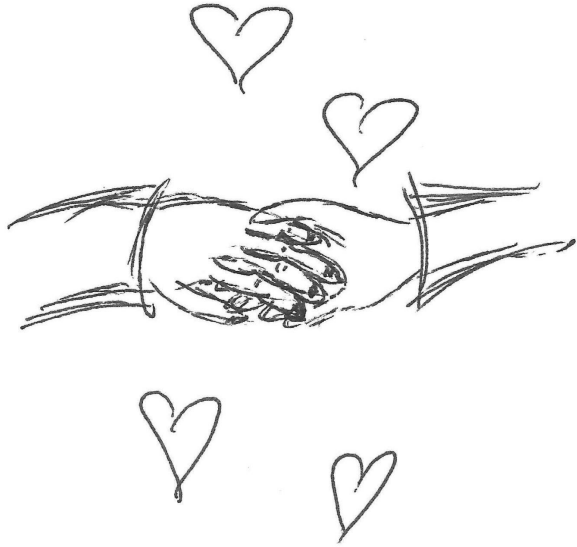
Gender: F



Text: I drew a pharmacist counting pills (dispensing) and counselling a patient on appropriate drug use.

Gender: F

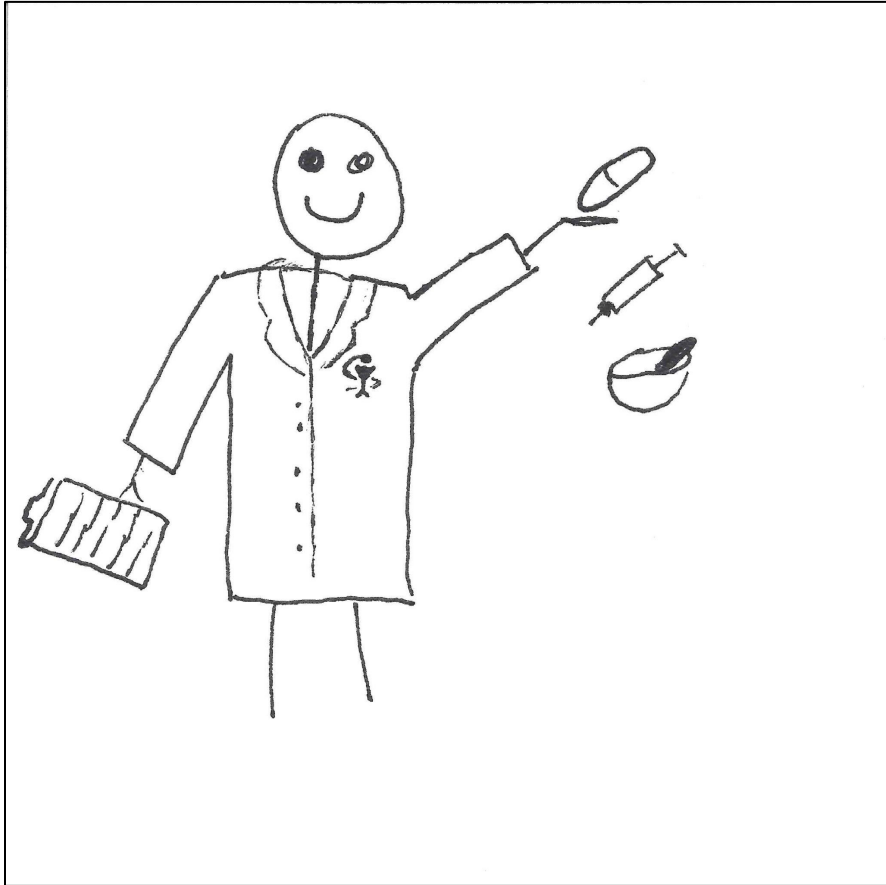
Image ID: 2025-Y1-005



Text: A helping hand. Kind, empathetic, resourceful.

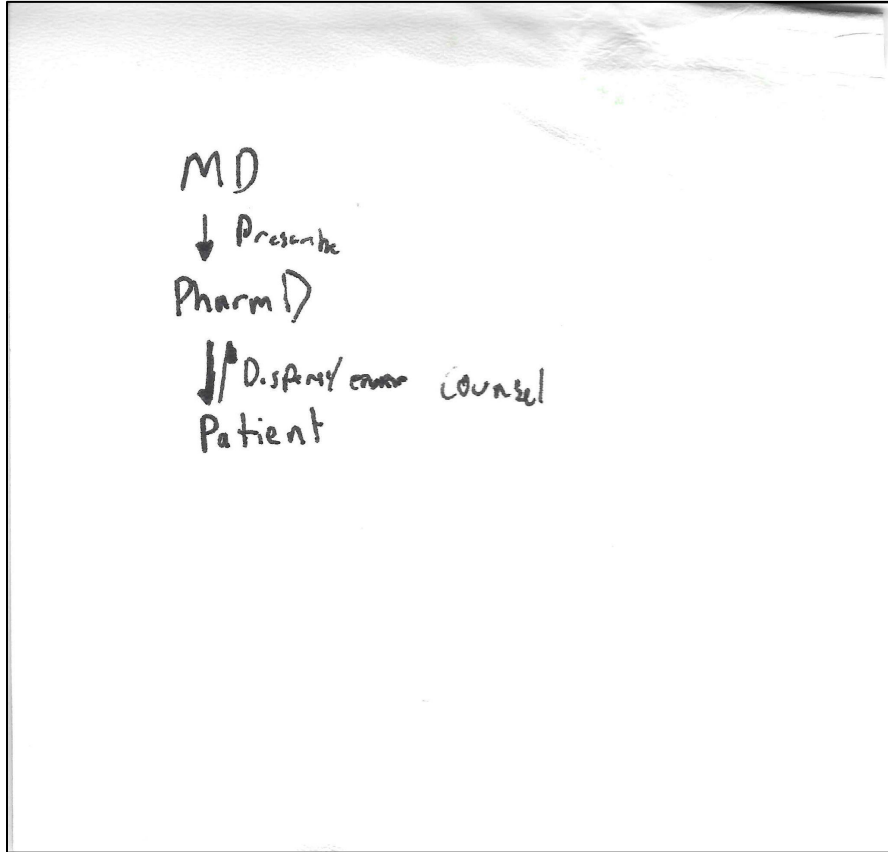
Gender: F

Image ID: 2025-Y1-006



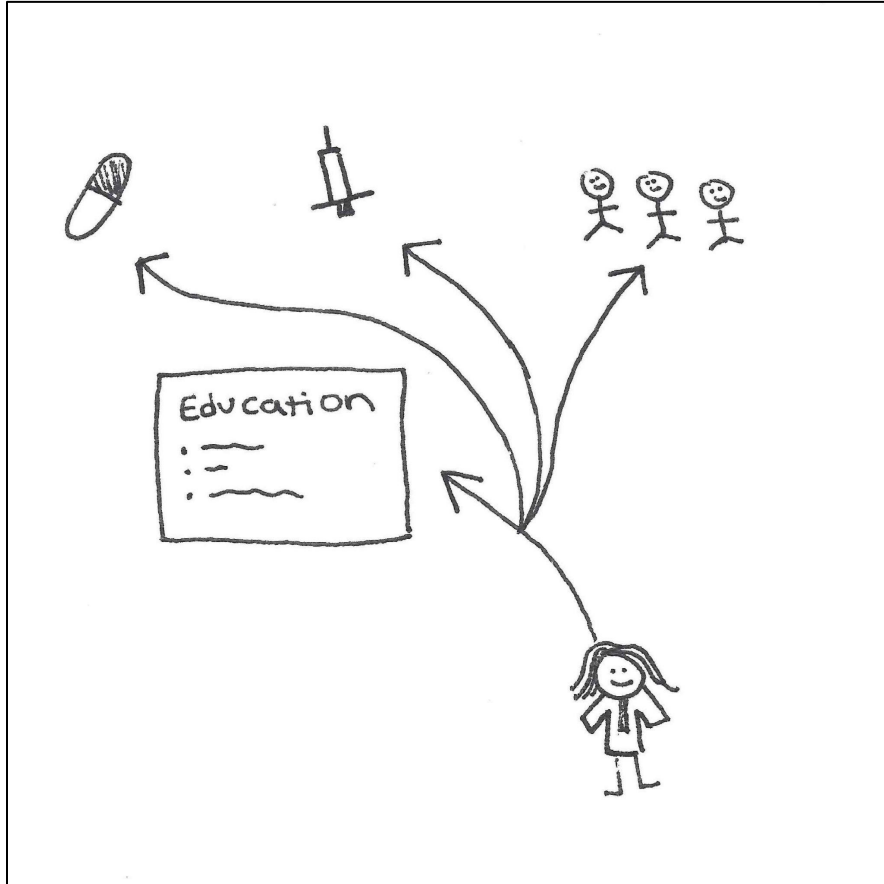
Text: White coat=professional, pill=dispensing medication, syringe=admin of injections, mortar & pestle= compounding, clipboard= clinical aspect.

Gender: M



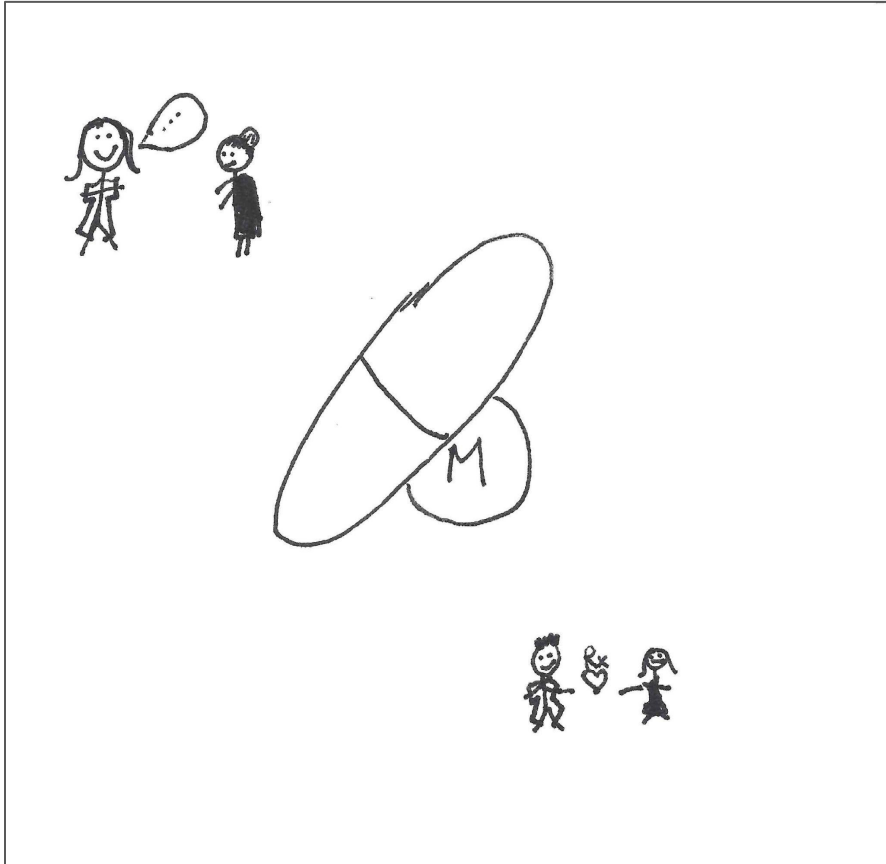
Text: Roles of pharmacists to act as a liaison between the prescriber and the patient.

Gender: M



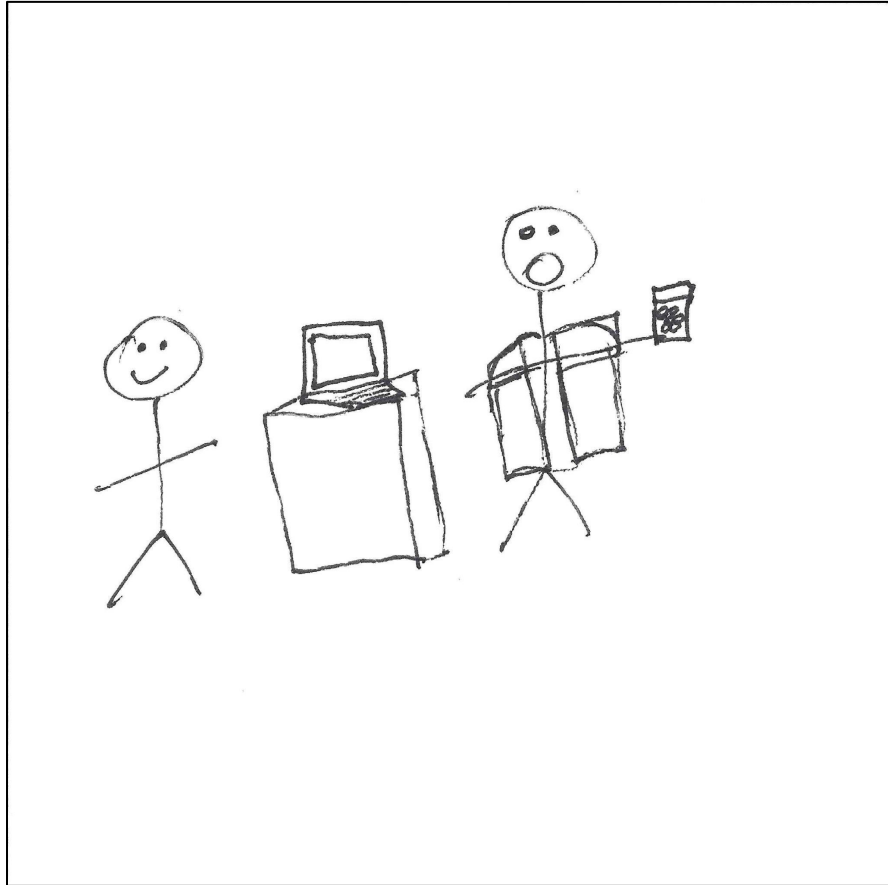
Text: It's a multifaceted role. Includes obvious tasks (i.e. filling, dispensing prescriptions, vaccinations). Also includes community education outreach. Inter-professional collaboration to promote patient health and wellbeing.

Gender: F



Text: Communication is important in helping patients feel safe and knowledgeable about what they are taking, Giving support and caring for patients is also an important part of care.

