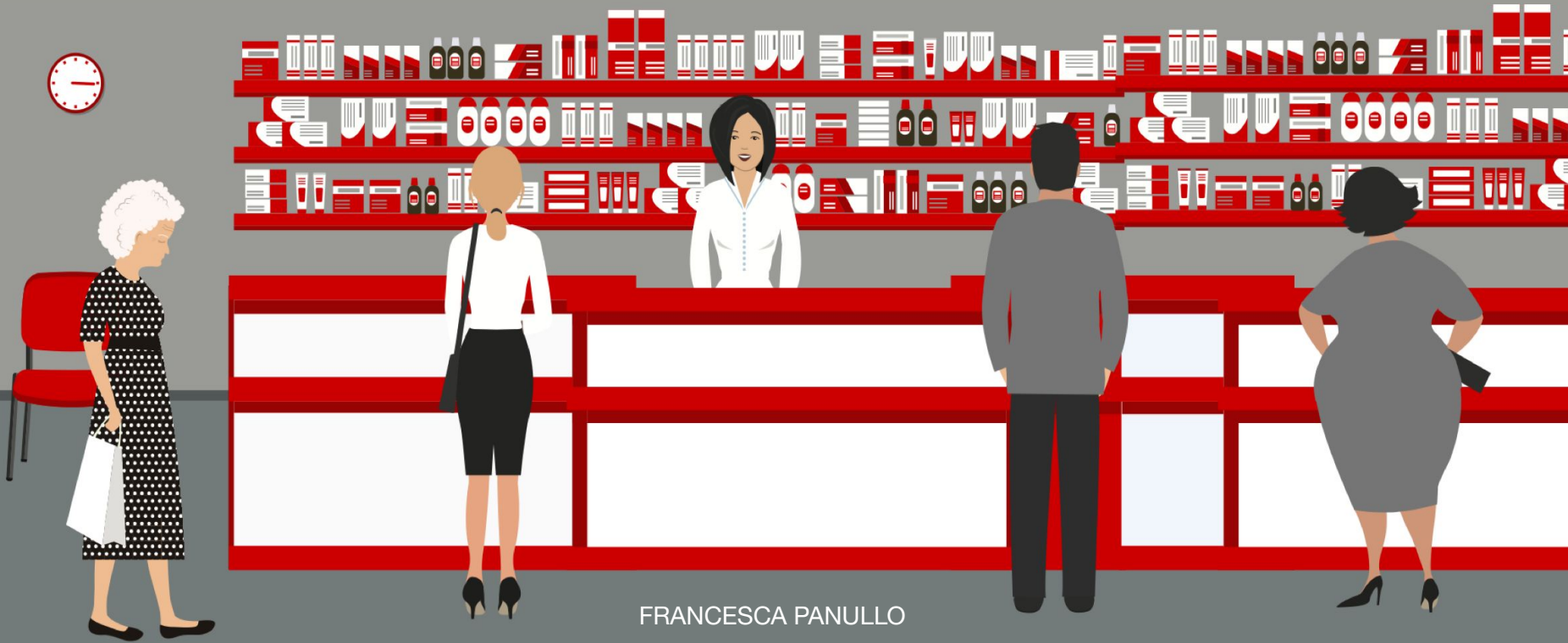


# USER RESEARCH FINAL PRESENTATION

## MAJOR FINDINGS



FRANCESCA PANULLO

# BACKGROUND & HYPOTHESIS

## BACKGROUND

- As a person who suffers from an autoimmune disease, and after speaking to friends with other autoimmune diseases, I noticed that we seem to be a lot of frustration in receiving medicine that is covered by healthcare insurance. We often **go to pick-up prescriptions to find out that they are no longer covered by our insurance company**
- Healthcare professionals had also said getting **prescription approval for patients from their insurance was a long complicated process.**

## HYPOTHESIS: MOBILE APP/ACCOUNT

1. Design an app that **consolidates** all the patient information so patient would have one place to go instead of multiple apps to access their information.
2. Patients **information would be accessible** (insurance coverage, medical devices/specialty pharmacies/pharmacies, and healthcare providers) to those **involved in making decisions about patient care.** This would help **accurately inform and expedite the process of providing patients care.**

