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Registered Nurse

Julie Smith

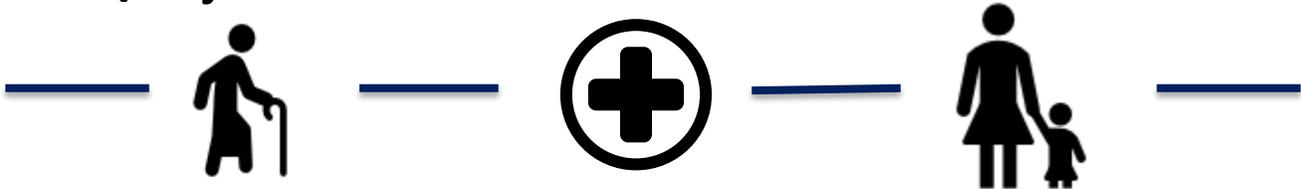
- **37 years old**
- **Registered Nurse**
- **Quincy, MA**

About Julie

Julie became a nurse after seeing her grandmother suffer with diabetes and kidney disease progressing to dialysis treatment. She wanted to be able to help people like her grandmother, so they can avoid the need for renal replacement therapy.

Julie works at a community health center in Quincy, MA – just outside of Boston. She knows she could make more money in private practice, but **she is committed to her patients and feels called to work in a high need area** – she chose this job to help people like her grandmother after all!

She can afford a reasonably nice apartment not too far from her job. But **her only daughter, Sarah, is about to start school and she is worried about the public-school systems in Quincy.**



Julie's Typical Routine & Interactions

Julie is well liked at work. The 3 physicians and 1 nurse practitioner who work at **her CHC see her as being very competent and expect a lot from her.**

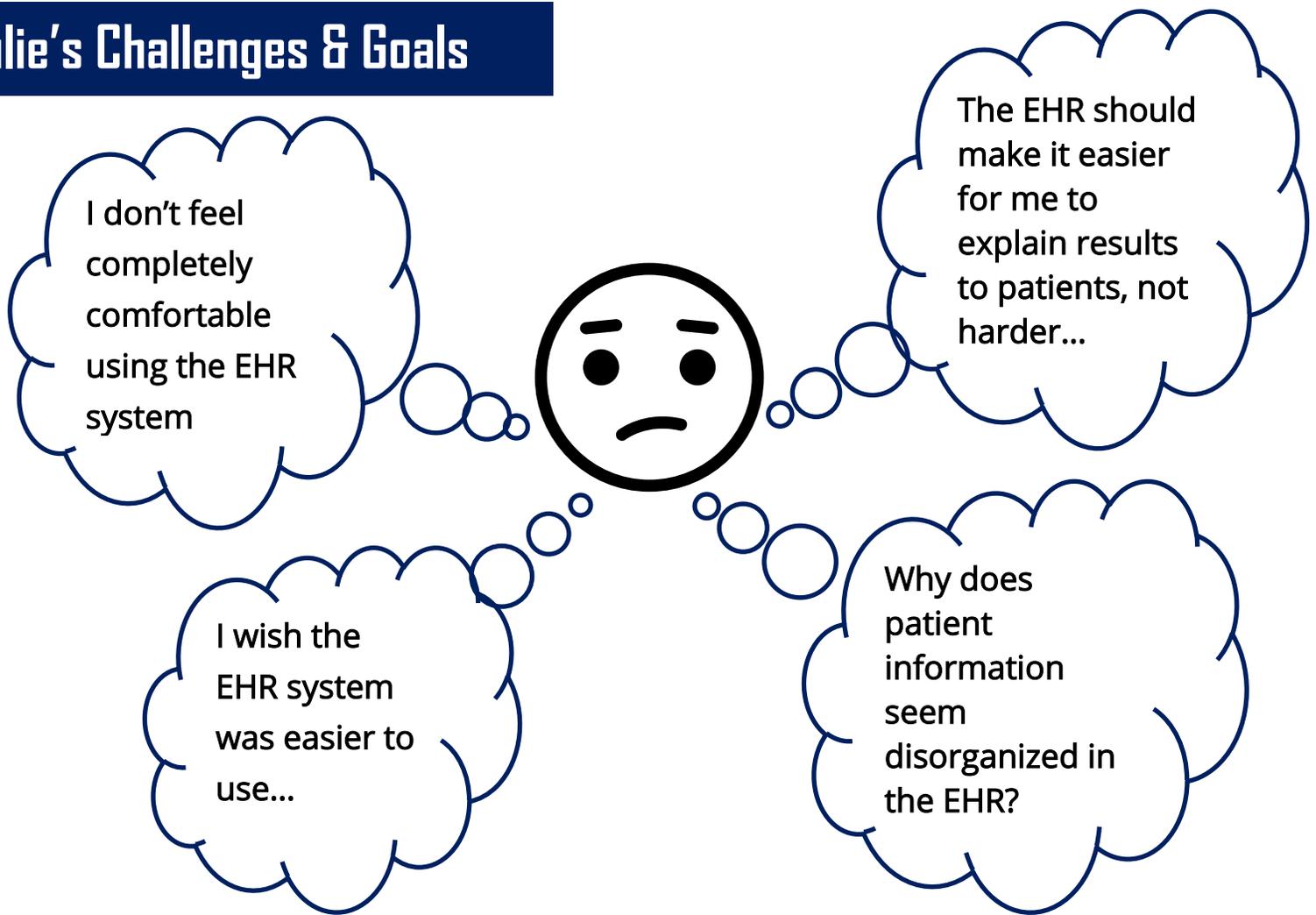
She prides herself on **providing excellent patient care** and really connecting with her patients.

She sees **educating patients**—really making sure they understand what the doctor said—**as one of the most important parts of her job.**

Julie has been asked to help facilitate a quality improvement effort focused on diabetic kidney disease care across her CHC and 5 other loosely affiliated CHC sites.