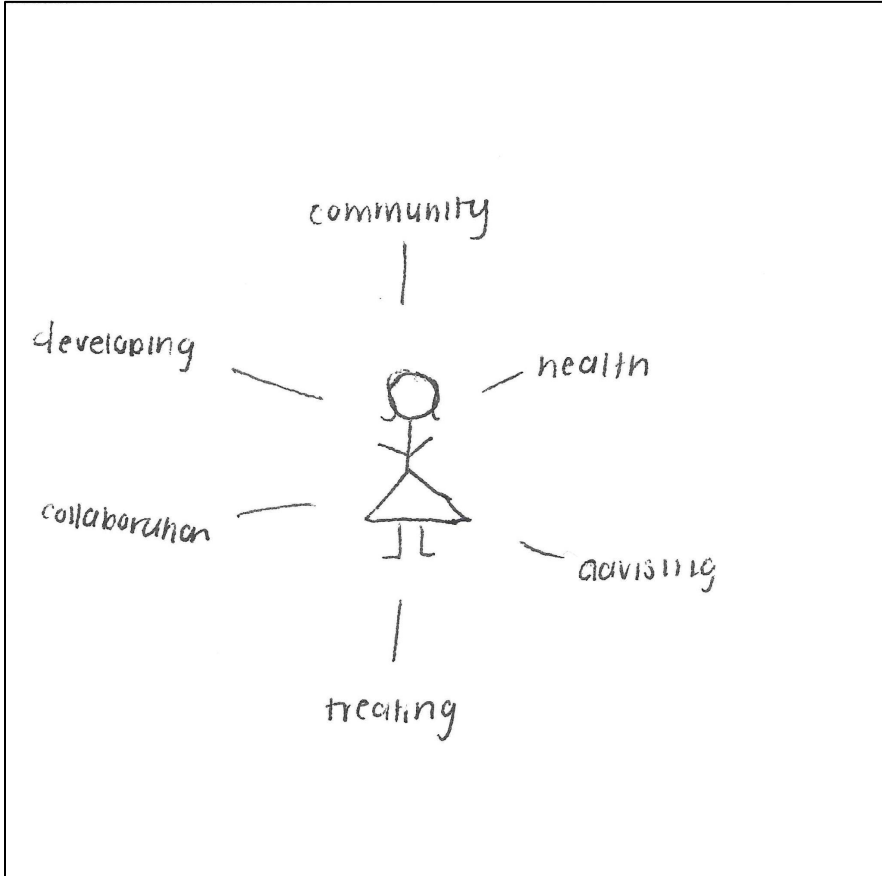
Gender: F



Text: The pharmacist on the right hand side is filling a prescription and explaining to the patient how to use the drug.

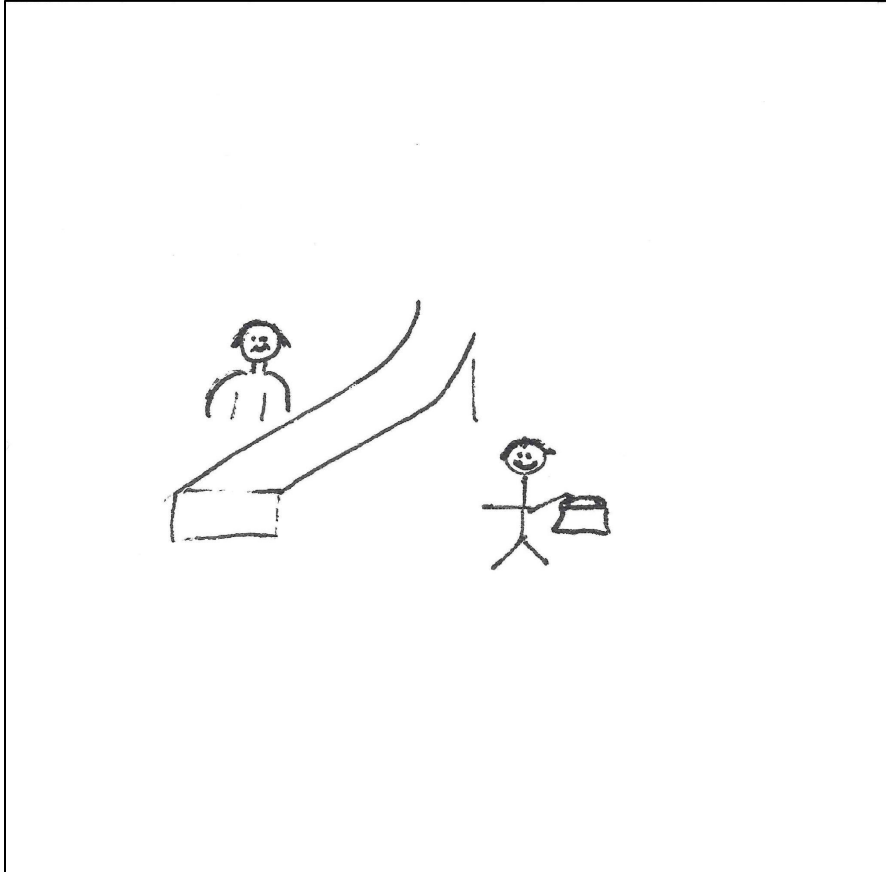
Gender: M





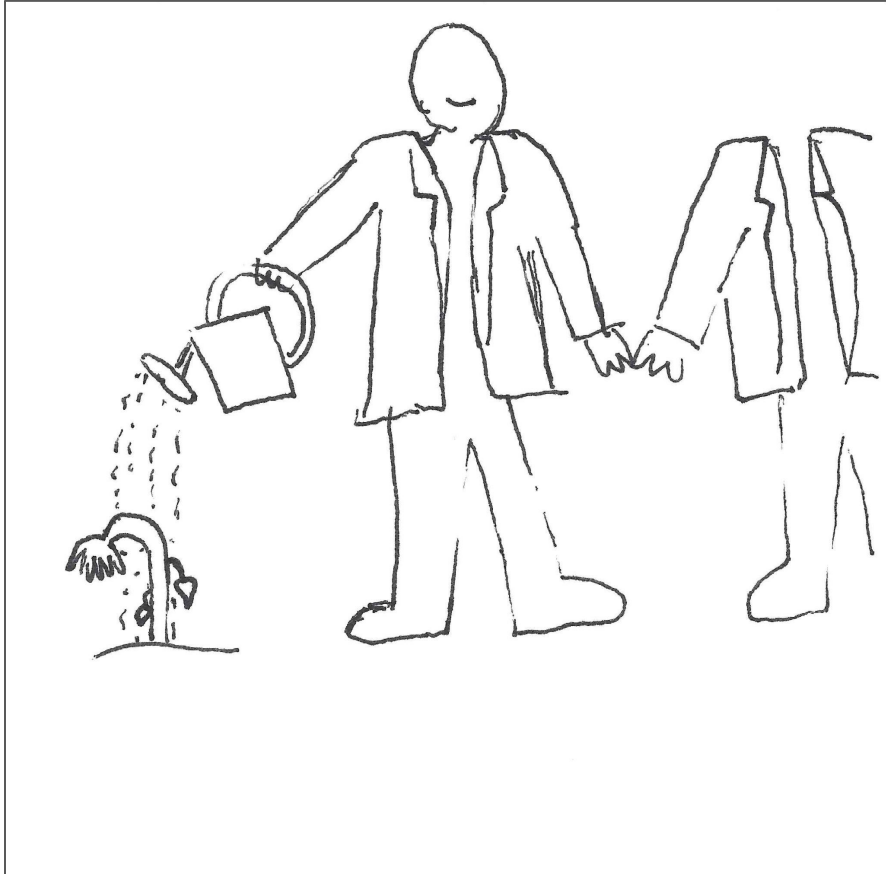
Text: My drawing shows a pharmacist who is at the center of various items to which she must attend. The role of a pharmacist has grown so much and we are entering a profession with dynamic expectations and regulations. Working as an accessible health care provider she has to balance all the domains and take care of her community.

Gender: F



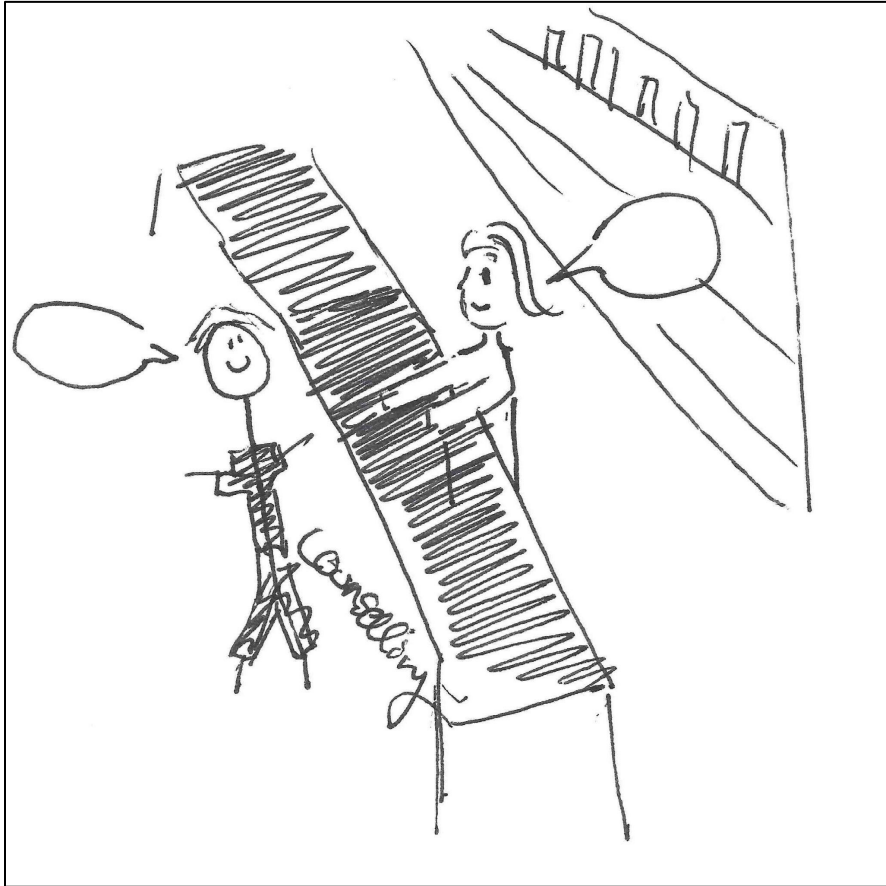
Text: Filling prescriptions and dialoguing with patients to form relationships to help with their medications.

Gender: M



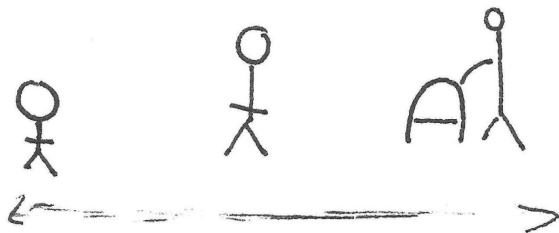
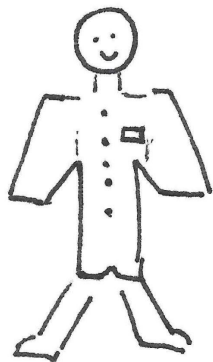
Text:I've drawn a pharmacist watering a wilted plant to represent them helping an ill patient replenish and become healthy. They are also holding hands with another professional to show they aren't alone. We work together with other healthcare professionals to increase public health.

Gender: M



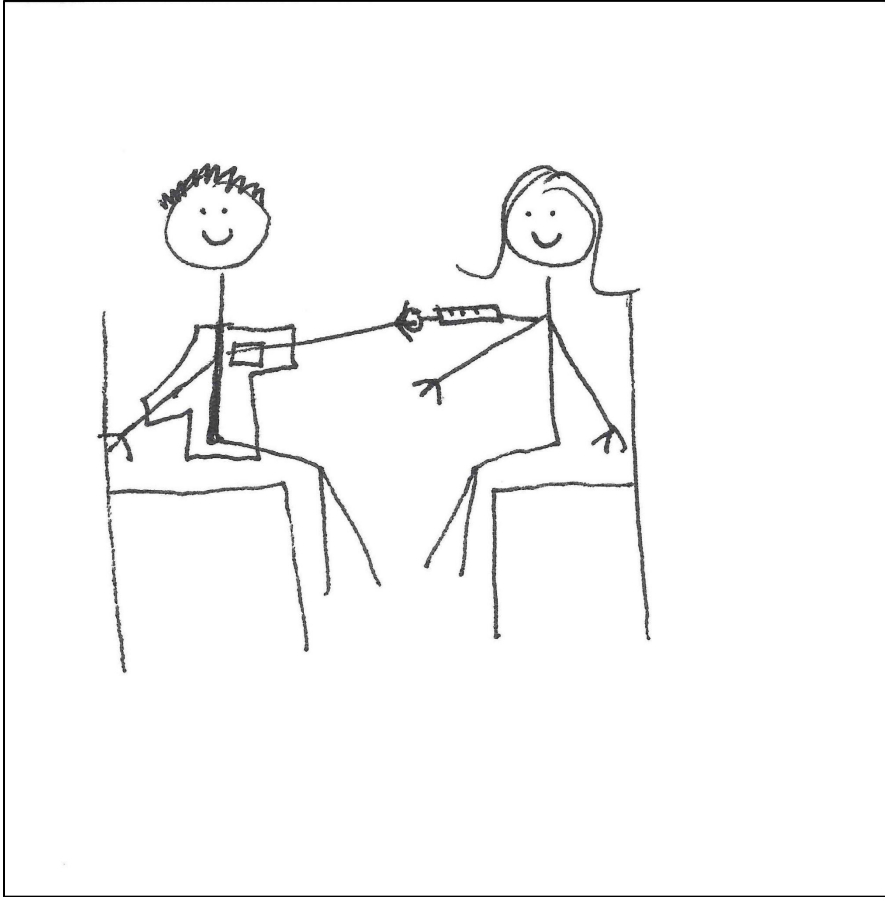
Text: Patient-centered care, counselling, patient interactions, medications.

Gender: F



Text: A pharmacist overlooking the health of any age

Gender: M



Text: Pharmacists play a major role in giving immunizations to help protect our communities

Gender: F



Text: It is a pharmacist introducing themselves and asking the person if they needed help

Gender: F



Text: Pharmacists have a major role in patient care beyond just dispensing medications

Gender: F





Text: The pharmacist is happy & excited to help others. The role of the pharmacist is to provide patient care which is what she is doing.