# METHODOLOGY & RESEARCH QUESTIONS

## Remote Patient Usability

- Pre-test survey to qualify
- Used: Google Hangouts /FaceTime, Invision and native app/login
- Follow up interview
- Screening: Patient/Caretaker autoimmune disease & pharmacy app
- Tested: CVS pharmacy app
- 4 participants, 20-37 yrs, San Diego, CA

## Remote Provider Interview

- Pre-test survey to qualify & get insight on portal
- Recorded phone conversations
- Follow up interview with demographic questions to answer discrepancies
- Screening: Healthcare provider & experience in getting prescriptions approved from insurance.
- Tested: CVS pharmacy app
- 4 participants 75% 50-70 yrs,, New Haven, CT

## Provider Survey

- Screening: Healthcare provider & experience in getting prescriptions approved from insurance
- Method: Google Forms & Mechanical Turk
- Participants: 35, 79% 27-46 years old 81% 18-36 yrs, variety of locations in USA (South & Midwest) & India

## Patient Survey

- Screening: Autoimmune-Chronic Disease/Controlled Substance, pharmacy app
- Method: Google Forms & Mechanical Turk
- Participants: 35, 79% 27-46 years old 81% 18-36 yrs, variety of locations in USA (Northeast & Midwest), & India

Research  
Research Questions

## DISCOVERY

Research  
Research Questions

## DEFINE/CONFIRM

### Use

Do providers have a patient portal? What do they use it for?

Do patients have a portal? Do they have health insurance? What do they use it for?

### Data Sharing

What do providers think about data sharing?

What do patients think about data sharing?

### Quantitative Use

How many providers use the patient portal?

How many patients use the patient portal? How many patients have a health insurance app or other healthcare apps?

### Quantitative Frequency

How often do the providers use the patient portal?

How often do patients use their pharmacy app/login? How often do patients use their patient portal?

### Sharing Data

How many providers have positive ideas and think that sharing data would be helpful?

How many patients think that sharing data to help with their plan of care and consolidate apps is helpful?

Link to: [Patient Usability](#)

Link to [Provider Interview](#)

Link to [Provider Survey](#)

Link to [Patient Survey](#)

# MAIN GOAL & FINDINGS

## MAIN GOAL

- **Validate** if an app/site that stores all patients information and shares healthcare data to those involved in patient care is needed and if people will be receptive toward it

## FINDINGS

1. FREQUENCY OF USE
  - **Patients** frequently use their portal and pharmacy app as well as patients use a variety of other healthcare apps.
  - **Providers** frequently use patient portal
2. SHARING HEALTH DATA
  - **More** patients and providers are **positive and open to sharing health data**.
  - There is **some hesitancy mainly due to security**
  - Other hesitancy due to data overload and not knowing what the app actually looks like and how it functions

# APPLICATION & USAGE FREQUENCY-PATIENT



**79%**  
**58 patients**  
Check Pharmacy App 1-5x  
month

**66%**  
**59 patients**  
Check Portal 1-5x/month

## FINDINGS PATIENT

- The **frequency** of which patients utilize their healthcare devices is between 1-5 times a month causing it to be of **value** to patient.
- **The large number of healthcare apps** patients use (majority of patients have a patient portal, pharmacy app and health insurance account and additional healthcare apps) indicates patients' needs for healthcare apps.

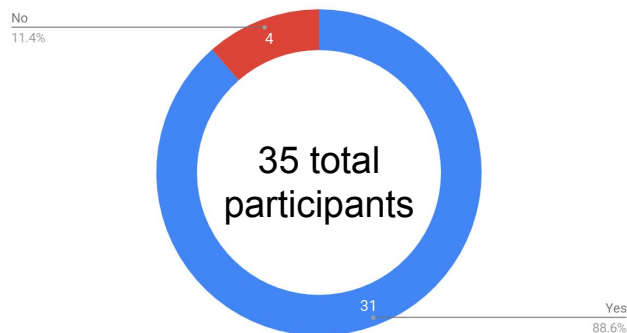
## RECOMMENDATION PATIENTS

- Patients: This **validates** the **need and potential benefit of having a healthcare app that would consolidate** the different mobile app and create one location in which they can access all their information.