She is excited to be involved since kidney disease is so close to her heart, but **she is also nervous about her role in this effort**—especially since **the other CHC sites use different EHR systems that she is not familiar with.**

Julie's Challenges & Goals



A few years ago, **Julie's community health center transitioned to an EHR**. She was never very good with computers and **she is still not totally comfortable with the EHR system**.

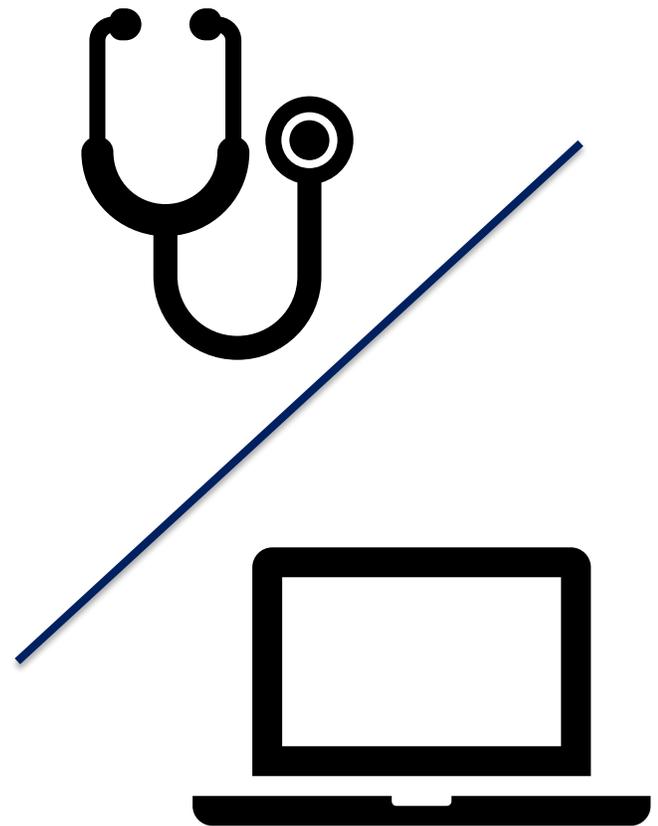
She gets frustrated with the EHR because she feels that **it makes it harder to really pay attention to her patients**. She wishes the EHR system were more intuitive to **better provide and document education**.

It seems like **patient information is really disorganized** and she must look in several different places in the EHR to get a complete picture of her patients.

This gets really **overwhelming for Julie since she sees so many patients**. She also wishes the EHR made it easier for her to explain test results and provide education to patients.

What Julie wants from a Care Plan

- An **easy-to-read document** where finding information is clear and defined
- **Access to relevant patient information:**
 - problem list
 - lab trends
 - medications and refill pattern
 - over-the-counter supplements
 - diet history
 - next appointments
- A **“help” tab** with written and video explanations for frequently asked questions and a live chat assistance for specific questions





Family Medicine Physician



John Carlson

- **38 years old**
- **Family Medicine Physician**
- **Spearfish, SD**

About John

John is a caring, competent, and innovative doctor. He is married with two young children. He really **enjoys being part of a small community and having long term relationships with his patients.**

He is also becoming **overworked and on the verge of burnout.** He has been in private medical practice for 10 years in a rural community and works with a younger partner of 3 years, an Advanced Nurse Practitioner, and a Physician's Assistant.

The **practice has transitioned to a NCQA Level 3 Patient Centered Medical Home (PCMH)** and is recognized for excellent work in Diabetes and Asthma Care.



John's Typical Routine & Interactions

John's day begins with **hospital rounds seeing an average of 2-4 patients, and continues in his office seeing about 25 patients.**

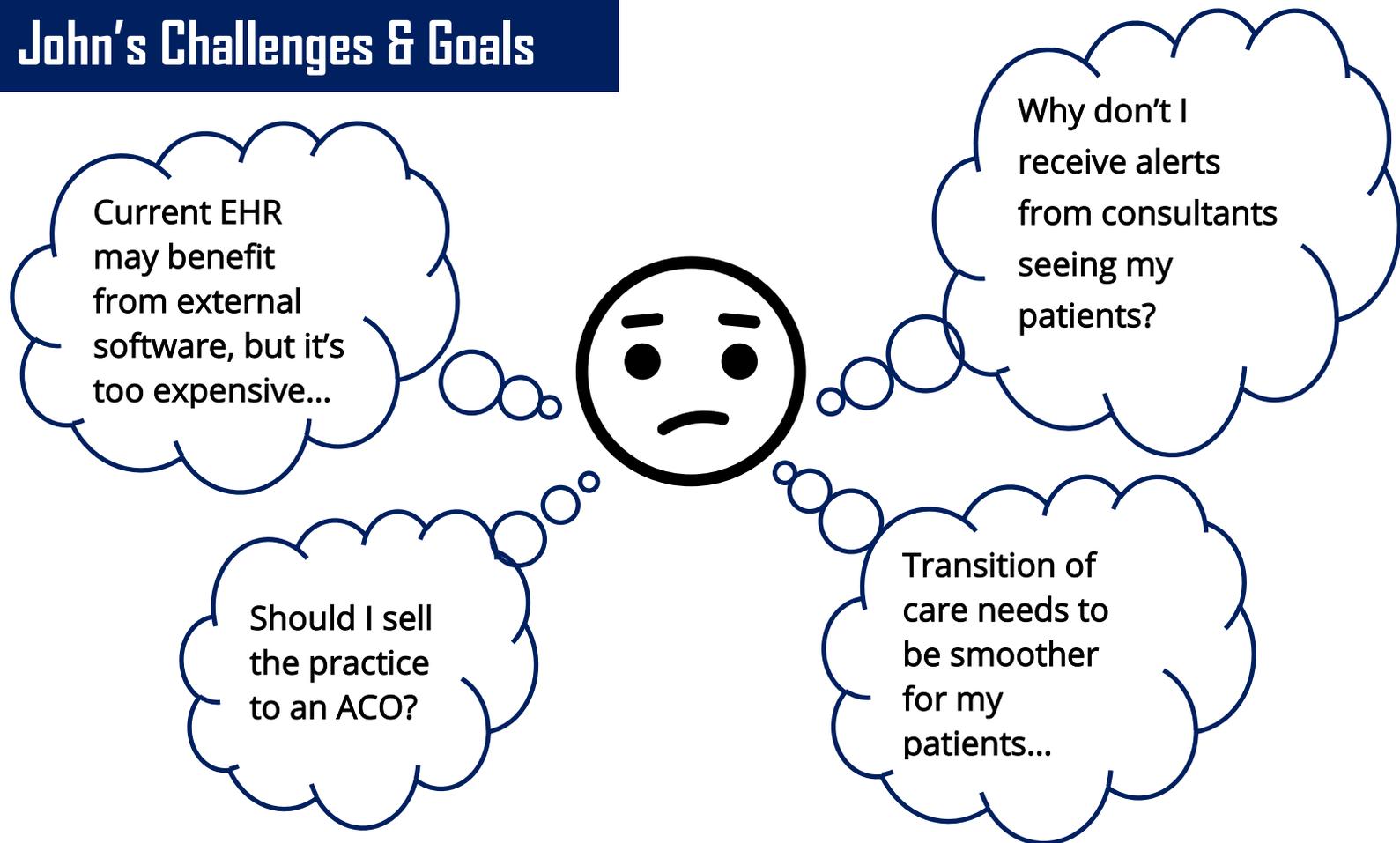
The **practice sees 100 patients** per day and makes **another 100 phone calls a day** for transitions of care and population management.