Gender: F



Text: In the center, I drew a signature white coat of a pharmacist. Around it I drew lab materials (compounding), books (academia), giving drugs (practice), and a conference (professional development)

Gender: M

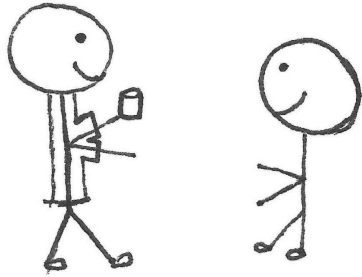
Image ID: 2025-Y1-021



Text: Pharmacist at the consultation desk  
greeting a patient

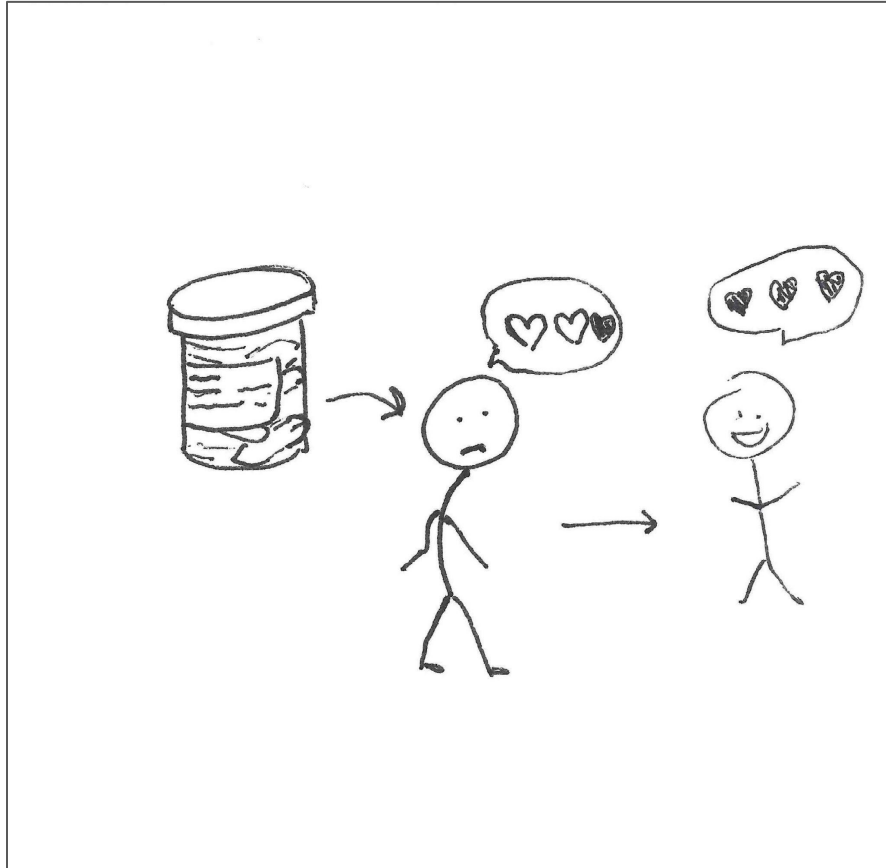
Gender: M

Image ID: 2025-Y1-022



Text: Patient care/interaction, empathy,  
dispensing medication

Gender: F



Text: Pharmacists provide care to patients who are in need of help using medication

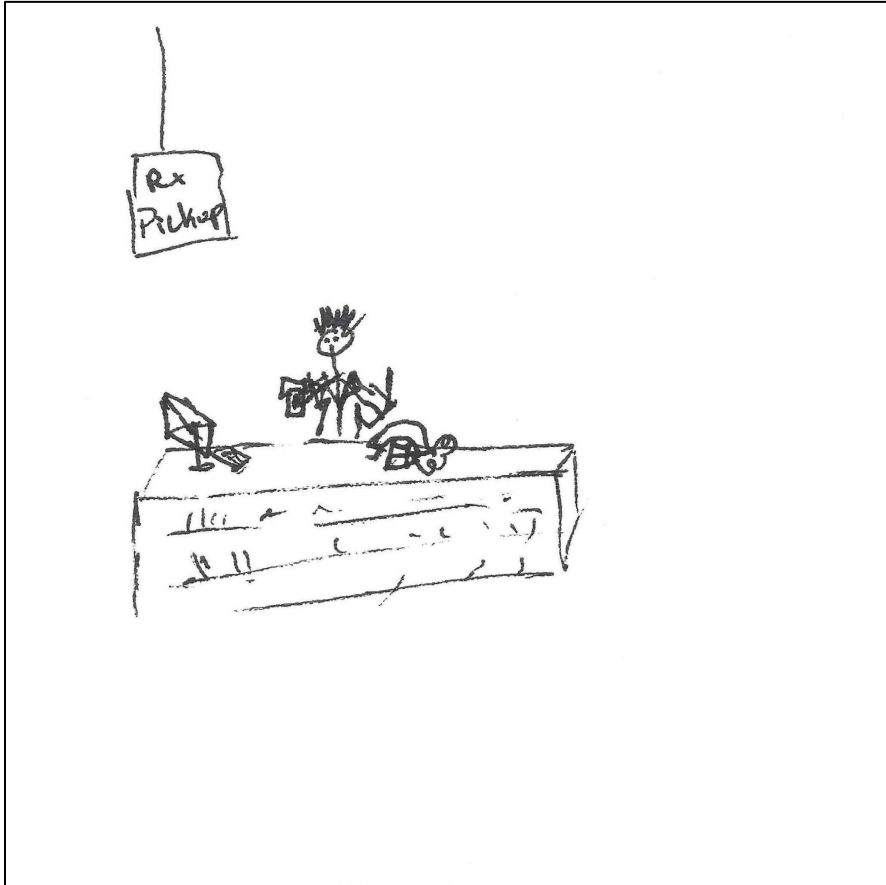
Gender: F

Image ID: 2025-Y1-024



Text: I drew a community pharmacist working in a small pharmacy surrounded by shelves of pills and a computer

Gender: F



Text: My current view of pharmacists if mainly from the perspective of customer.

Gender: M



Text: Pharmacists listen with compassion and empathy, and help their patients problem-solve

Gender: F





Text: Pharmacists help the community :)

Gender: M



Text: My drawing is a pharmacist and a couple of items associated with pharmacy (prescriptions, pills, etc).

Gender: F



Text: Pharmacists are caring and empathetic

Gender: F

Text: Compassionate, confident, in an interaction. Sharp and attentive.

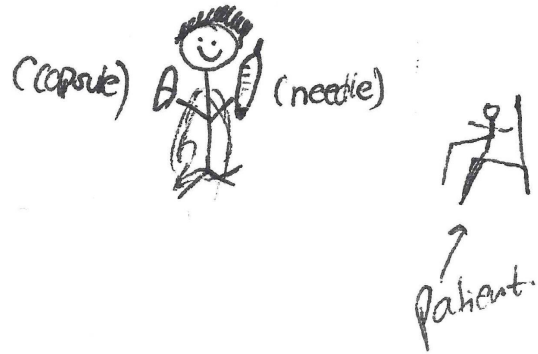
Gender: M





Text: I tried to draw a pharmacist counselling patients. The black coat should be white.

Gender: F



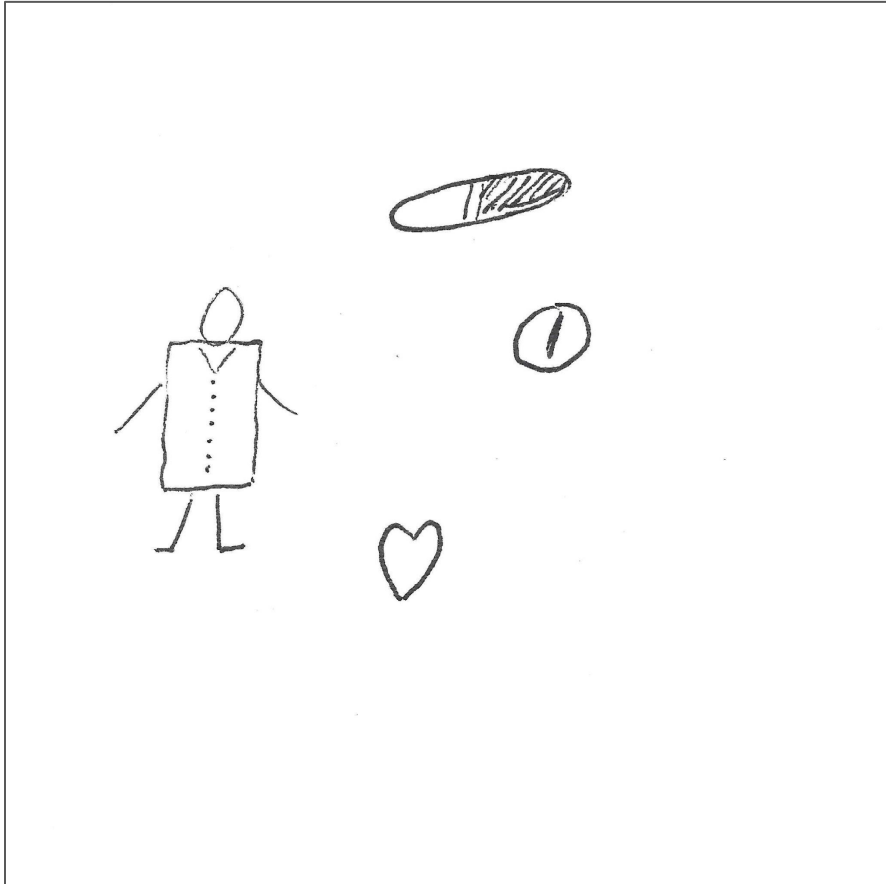
Text: Pharmacist is happy, and is holding a needle and a capsule

Gender: M



Text: It is a doctor and a pharmacist discussing possible treatment options with each other. The pharmacist is giving their input.

Gender: M



Text: I drew a pharmacist with some pills since they work closely with medications. I also drew a heart because they work with people and should care about their health

Gender: M





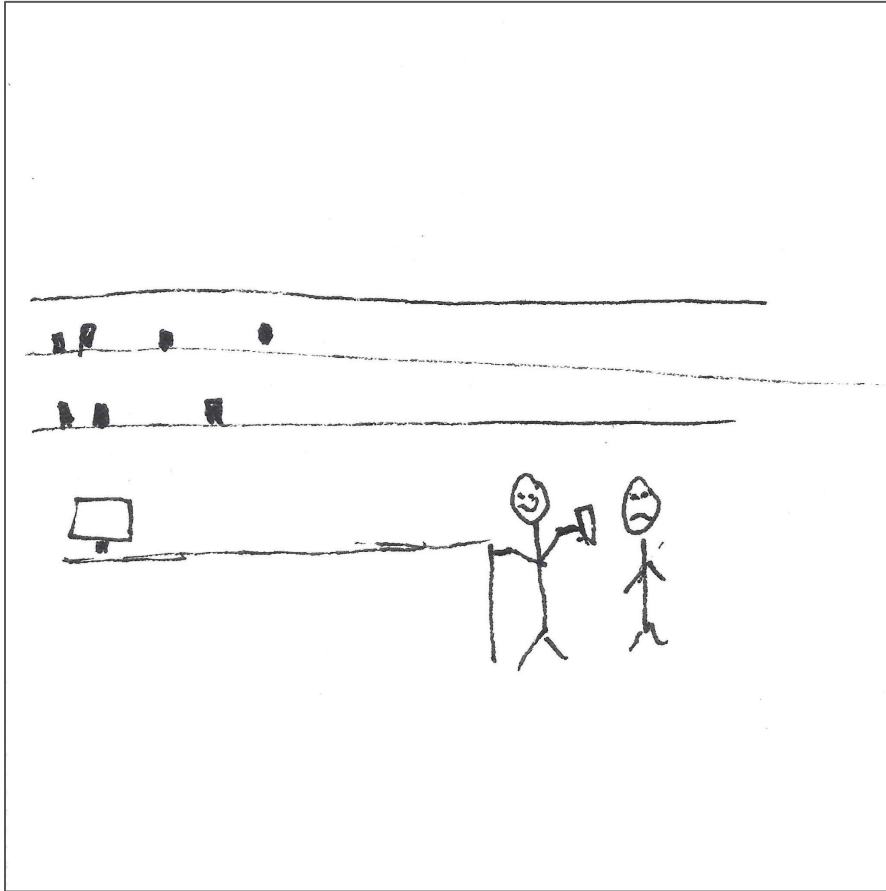
Text: Pharmacist is someone who is professional. Always in a lab coat, almost like a scientist. Always ready to help someone with questions + to serve the community.

Gender: F



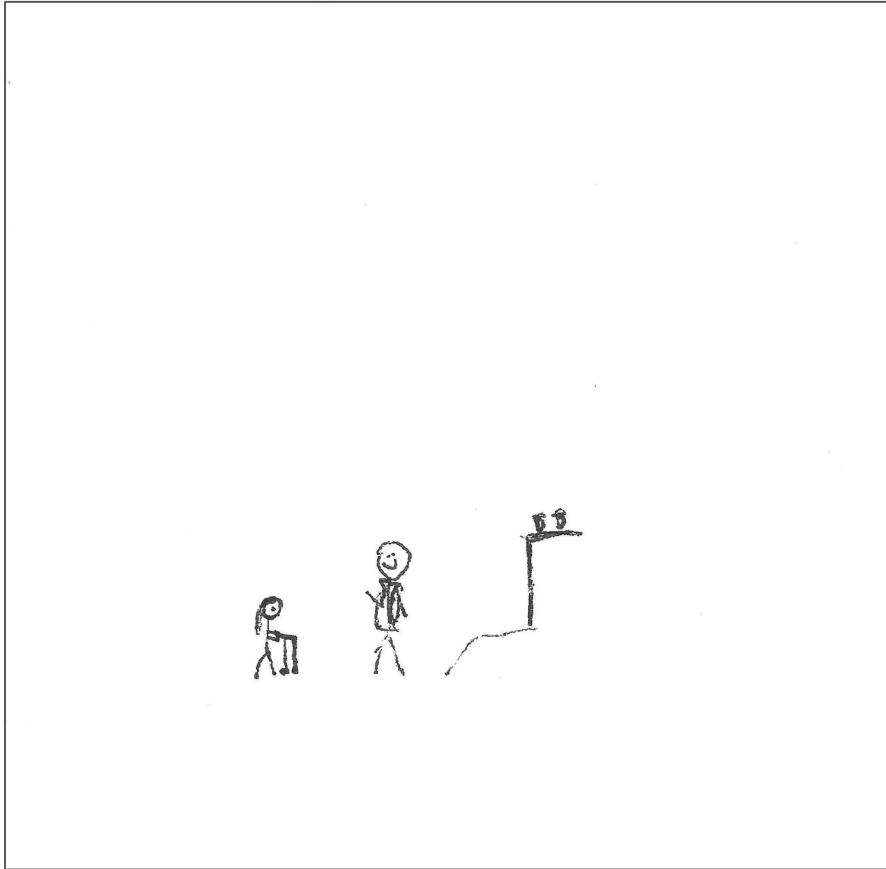
Text: The pharmacist's role is to be the most accessible health care provider in the community. The pharmacist here is on the consultation booth, being accessible.