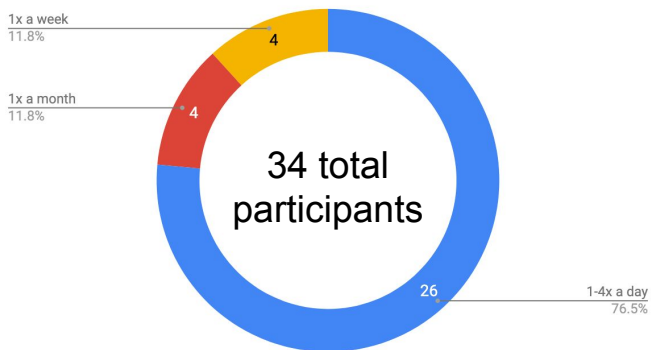
Link to [Patient Survey](#)

# APPLICATION & USAGE FREQUENCY-PROVIDER

Does your company currently have a patient portal?



How frequently do you check your patient portal?



Link to [Provider Interview](#)

Link to [Provider Survey](#)

## FINDINGS PROVIDERS

- 76% of 35 provider check portal 1-4x a day
- 58% of 35 providers get notifications on portal 1-4x a day
- 89% of 35 providers have a patient portal.
- Providers in interview said majority of the **issues** around **getting medications approved was insurance companies and pharmacies not having all the information** on the patient and providers not having information on which prescriptions are approved by the insurance

## RECOMMENDATIONS PROVIDERS

- Providers: This **validates the need and potential benefit of** having a healthcare app that **would share this information and inform** all those involved in the decision making process **the best way to provide patient care.**
- Provide tutorials on how to use the patient portal to reduce any issues or negativities providers may have with portal

# SHARING DATA-OVERVIEW



## DATA SHARING POSITIVE

Patients and providers are positive and open to the thought of sharing health data

1. Patients believe that sharing data will allow for better healthcare
2. Healthcare providers believe it will help in prescribing medications
3. Both believe it will streamline workflow having one centralized location



## DATA SHARING NEGATIVE

Patients and providers are hesitant to thought of data security and breaches

1. Patients that have less healthcare mobile apps or portal logins or do not use them frequently, saw the risk of sharing data greater than the reward of consolidating information.
2. Healthcare providers that were a bit older seemed to have more apprehension to data security and sharing
  - 75% of participant in interview 50-70 years old think sharing information and implementing a new system will have **risks and errors in the beginning.**
  - 79% of healthcare [provider from survey](#) 27-46 years old think **sharing information would help**



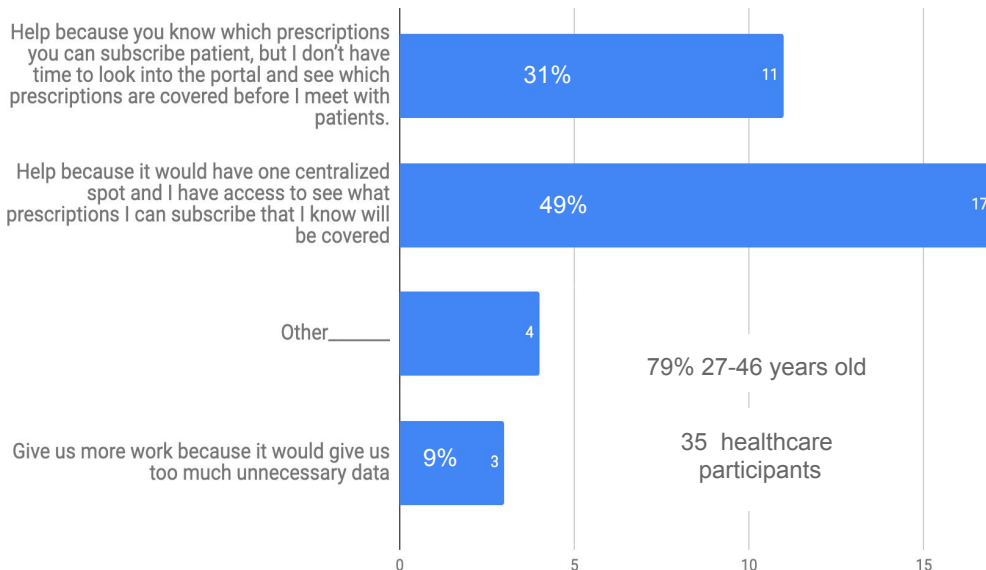
## DATA SHARING OVERALL

More patients and providers are positive about sharing data

1. More patients utilize healthcare apps frequently and have a number of them. There is value of creating an app that consolidating all their applications into one. Patients view the app accessibility as a higher reward than the risk of sharing data.
2. Healthcare providers believe sharing data and having access to all information will help provide better patient care. Though some providers are divided on if it will cause more work they still think it will help patient care.