The switch to electronic health records (EHR) has helped with prescription writing and medication reconciliation, but **note writing has become a nightmare.**

John is working 2 extra hours every night completing his notes. This is eating into his family time.

John's Challenges & Goals



John has found software that works with his EHR that will

- provide point-of-care computer decision support
- create population health registries

Unfortunately, **the software is very expensive** and the **pay for performance programs have not created a clear return on investment for this.**

His small town is located between **two large hospital systems that have both become Accountable Care Organizations (ACOs) and are trying to buy his practice.** Others have sold to the systems and have **not been happy with the corporate management.**

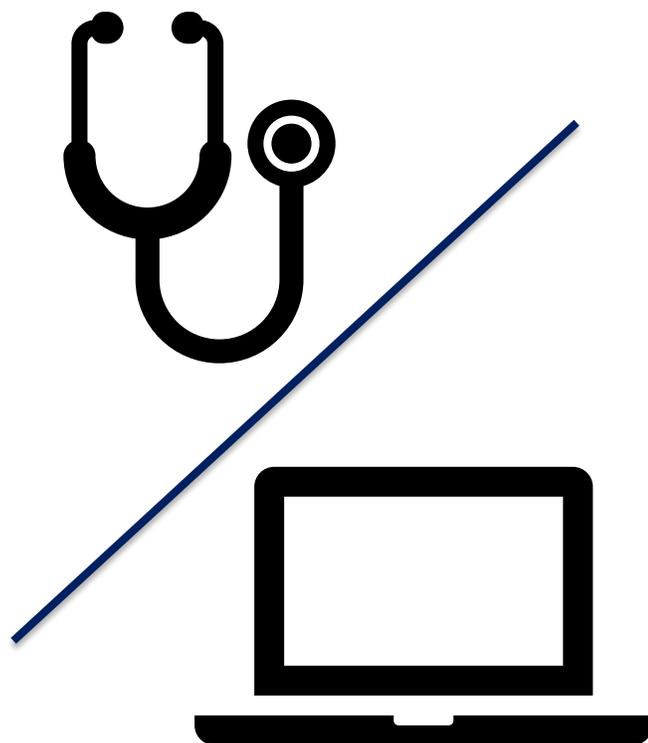
John is frustrated with the lack of common quality performance metrics. He also **does not have access to claims data for his patients.** For example, he was not alerted when one of his female patients had a pap smear with her gynecologist.

For the care plan, he needs information about

- **transitions of care** when his patients are in the hospital in near real time
- **patient-specific social determinants of health**, so he can appropriately modify his care

What John wants from a Care Plan

- An **easy-to-read document** where information is clear and defined
- **Access to relevant patient information:**
 - problem list
 - lab trends
 - medications and refill pattern
 - over-the-counter supplements
 - diet history
 - next appointments
- **Communication with other providers**
 - A list indicating which provider is treating the patient and for what
 - Ability to quickly send a message



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Nephrologist



Vince Jones

- 56 years old
- Nephrologist
- El Paso, TX

About Vince

Vince is a **nephrologist in a large subspecialty group** serving El Paso, TX. The practice includes a **significant Hispanic population**.

He has many responsibilities:

- maintains an office practice
- provides rounds in three different dialysis units
- manages inpatients and hospital consults on a rotating basis with partners



Vince's Typical Routine & Interactions

Vince is on call
approximately

- one night per week
- one weekend every six weeks

When Vince is on call, **he is quite busy** and rarely gets more than **3-4 hours of sleep**.