Gender: M



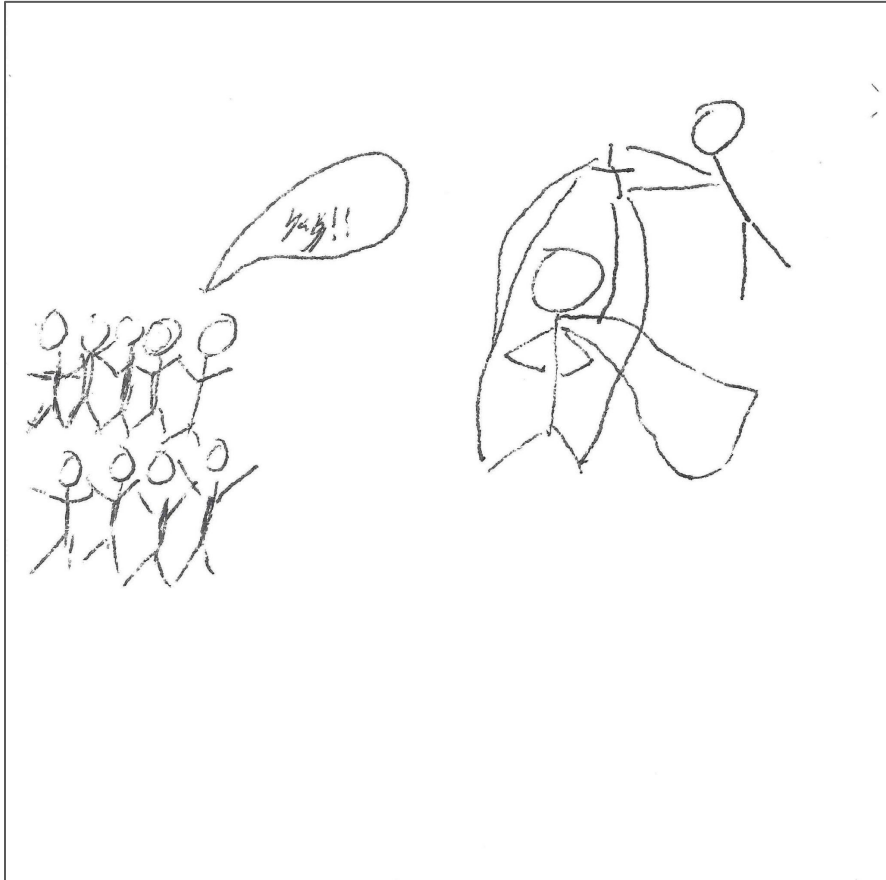
Text: Patient care, health advice, verification, optimization of treatment.

Gender: M



Text: As a pharmacist it will be very important to really know the needs of our patients. Effective communication of key.

Gender: F



Text: My drawing is showing the people cheering for a HCP (Ex. physician, nurse) but the pharmacist is pulling some string which symbolizes his work behind the scenes.

Gender: M



Text: A pharmacist giving a drug product to a patient and giving verbal instructions on how the drug should be taken

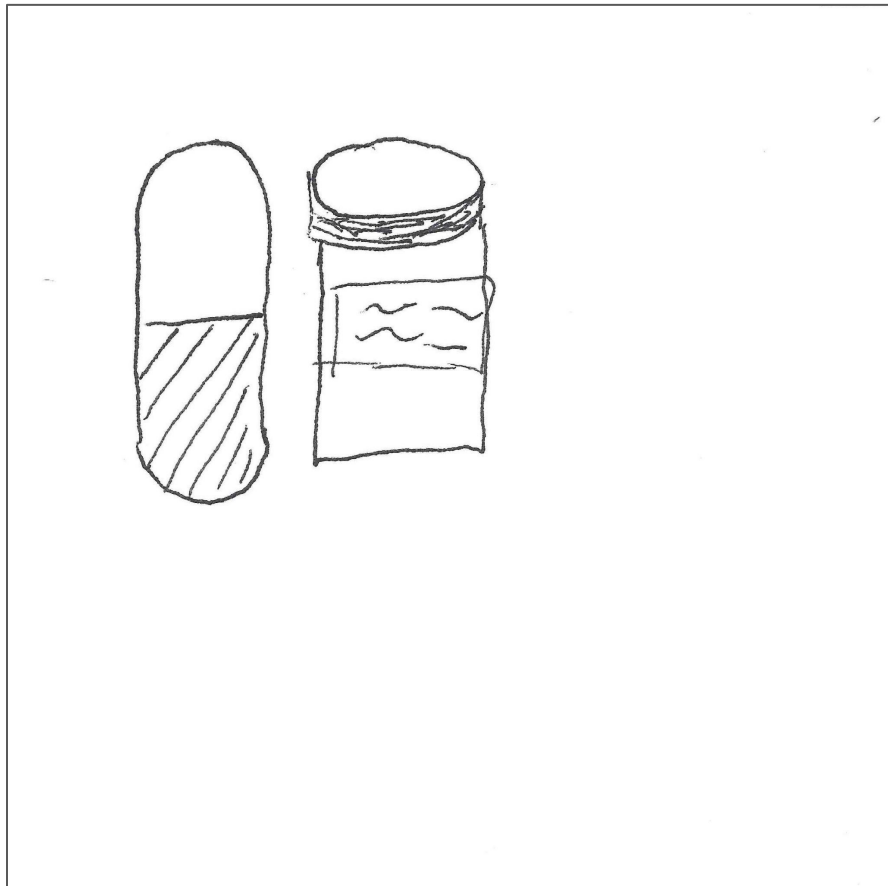
Gender: M



Text: I think this simple drawing reflects the friendly and warm nature of pharmacists (welcoming smiles). It also reflects the professional side of the career with the (white) coat

Gender: F

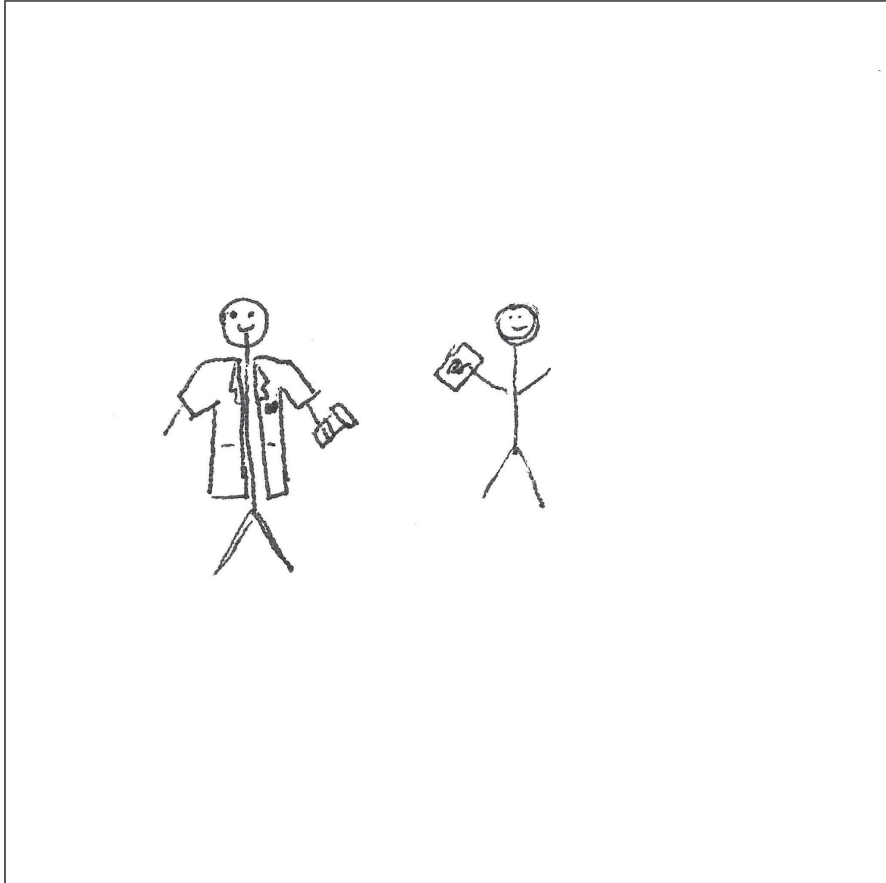
Image ID: 2025-Y1-042



Text: N/A

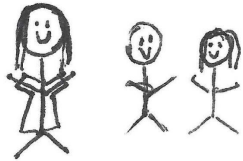
Gender: F





Text: I believe a pharmacist's role is to provide patient care in either a personal or impersonal setting & provide the best care possible

Gender: F



Text: My drawing of a pharmacist demonstrates the pharmacist's professional identity via the white coat and the collaborative side of the profession is shown by the surrounding people

Gender: F



Text: Ready to serve the community, smiling, professional

Gender: NB



Text: Pharmacists provide excellent patient care in the realm of medication use

Gender: M

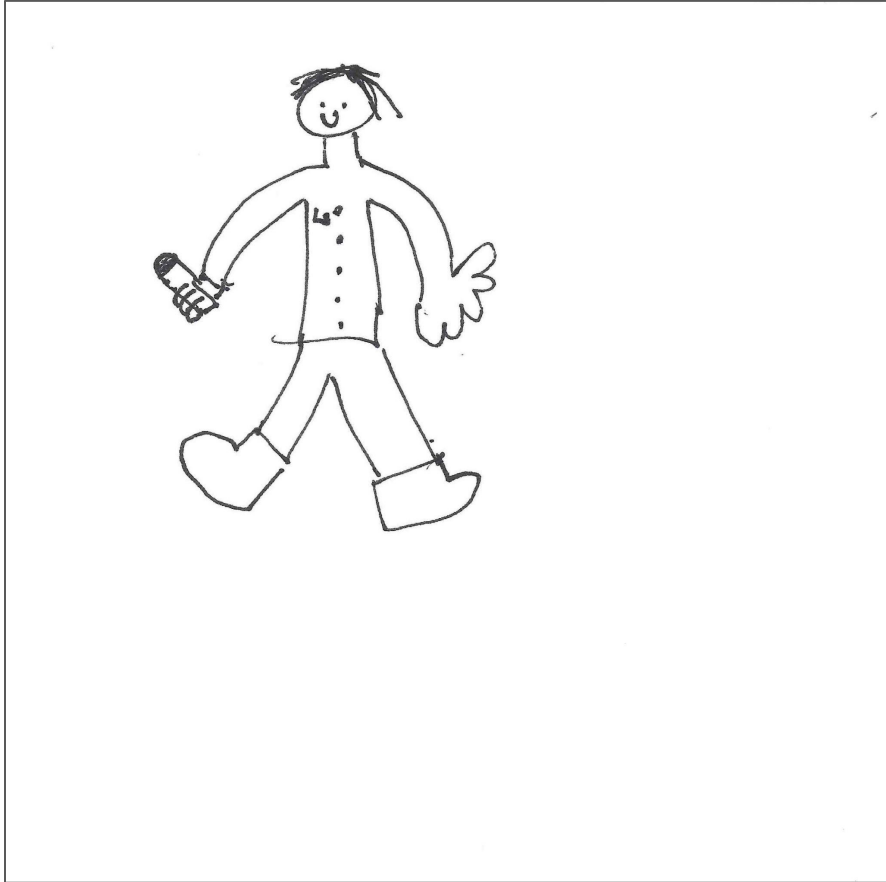
Image ID: 2025-Y1-047



Text: I drew a pharmacist compounding and also dispensing to patients. I feel these 2 activities are most associated with the pharmacy.

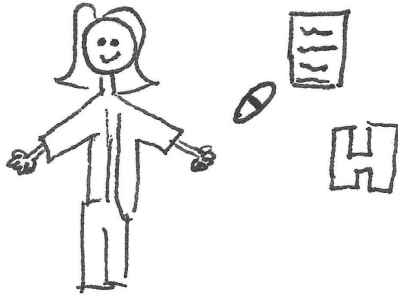
Gender: M

Image ID: 2025-Y1-048



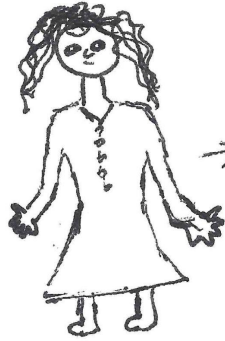
Text: He is a younger pharmacist holding a pill bottle and is happy

Gender: M



Text: Pharmacists role is to help people @ their vulnerable times. By increasing the well-being of the patient through therapeutic practices.

Gender:



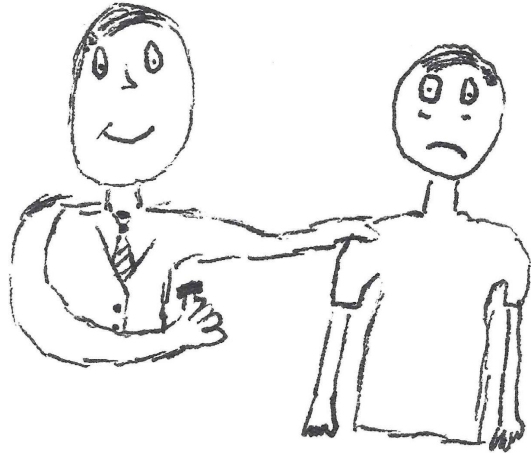
→ she has a coat  
on

Text: My pharmacist that I drew is a female and she owns her own pharmacy. She's very polite and always does her best for patients.

Gender: F



Image ID: 2025-Y1-051



Text: A pharmacist serves the community by providing therapeutic treatment for their patients

Gender: M

Image ID: 2025-Y1-052



Text: I drew a pharmacist on the job with a prescription bottle in hand

Gender: F



Text: The pharmacist is giving the patient medication and is seeing if the patient needs any help at all

Gender: F



Text: The professional-looking pharmacist who has worn her lab coat and name tag is getting ready for a medication review with a patient and practicing patient-centered care

Gender: F



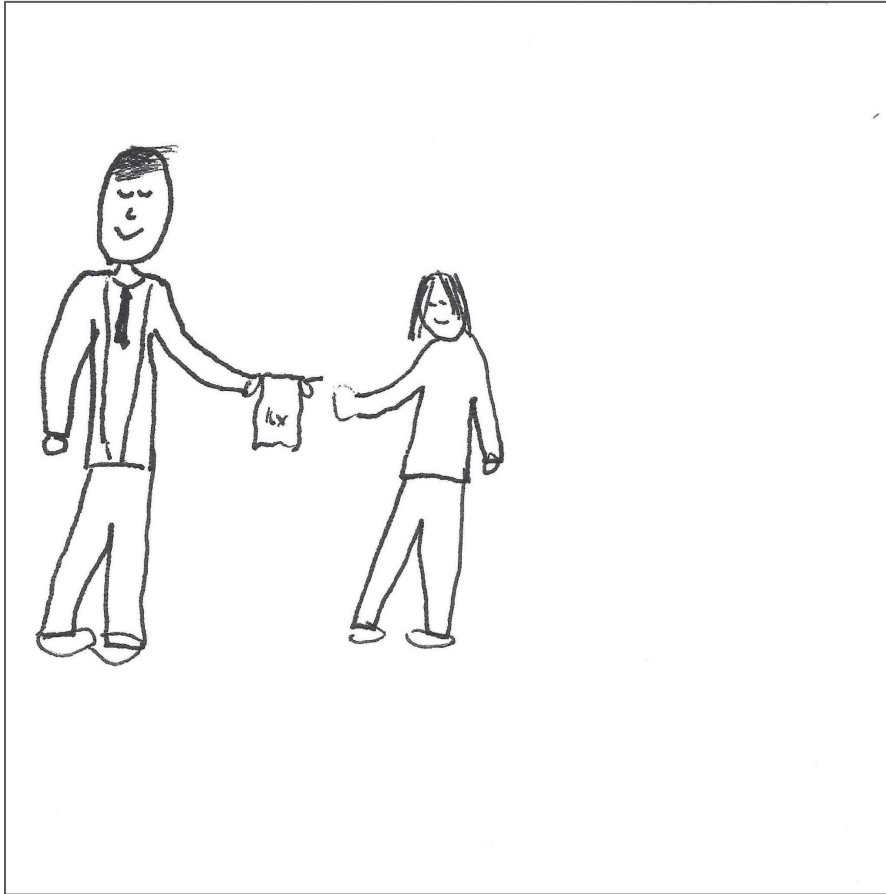
Text: The pharmacist is providing instructions to the elderly on how to take her prescription medication.

Gender: M



Text: It is a pharmacist who is dispensing a prescribed medication to a patient

Gender: F



Text: The drawing depicts a pharmacist warmly greeting a familiar patient & giving her the prescription

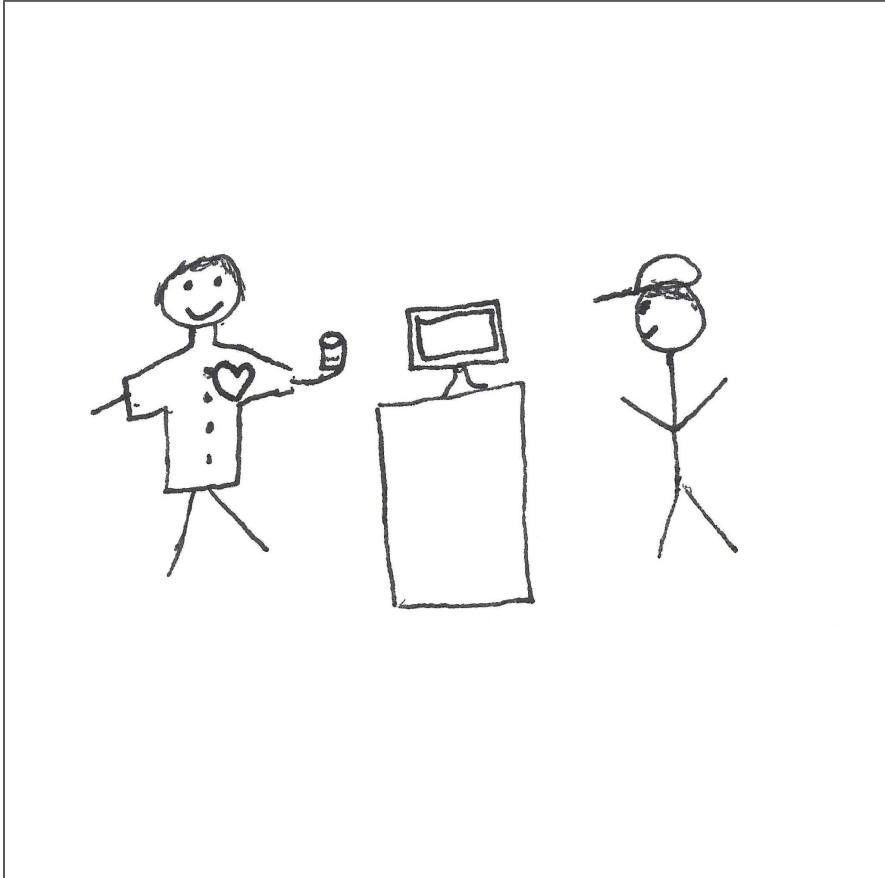
Gender: M



Text: My pharmacist is professional & friendly and willing to help others

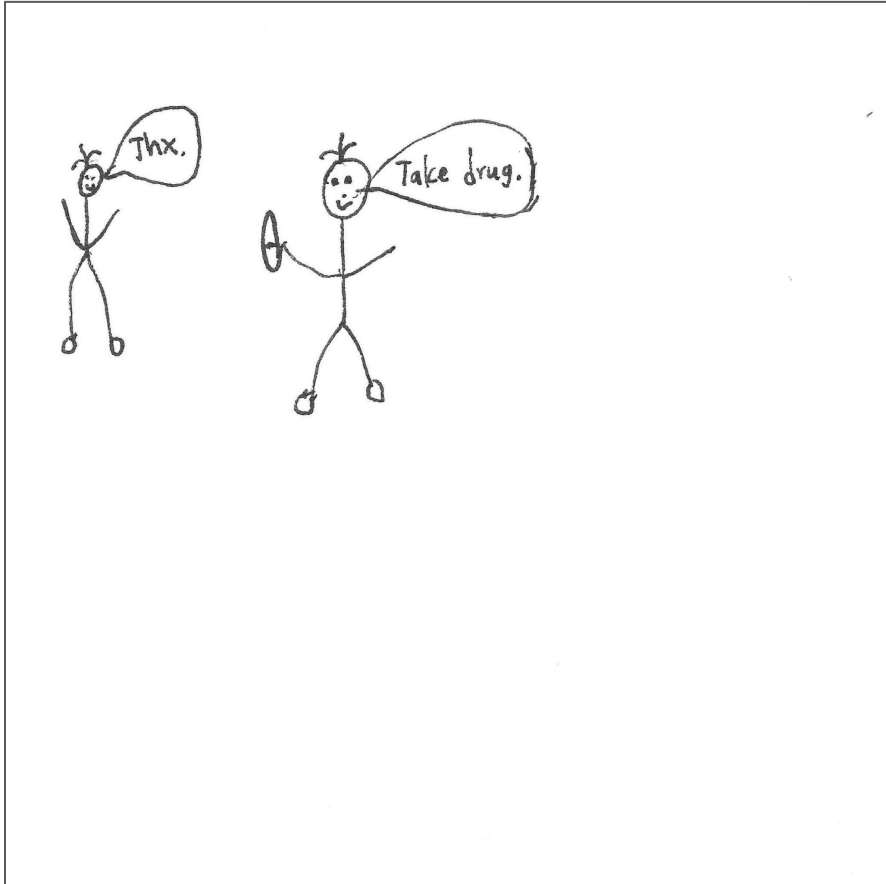
Gender: F





Text: Pharmacists provide people with medication they need to live healthy lives. Pharmacists care about their patients and their health and show empathy as shown by the heart on the pharmacists coat

Gender: M



Text: Main role is to fill/give prescriptions. Not much else I can indicate in a drawing although I know a pharmacist's work goes beyond that.

Gender: M



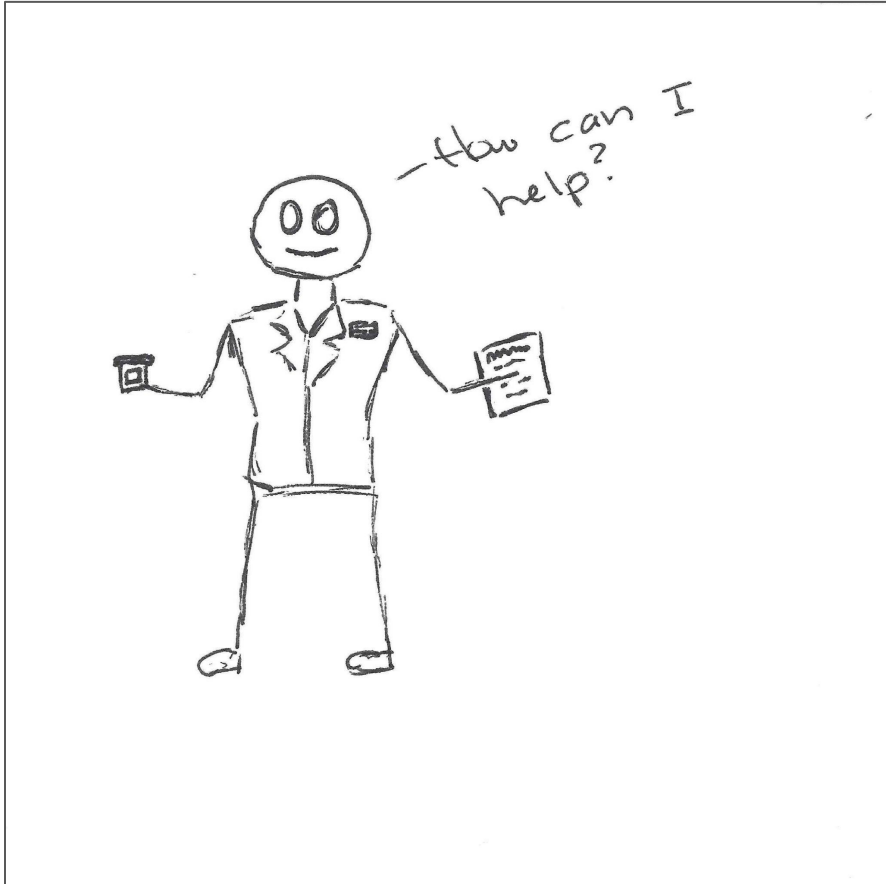
Text: Helping patients understand their drug therapies so they can optimize their health

Gender: F



Text: I drew a pharmacist and a patient in a counselling room going over the patients medications as a symbol of patient care as the pharmacists most important role

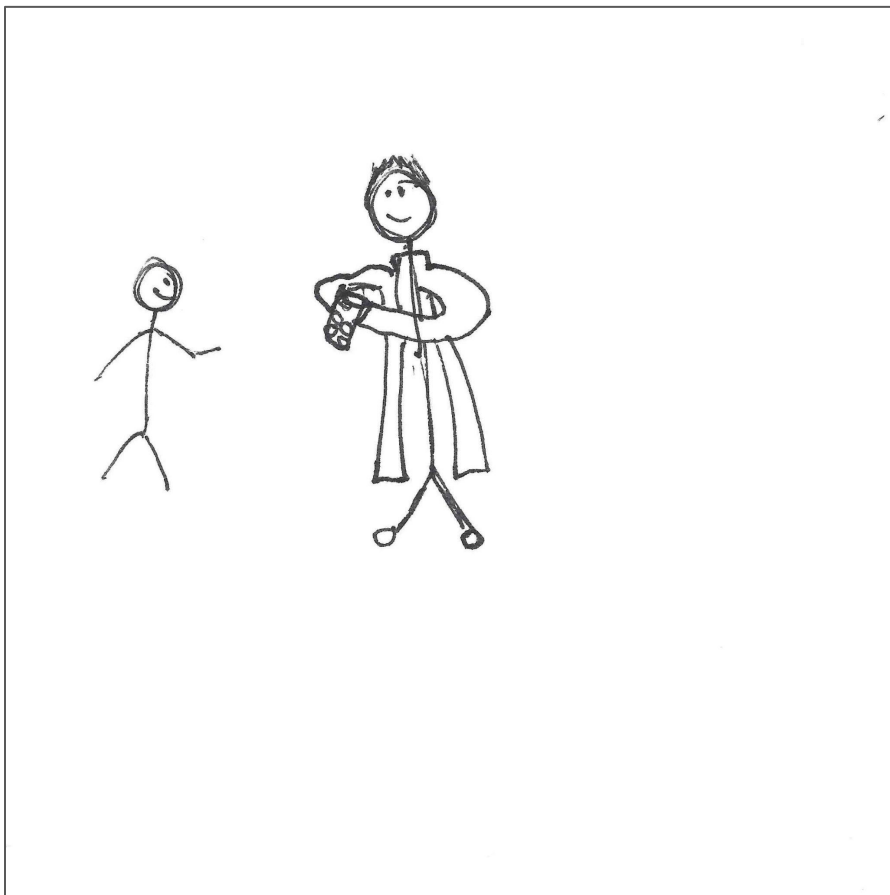
Gender: F



Text: Eager to assist with any health issues a patient may arrive with

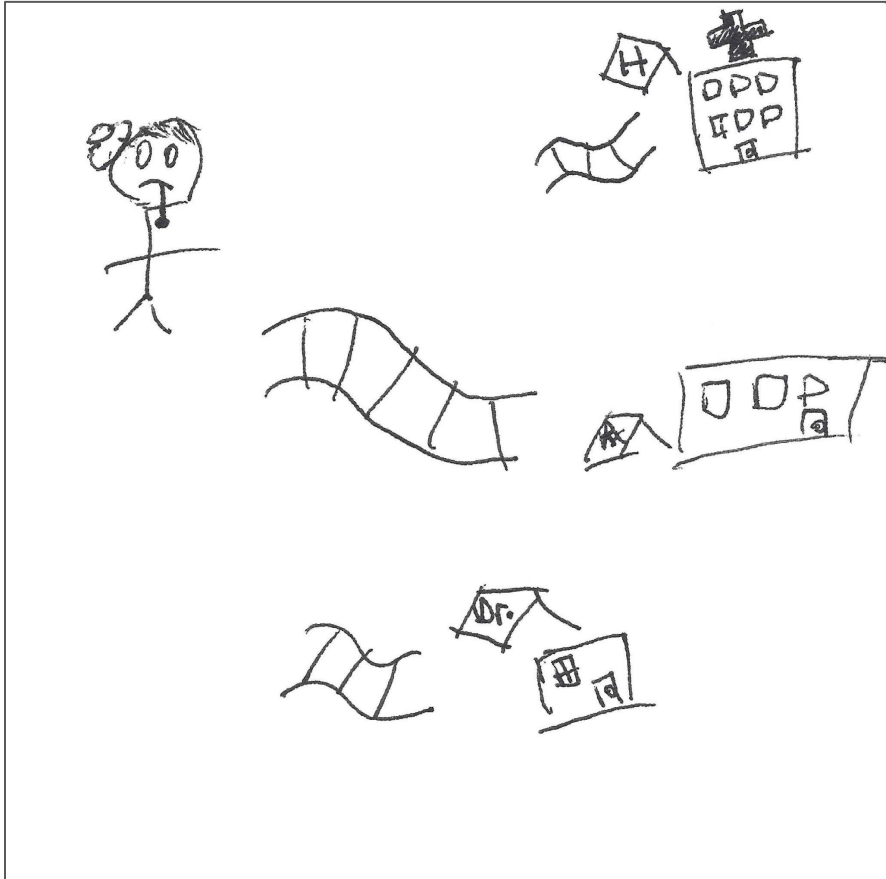
Gender: F

Image ID: 2025-Y1-064



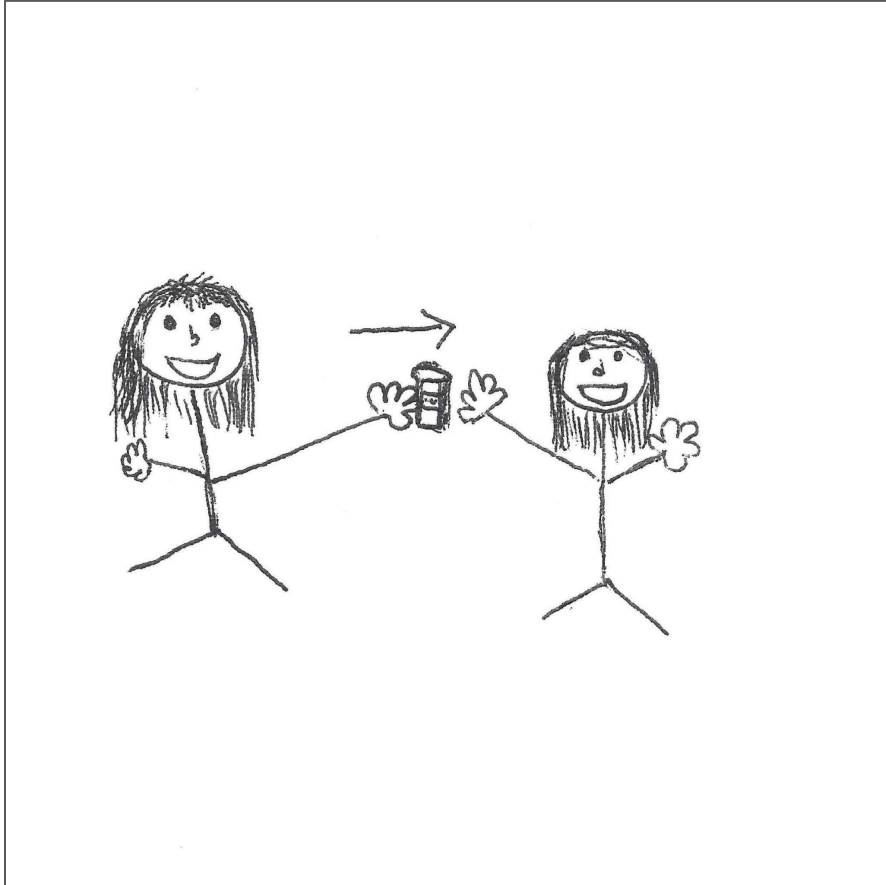
Text: I drew a pharmacist prescribing some medication to a patient

Gender: M



Text: First to go to one hospitals or doctors for many minor ailments. First point of contact.