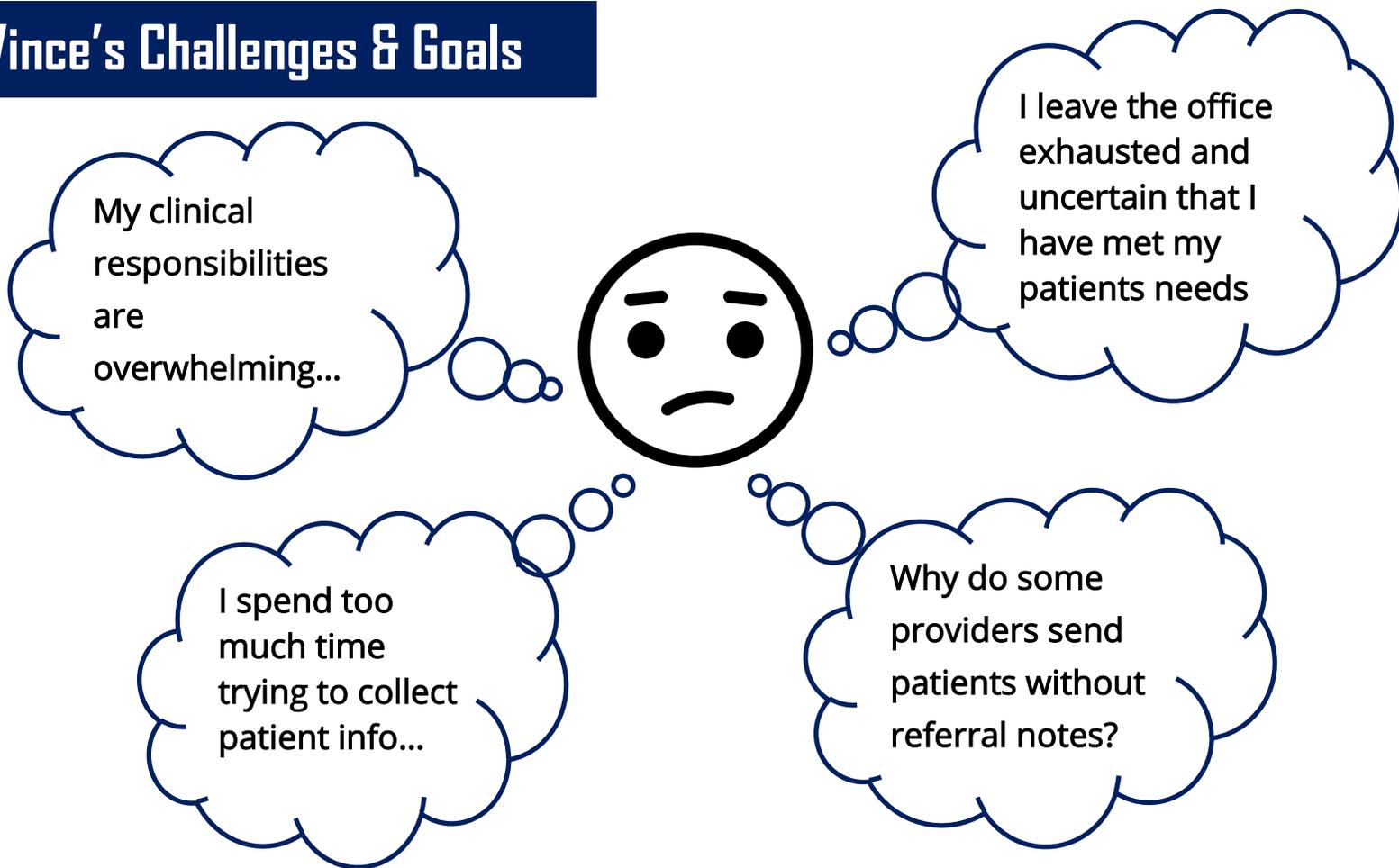


Vince gets consults from three area hospitals.

Consults include:

- ER
- inpatient
- discharges
- referring primary care providers

Vince's Challenges & Goals



Vince enjoys patient care and strives to provide the highest level of care to all the patients he sees.

However, **many of his new patients arrive with minimal or no clinical information** from the referring provider and often are not aware that they have kidney disease. **This makes initial visits stressful and increases patient anxiety.**

Patients are seen with no information on:

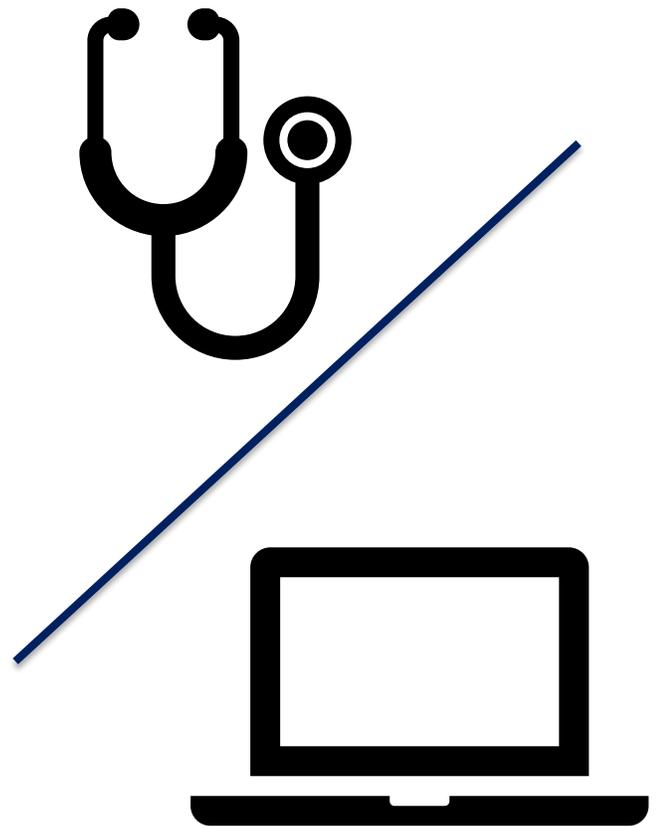
- general medical treatment
- preferences toward renal replacement therapy or end of life care
- family and social support

Vince's overwhelming clinical responsibilities leave him limited time even with less complex patients. Despite extraordinary effort, **he leaves the office exhausted and uncertain that he has provided his patients all that they need.**

What Vince wants from a Care Plan

A brief (<3 pages) document which he can easily read in the 5-10 minutes he has between patients which includes:

- Patient age, race, gender, employment status, location of residence, family status/support
- A brief statement of patient's future life plans (e.g. work forever, retire in 6 months, etc.)
- Concise list of medical problems
- Up-to-date list of current medications and treatments
- Diet on which the patient has been instructed
- End of life preferences
- List of current active providers
- Kidney-specific information:
 - Diabetes status, duration, retinopathy
 - eGFR with historical values
 - UACR with historical values
 - Hematuria
 - Blood pressure control
 - Lab evaluation (basic serologies, imaging)



References

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Dietitian



Maria Gonzalez

- **27 years old**
- **Registered Dietitian**
- **Chicago, IL**

About Maria

Maria is a **registered dietitian** who works at a **community health center (CHC)** in a **Latino neighborhood in Chicago**.

She has been working there for several years with a **variety of patients**. Many present with **obesity, diabetes, prediabetes, and CKD**.

Recently, the **CHC partnered with the University Hospital** to provide subspecialty care and can now **access their electronic health record (EHR)**.



Maria's Typical Routine & Interactions

Typically, **Maria begins her day** at the clinic

- reviewing her emails
- checking for any urgent messages that need immediate attention

Once she completes those tasks, Maria

- **reviews the EHR before meeting with each patient**
- prepares necessary material
- meets with each patient

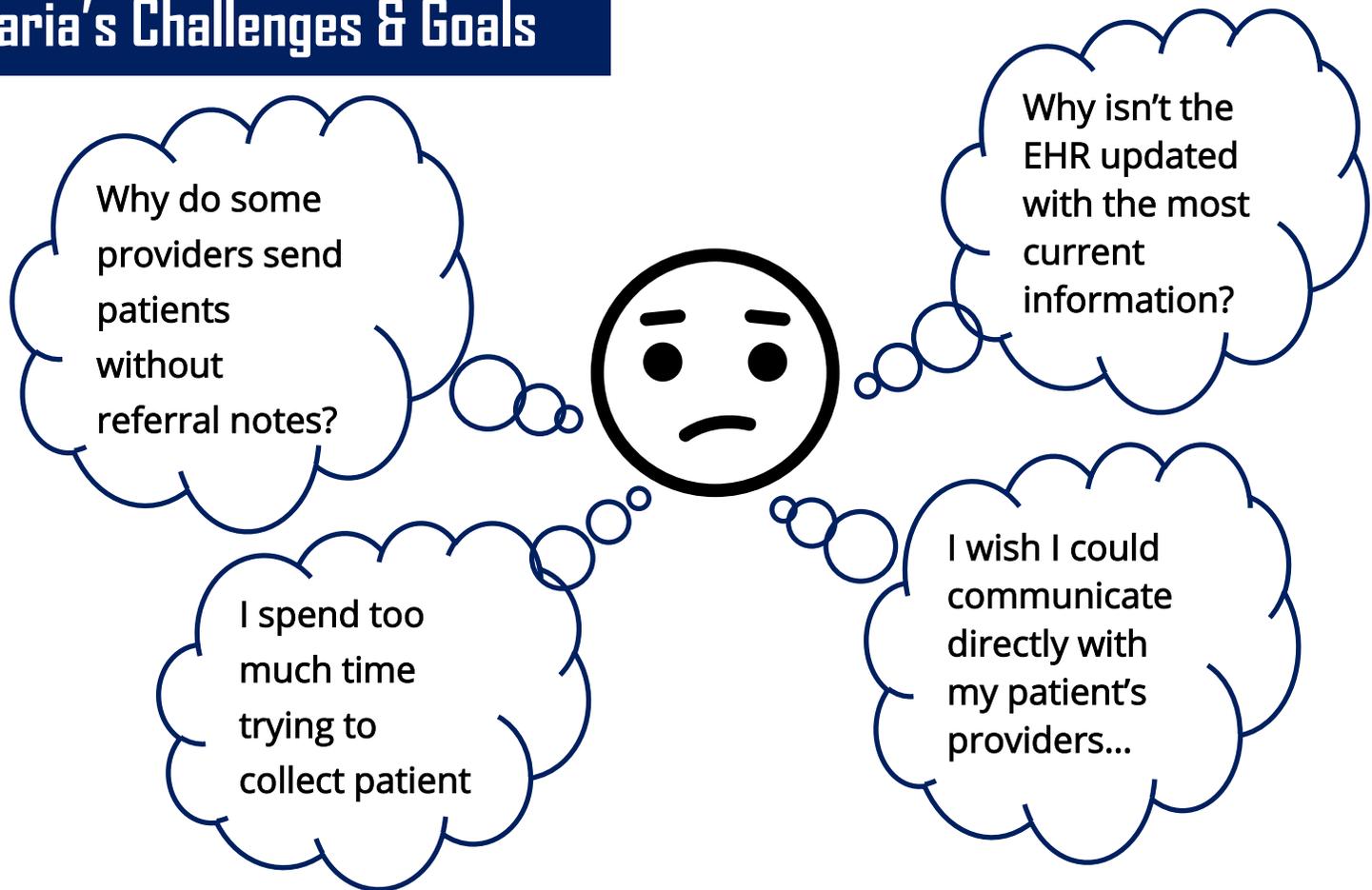
Maria **writes her notes whenever she has spare time:**

- in between patients
- while she has her lunch break
- at the end of the day

On busy days, she **sometimes has to finish charting the next day.**



Maria's Challenges & Goals



Having access to the University Hospital **EHR has helped Maria's daily routine**, especially when assessing patients from the hospital.