Gender: M



Text: Pharmacists dispense medications to patients and positively impact their patients lives

Gender: F

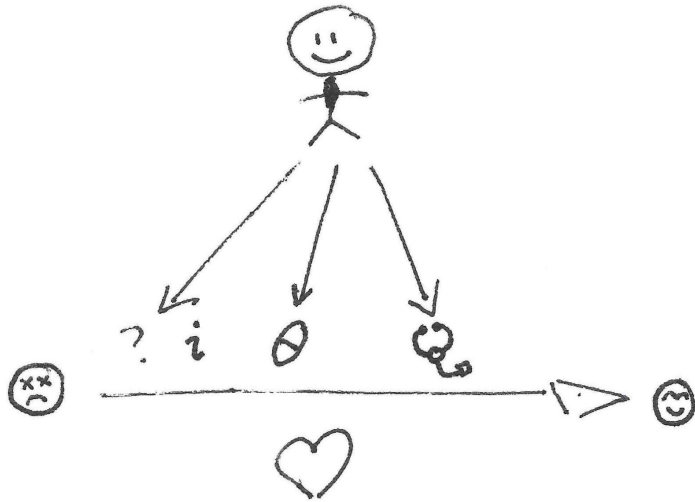


Image ID: 2025-Y1-067



Text: I have drawn a pharmacist with beautiful hair. It took a long time to make this hair but no one sees the work done in the washroom. Our role is to understand our importance or we betray society

Gender: M



Text: The role of a pharmacist is to provide the elements indicated by a physician to help improve the patient's health. This includes: gathering information, dispensing drugs, and monitoring, this involvement of pharmacists requires care and empathy.

Gender: M



Text: A pharmacist is a knowledgeable professional that cares for the well being of their patients. They are welcoming and understanding, which is why my pharmacist has a smile.

Gender: F



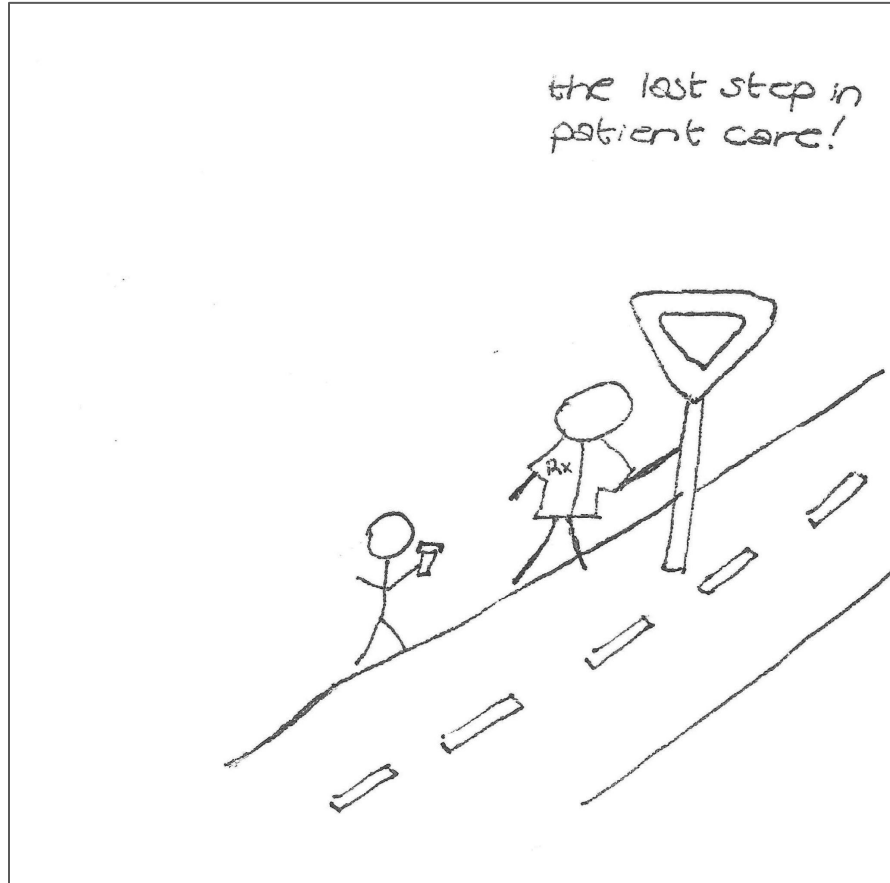
Text: A pharmacist should be passionate to help. I believe that pharmacists as most accessible part of healthcare are responsible to share their medical knowledge in best way possible to help those in need and that comes with the love for medicine, pharmacy, and society.

Gender: F



Text: Patient care, research, education, drug synthesis, consultation, practice, expansion.

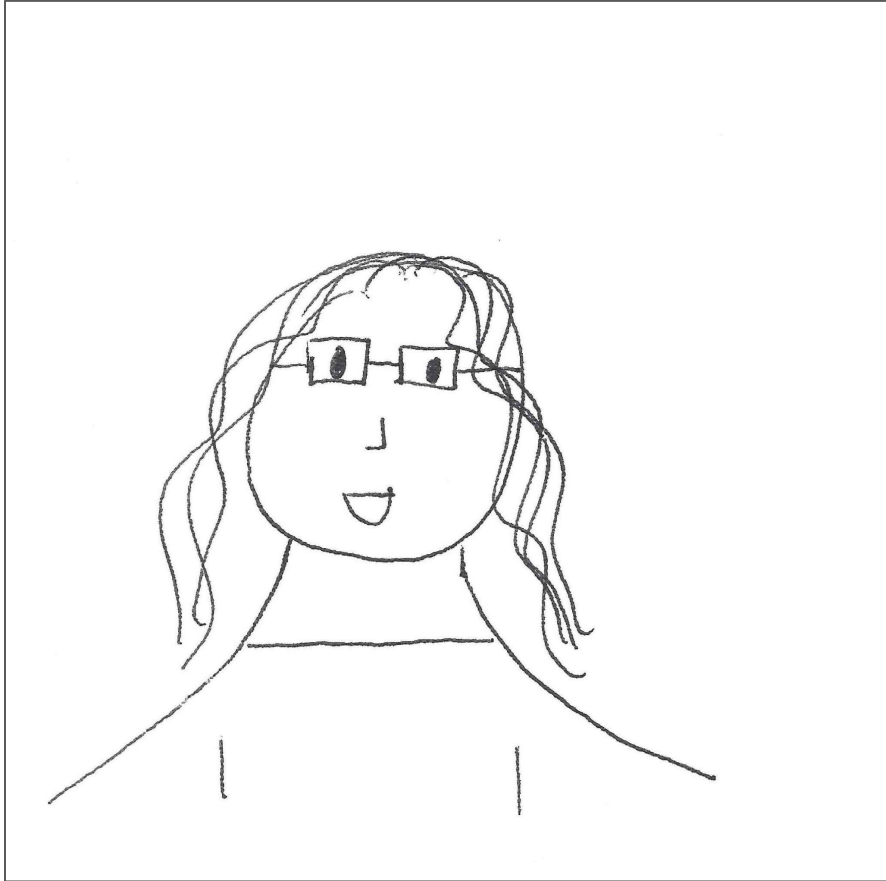
Gender: M



Text: I believe that pharmacists play an important role as the last step of patient care

Gender: F

Image ID: 2025-Y1-073



Text: My drawing is supposed to depict hopefully me in the future where i am successful + happy in my profession

Gender: F



Text: I highlighted the roles of pharmacists in communication (with other healthcare workers, care homes, and neighbourhoods) and general tasks like dispensing and answering questions and empathizing/checking for alarming interactions. Also they advocate and consult patients and for the profession.

Gender: F

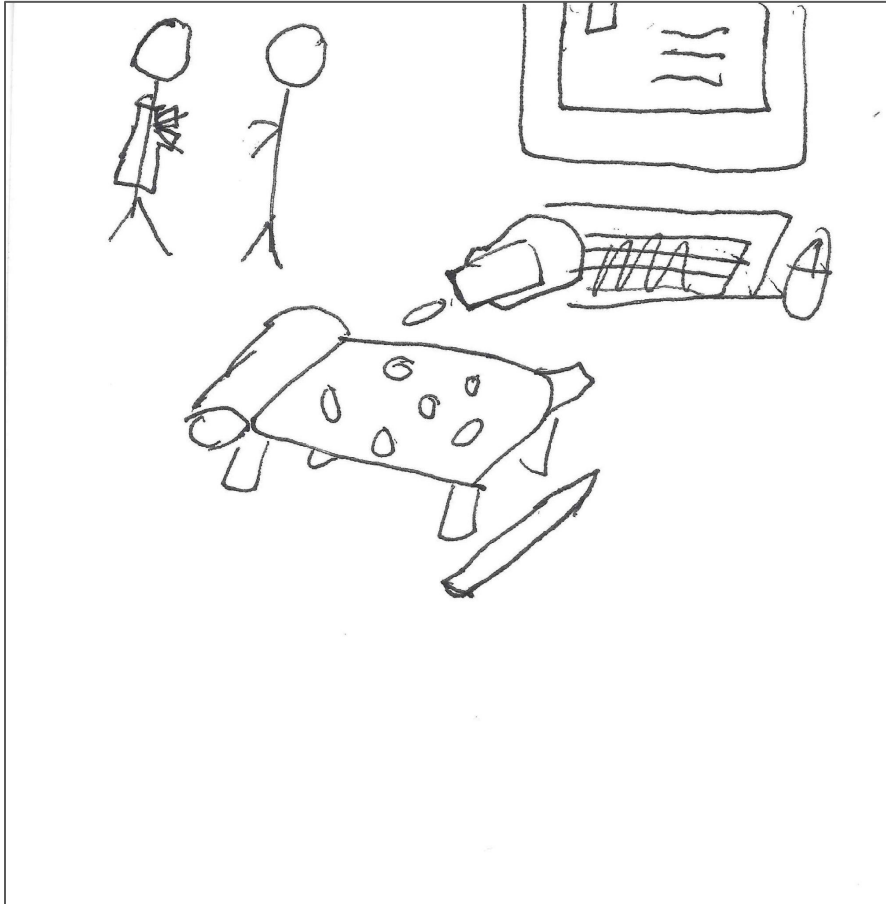




Text: I drew a pharmacist in a professional white coat asking a patients in a wheelchair what they can do for them today, offering their care and expertise.

Gender: F

Image ID: 2025-Y1-076



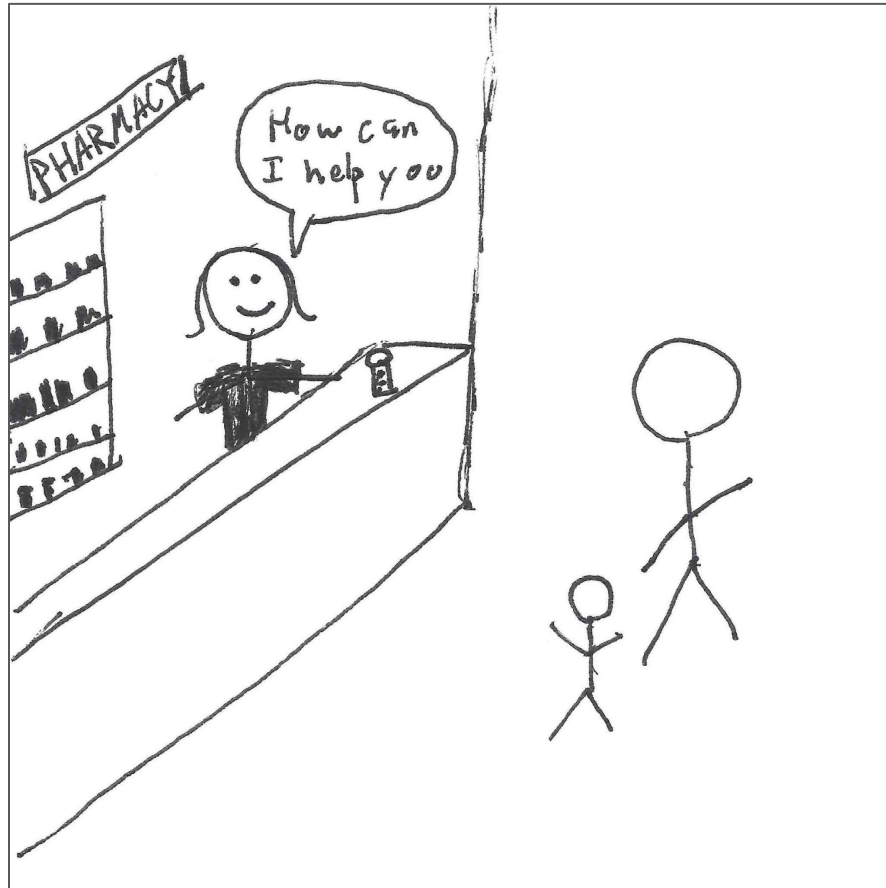
Text: Communicating w patients, filling prescriptions, keeping records of patients