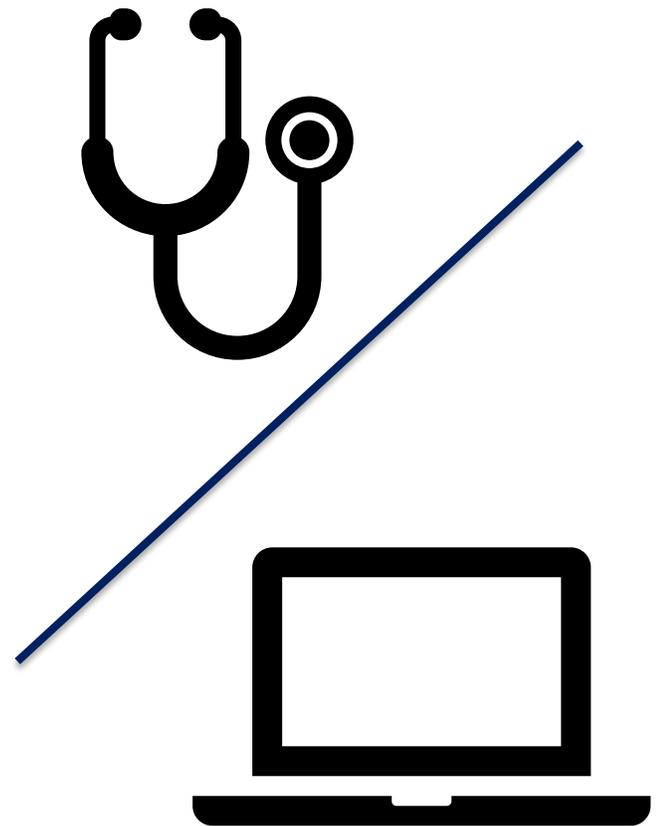
However, **lab results are often not up-to-date and medication refill patterns are not shown**. Without these pieces of information, **it is difficult for Maria to make the best recommendations** to her patients.

Furthermore, **communication is still lacking between Maria and other health professionals** from the University Hospital and other institutions. Many **patients come to her without a referral written, making it tough for Maria to adequately prepare beforehand**.

As a result, **time is lost** gathering this initial data during the appointment. She also is **unsure how regularly the doctors from the University Hospital read her notes**; it **often takes too long for her recommendations to be implemented**, and it is **hard to contact other providers**.

What Maria wants from a Care Plan

- Ability to **communicate with other professionals more directly**
- A **completed referral template** including reason for referral
- **Access to patient information, including:**
 - problem list
 - lab trends
 - medications and refill pattern
 - over-the-counter supplements
 - anthropometric trends
 - diet history
 - previous diet orders/education received
 - previous appointments with RDs
 - next appointments
- Features: A **dietitian note template** in which
 - important values automatically populate to reduce errors from rewriting,
 - automated nutrient needs calculator
 - graph for eGFR to show patients progress
 - ability to recommend lab tests if not current
 - ability to recommend diet orders



References

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Social Worker

Sam Johnson

- **32 years old**
- **Renal Social Worker**
- **Tallahassee, FL**

About Sam

Sam has spent many years of her life working in public health and public service:

- two years volunteering with the Peace Corps in Namibia
- over 10 years as a social worker in hospital and community settings

For the past 3 years, she has been working as a **renal social worker in an outpatient CKD clinic.**

Sam takes great pride in caring for patients' needs related to all aspects of their lives and views her role as one who **connects with her patients and gets them to open up about their concerns.**



Sam's Typical Routine & Interactions

Throughout the day, Sam **spends most of her time with her patients** discussing how they can improve their health and their lives.

She attends **plan-of-care meetings** with her team each day.



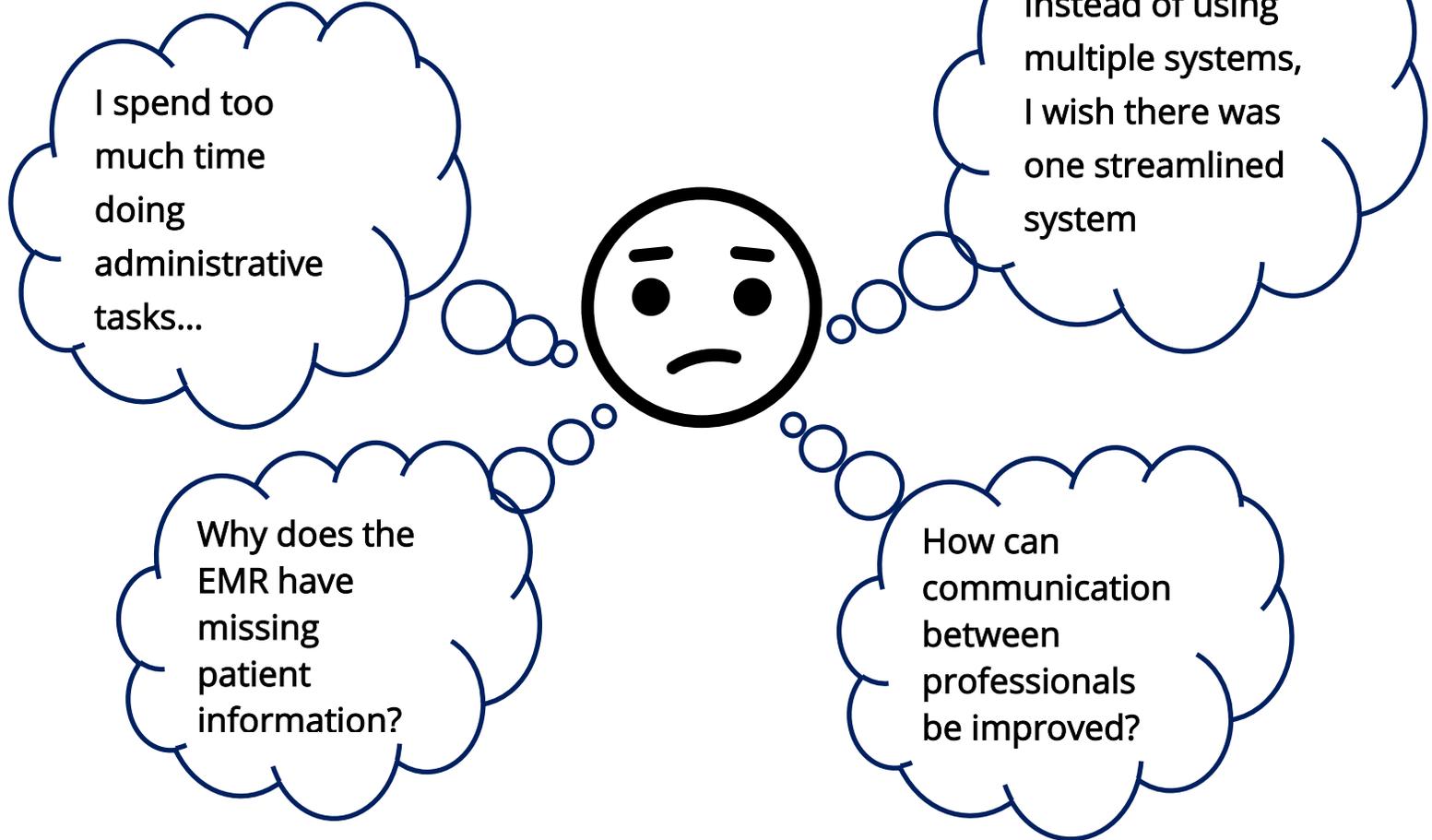
She also devotes a lot of her time **charting and contacting by telephone:**

- hospitals
- insurance companies
- pharmacies
- transportation providers

Lastly, **she spends hours on administrative tasks**

- entering data into different health record systems
- completing reports
- printing copies of information
- sending faxes

Sam's Challenges & Goals



Sam feels too much of her time is spent away from her patients doing administrative tasks and searching for data. Using multiple systems is not only **time consuming**, but also **increases the chance of making mistakes**.

Additionally, her **EMR does not show certain patient information needed to help her patients**. She must then spend time calling resources or sifting through notes to obtain the right information.

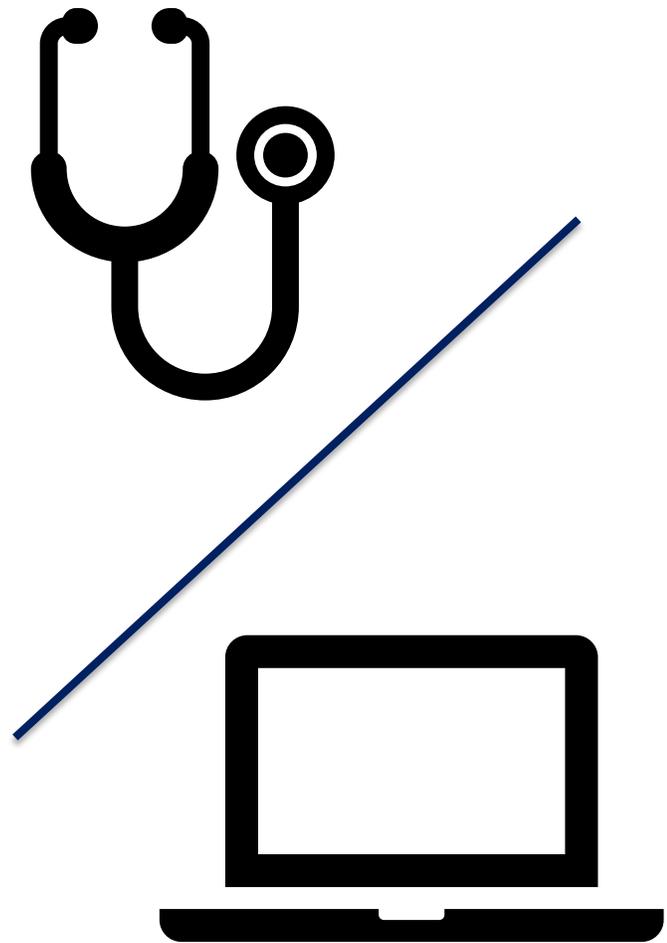
Communication between colleagues is another challenge that can be improved.

Within the facility, professionals do not read each other's notes and therefore may not be on the same page regarding recommendations for patients. For example, Sam sometimes finds patients are given recommendations not compatible with their situations or goals.

What Sam wants from a Care Plan

A comprehensive yet concise document with patients' important medical information in one location

- **Data elements should include:**
 - correct diagnosis
 - billing information and insurance details
 - patient job status
 - psychosocial information
 - medication
 - diet
- **Ability to compile data and create reports**
 - **comment boxes** rather than simple check boxes
- **Improved communication:**
 - **Template for notes** to reduce the amount of missing information
 - **Easy way to share information with other facilities**
- **Patient education:**
 - **Information in different languages** for patients whose primary language is not English
 - **Videos and educational content** compatible with patients who have limited literacy skills





Pharmacist



Ellen Walkowski

- **36 years old**
- **Community and Outpatient Pharmacist**
- **Detroit, MI**

About Ellen

Ellen is a pharmacist who **works primarily at the outpatient pharmacy in a large, university hospital medical center.**

She also **spends two days of the week working at various community pharmacies throughout the city.** She strives to **treat her patients holistically** and consider all aspects of their lives when making judgements on treatments.

For her own life, she aims to have balance in her work, diet, exercise, and mental health.



Ellen's Typical Routine & Interactions

When Ellen works in the community, she begins her day looking up her designated site for the day.