Gender: F



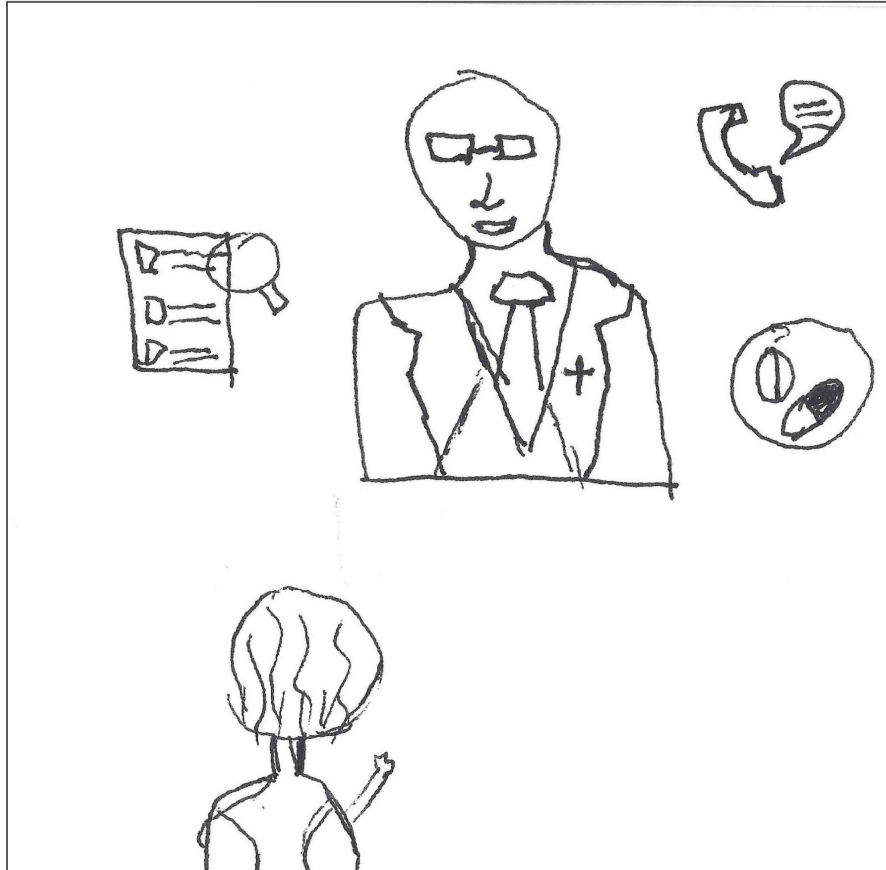
Text: Every patient has their own puzzle. We need to find your piece

Gender: F



Text: I drew a lovely stick figure drawing of a pharmacist helping someone.

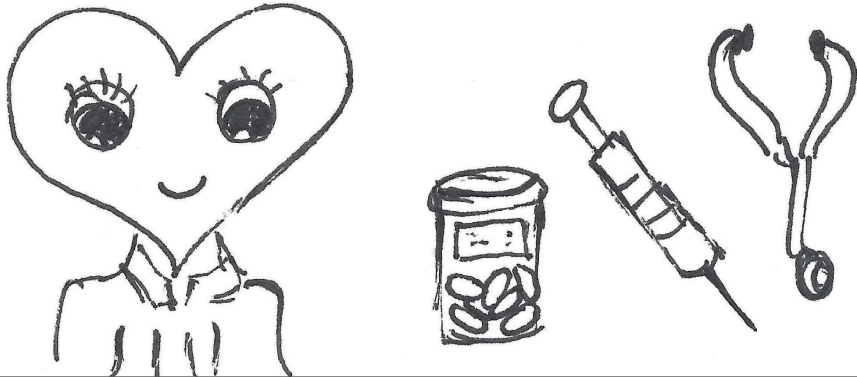
Gender: F



Text: Pharmacists are very reliable people who can be flexible on the way to assess patients either physically or virtually (through phone). Are very respectful and understanding.

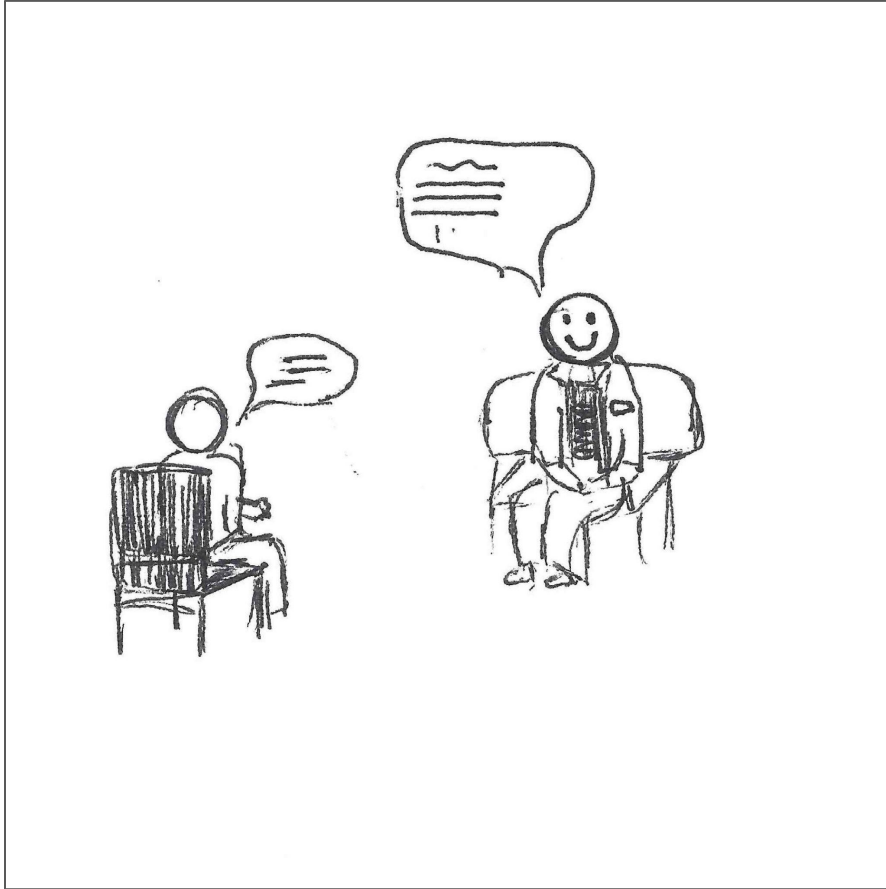
Gender: F

the reverse side of this paper, draw a pharmacist then  
space provided below, say a few words about your  
wing.



**Text:** A pharmacist is someone who has a big heart. Someone who is selfless, compassionate, and loving towards others. A person who is willing to help others to the role of medication and advocating for good health management.

**Gender:** F



Text: A pharmacist's role is to be a health consultant, an open minded and respectful person and an additional support center for patient care plans/treatment journey (I drew communicating, consulting, supporting)

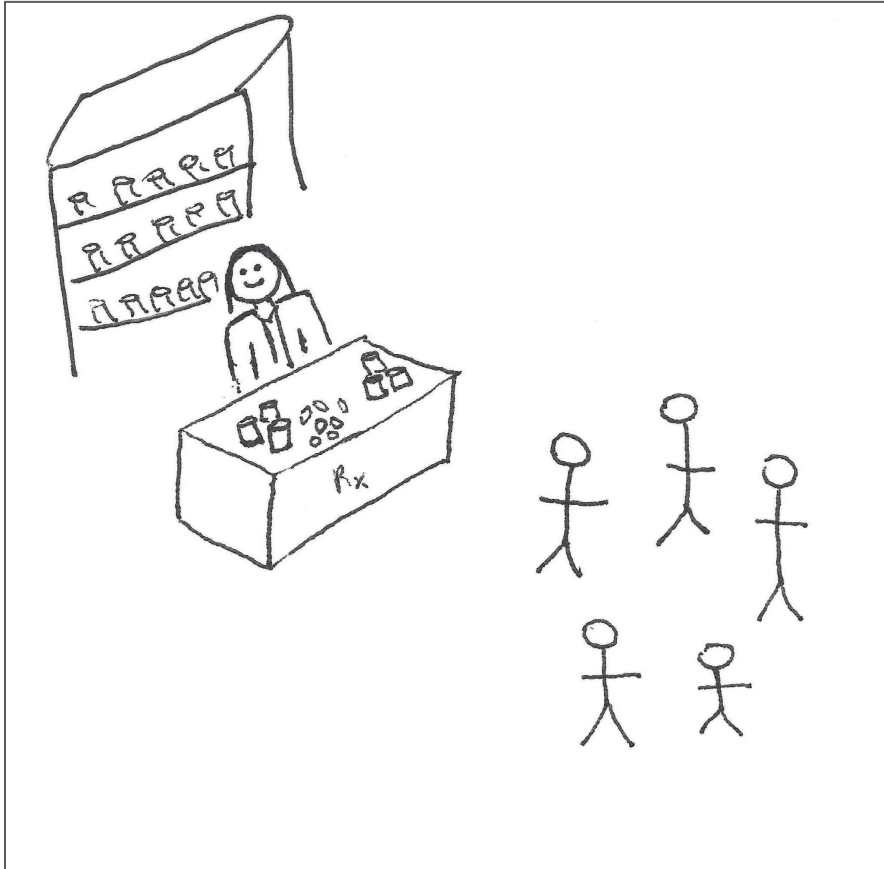
Gender: F



Text: I drew a few different roles that popped up when thinking about a pharmacist, such as: dispensing medication, compounding, helping patients, etc.

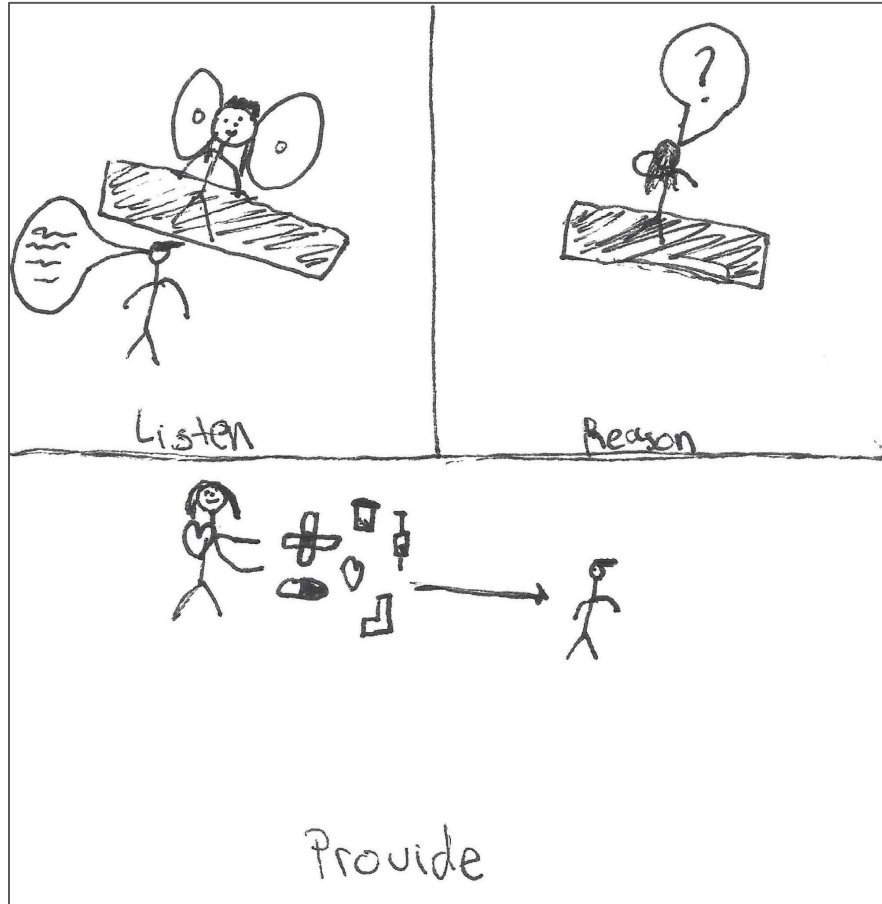
Gender: F





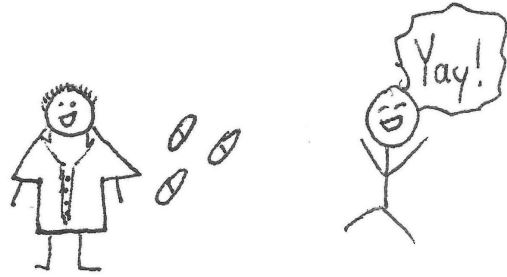
Text: My drawing depicts the pharmacist supporting patients by helping them address and fulfill their medication needs. Sorry for the messiness... I am certainly not an artist!

Gender: F



Text: It is the pharmacist's role to listen, reason, and provide.

Gender: M



Pharmacist prescribing / filling a prescription for a patient while communicating and giving healthcare advice.

Text: Pharmacist prescribing/filling a prescription for a patient while communicating and giving healthcare advice.

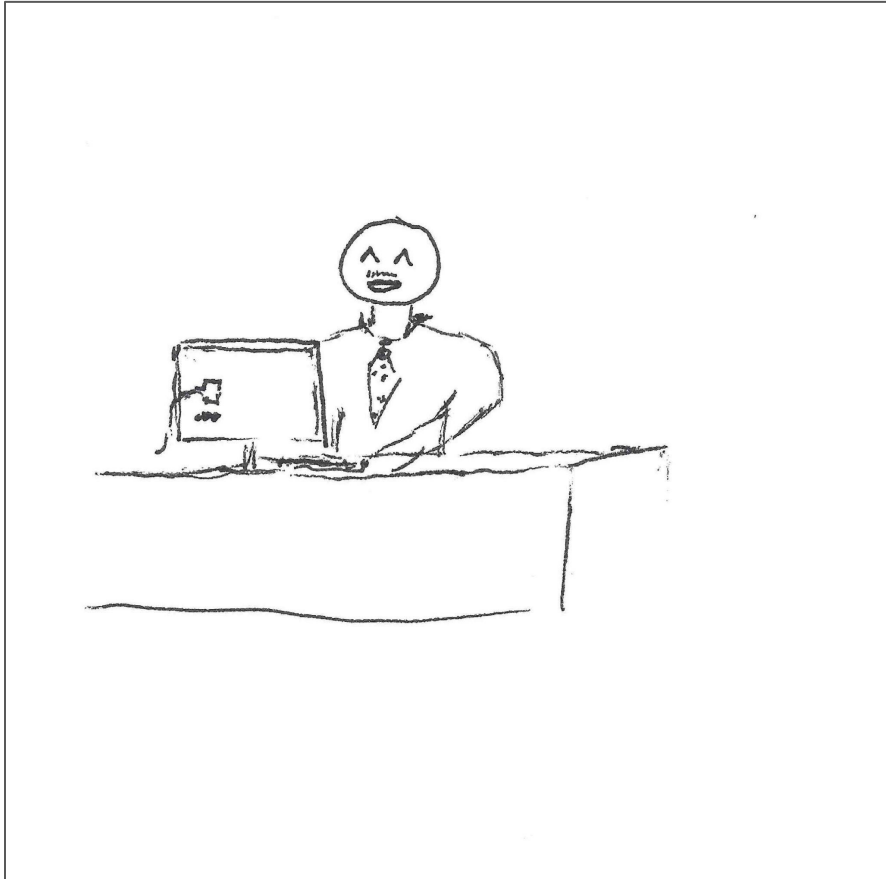
Gender: M



A pharmacist's role is to provide expertise to patients and other healthcare providers in the area of pharmaceuticals and pharmacotherapy. Ultimately, their goal is to help patients' improve their well-being.