Once she arrives, **she spends the day processing patient prescriptions.**

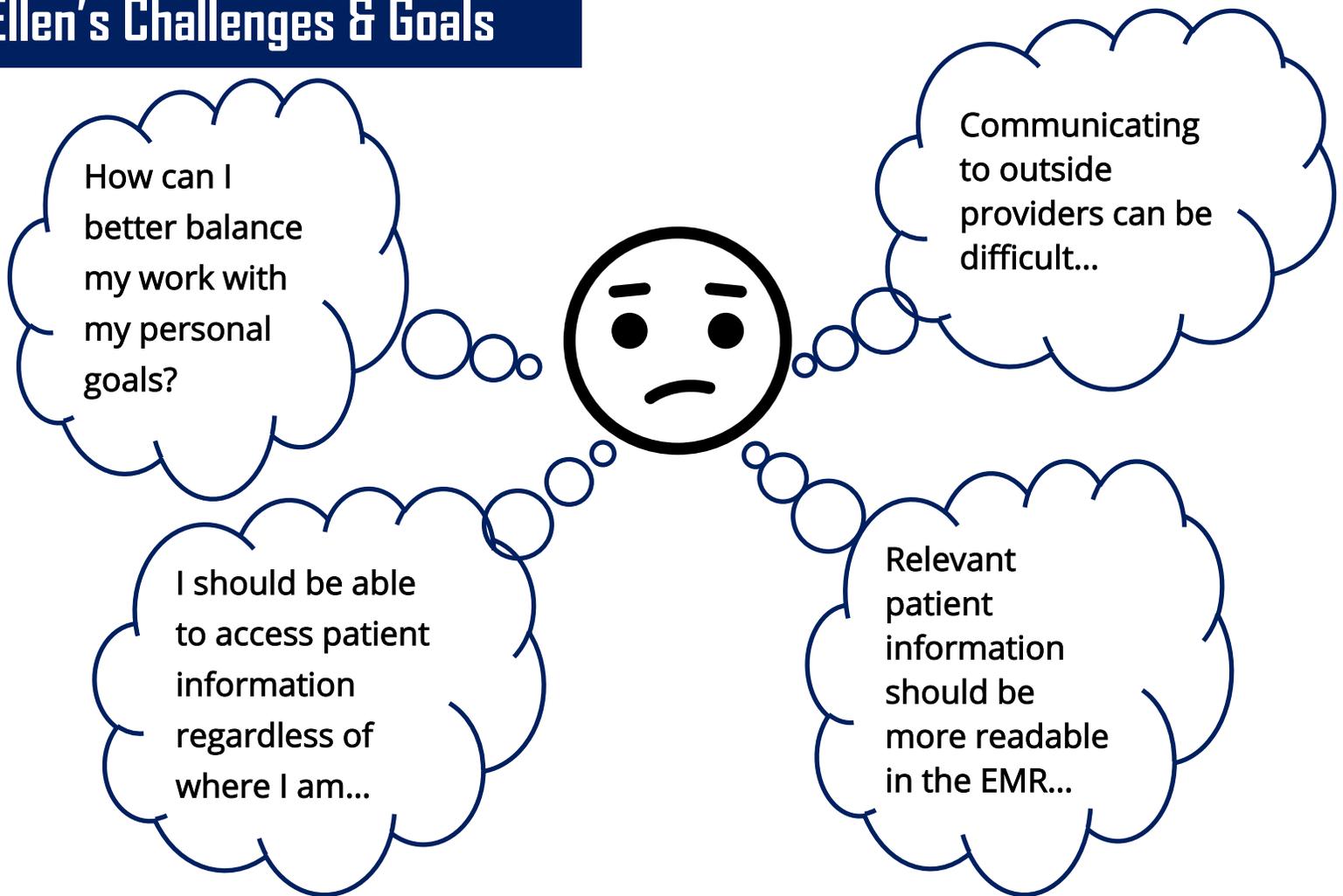
If prescriptions have health or insurance conflicts, she sets them aside and contacts the patient's physician or insurance provider, respectively.



Since only one pharmacist works during each shift, Ellen

- **often does not have time to take breaks or eat lunch**
- has challenges **attaining her personal health goals**

Ellen's Challenges & Goals



At the community pharmacy, Ellen does not have access to

- patients' medical records
- direct contact information for providers

In the hospital outpatient pharmacy, Ellen's routine is **less cumbersome because other pharmacists are on shift** and **she has access to the electronic medical record (EMR)**, allowing her

- to quickly verify patient information
- contact providers within the system

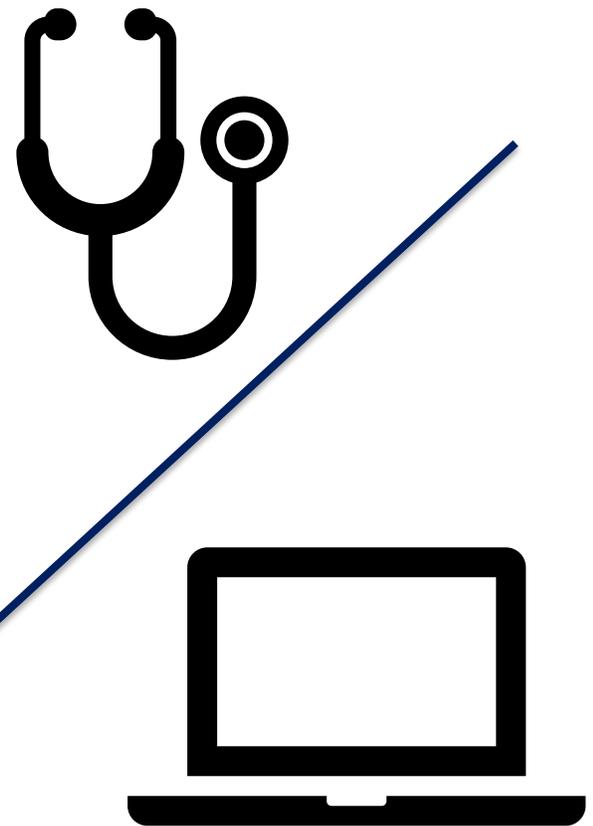
However, **providers outside of the system are difficult to reach**. Ellen has also noticed the **EMR is not laid out in a pharmacist-friendly way**. She often has to spend time

- going through multiple tabs
- sifting through notes to gain basic background information on her patients and the medications they are taking

What Ellen wants from a Care Plan

A **simple, easy to read document** which includes important patient information on 1-2 pages;

- medication information
 - name
 - dose
 - reason for medication
 - how administered
 - timing
 - dosing information
 - fulfillment data at the pharmacy
 - cost
- allergies and adverse reactions
- key lab values- especially eGFR
- listing of other providers or dialysis facility providing care and what they are treating
- ability for pharmacists and other professionals to add comments
- ability for other providers to see what pharmacists are assessing as drug-related problems
- printable for patients to keep and give to providers indicating prescribed medications
 - need
 - dosage



The EHR should include the ability to quickly send a message, especially in the community setting.

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