Text: A pharmacist's role is to provide expertise to patients and other healthcare providers in the area of pharmaceuticals and pharmacotherapy. Ultimately, their goal is to help patients improve their well-being.

Gender: F



Text: The pharmacist is a profession, but welcoming face for people to interact with. It is important for patients to have pharmacists to ask them medical information.

Gender: F



Text: I drew a pharmacist in a pharmacy setting with a smiley face in a chat bubble because i think pharmacists interact directly with patients to provide care and that usually comes with a positive attitude to ensure proper care is being given

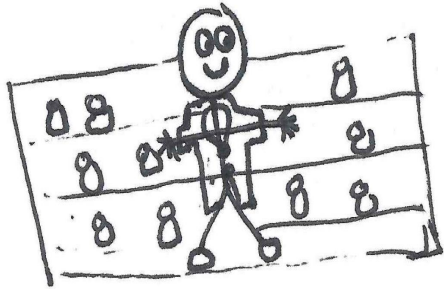
Gender: F



Text: I drew a pharmacist receiving and consulting a prescription from a patient.

Gender: F

On the reverse side of this paper, draw a pharmacist then in the space provided below, say a few words about your drawing.



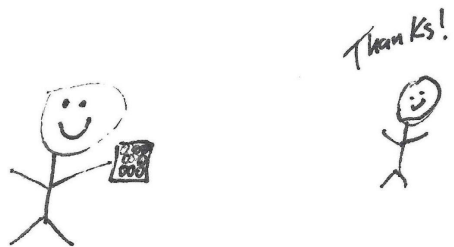
- A compassionate,  
friendly, ethical,  
and respected  
healthcare  
professional  
who is an expert  
in drug knowledge.

Text: A compassionate, friendly, ethical, and respectful healthcare professional who is an expert in drug knowledge.

Gender: F



Image ID: 2025-Y1-091



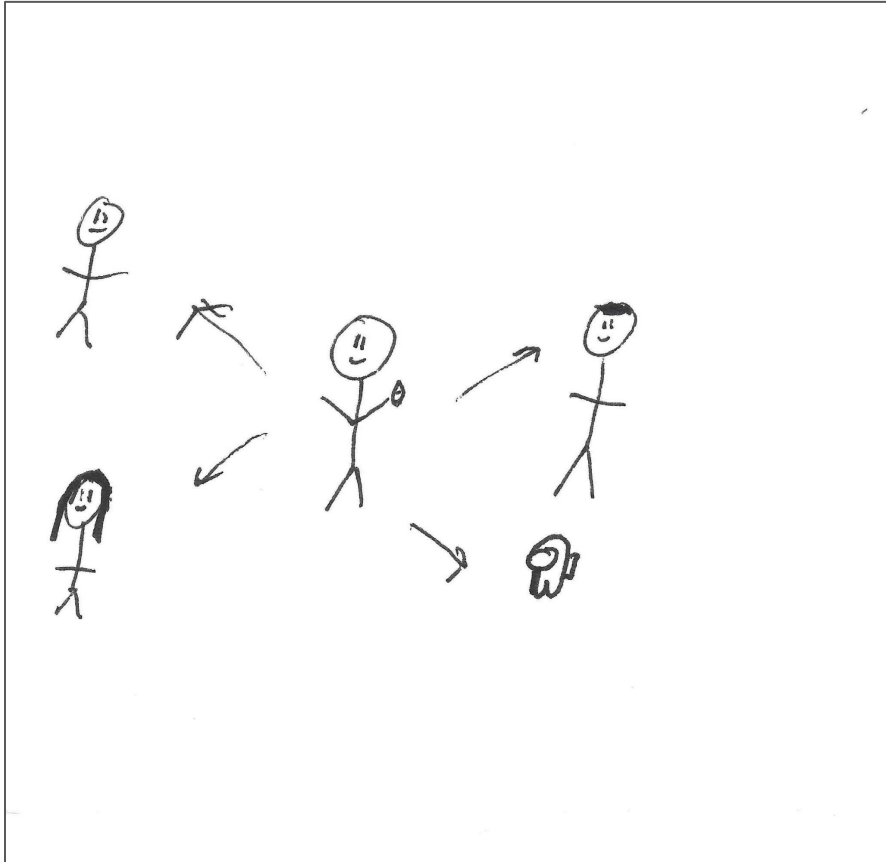
Text: Inviting, friendly, helpful, informative.

Gender: F



Text: My pharmacist is dressed in their profession outfit, with their white coat and name tag. They are smiling because it is important to have a welcoming/positive attitude, and they are ready to help people.

Gender: F



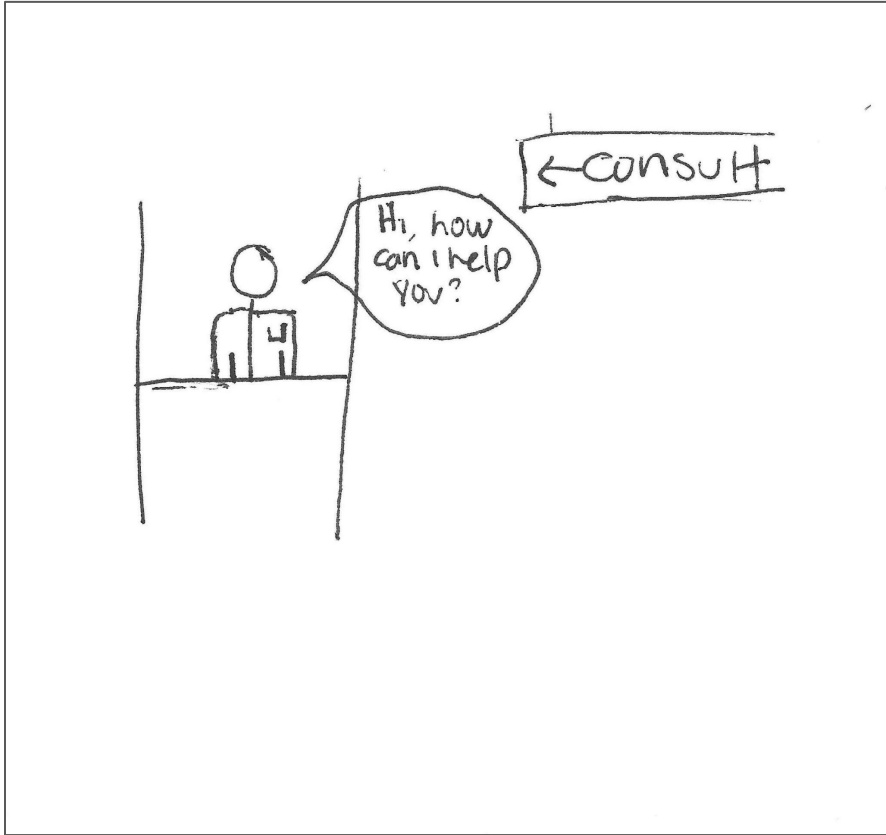
Text: Pharmacists work with others, no matter the differences.

Gender: F



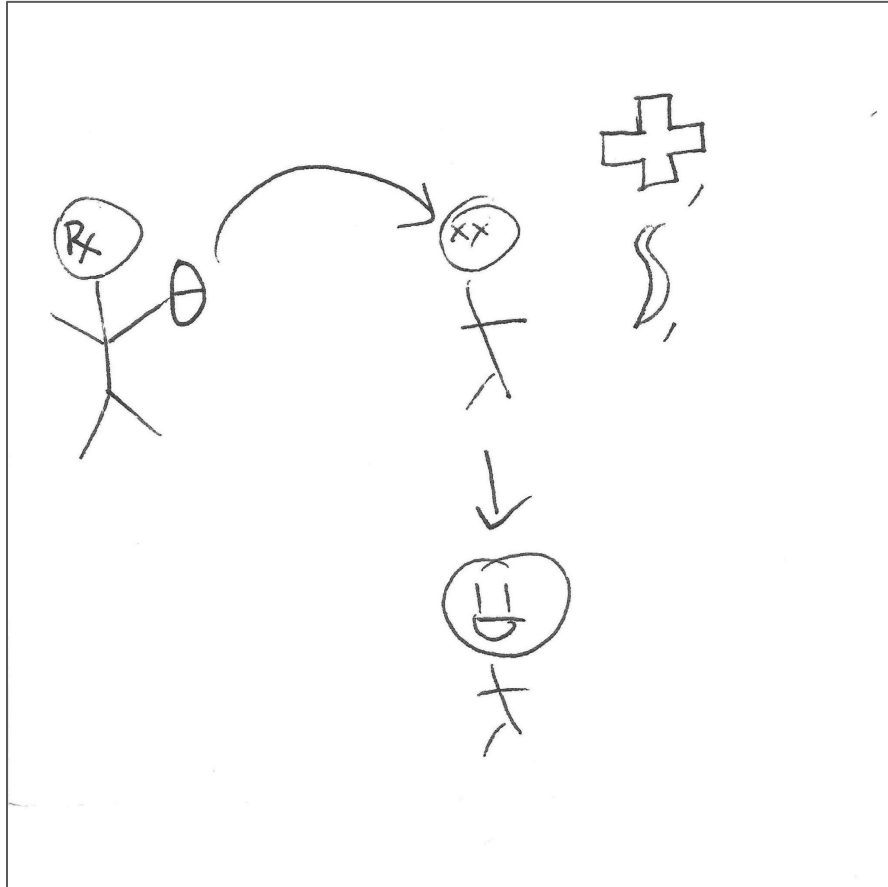
Text: I drew a pharmacist in a pharmacy coat and holding a vial of pills or medication as they are responsible for the sale and use of medications.

Gender: M



Text: When I think of a pharmacist what first comes to mind is the consultation counter of a community pharmacy. This is where most people interact with our profession and the pharmacist is a direct source of scientific information to the public regarding their health.

Gender: M



Text: To dispense and provide care to patients/customers in many environments.

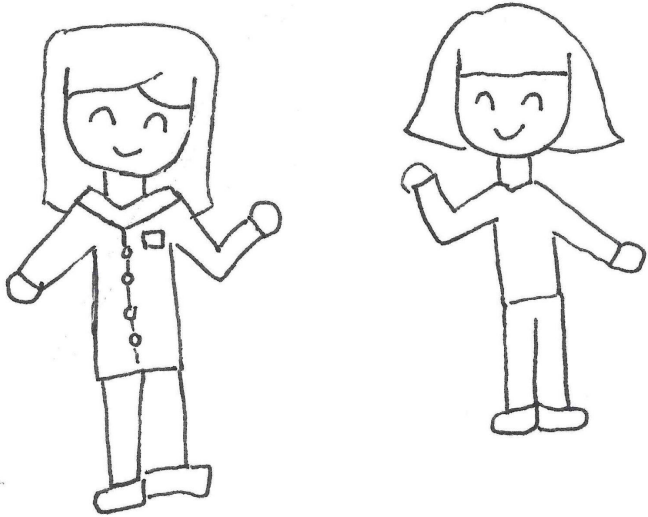
Gender: M

Image ID: 2025-Y1-097



Text: A simple drawing of a person representing a pharmacist, ideally he/she should dress professionally.

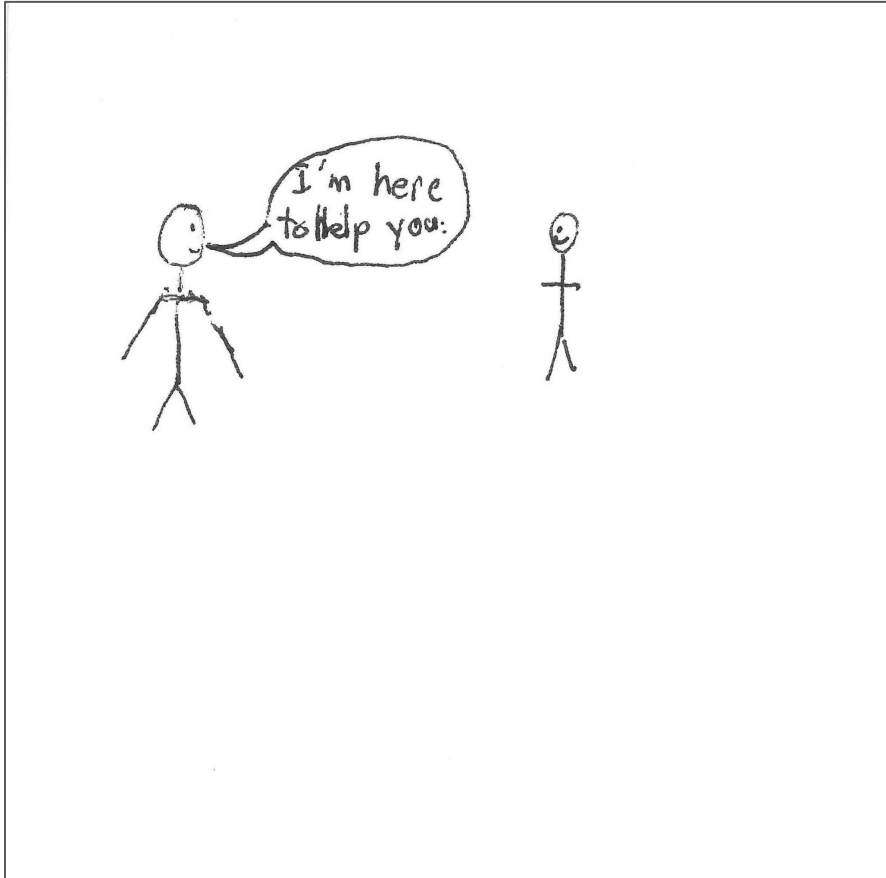
Gender: M



Text: A pharmacist is an expert on medication. They provide and look over drug therapies for their patients. They care for their patients and build meaningful relationships.

Gender: F





Text: I think of highest importance in a pharmacist's role is simply caring for patients.

Gender: M



Text: Serve your community, resolve problems, represent and advance healthcare

Gender: F