# PERCEPTIONS IN DATA SHARING-PROVIDER

Which of the statement (s) accurately describe how you would feel if patient information EHR records became accessible to health insurance companies and pharmacies, and you all had all of the data and access to this information in their patient portal.



Link to [Provider Survey](#)

Link to [Provider Interview](#)

## FINDINGS PROVIDERS



**100% of healthcare providers from interview** thought sharing data could be a **potential positive tool in the future**



49% said sharing information would help because it would help them know which prescription to prescribe and **which would be covered.**



31% providers said they thought it would be helpful but they **don't have time** to go through patients insurance coverage



3% providers give **unnecessary data**

## RECOMMENDATION PROVIDERS



**Filter way they receive data and information on portal to help ease workload** include search button or find and replace tool



# PERCEPTIONS IN DATA SHARING-PATIENT

## FINDINGS

- In **Patient Usability test** patients voiced wanting to **share children medical records to provide accurate care** informing their school nurses.

## RECOMMENDATION



Add a share icon to share the medicine list in email with healthcare providers



Have a feature where you can add the medicine list to your apple wallet.

## PATIENT USABILITY TEST

**CVS pharmacy** Search

Pharmacy MinuteClinic® Shop ExtraCare® Contact Lenses Photo My Orders Easy Recorder Basket

Home | Drug | Wallet Card Report

### Review Medicine List

Create your own printable wallet size medicine list in one easy step. Then you can easily convey your information to your pharmacist or health care provider.

#### Medications

**CVS Pharmacy Prescriptions**

- Clindamycin Phosphate 1% Foam
- Cortisone 10% Aerosol
- Dextroamp-Amphetamine 20 Mg Tab
- Dicyclanide 10 Mg Capsule
- Fluoxetine Hcl 20 Mg Capsule
- Fluzone Quad 2018-2019 Syringe
- Mesalamine Dr 1.2 Gm Tablet
- Nystatin 100,000 Unit/Gm Cream
- Nystatin 100,000 Unit/Gm Cream
- Tolmetate 1% Solution
- Tri-Le-Estarylla Tablet
- Tri-Le-Sprintec Tablet
- Vyvanse 50 Mg Capsule

#### Patient Information

**Patient**

Name: FRANCESCA PANULLO  
Date of Birth: August 05, 1991  
Phone Number: (203) 376-6868

**Emergency Contact**

Phone Number: (203) 376-6868

**Pharmacy**

Name: CVS Pharmacy, Store #17674  
Address: 1830 OCEAN AVE  
SAN FRANCISCO, CA 94112  
Phone Number: (415) 840-0524

#### Conditions

ADHD  
Ulcerative Colitis

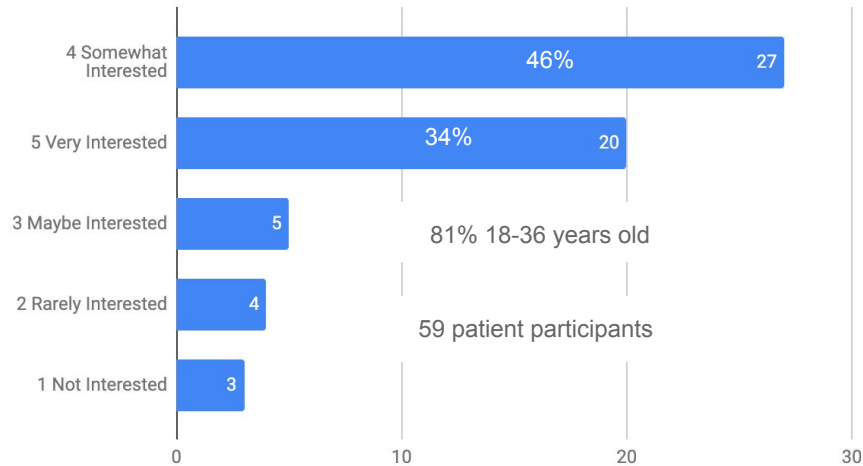
#### Allergies

Penicillin



“I want to be able to share this prescription schedule with other caregivers like our school nurse so she knows what medicines and allergies our daughter has”-Doug Usability Test

# PERCEPTIONS IN DATA SHARING-PATIENTS


**Scenario:** Imagine there was a service that allowed you to sync all the information from your pharmacy, patient portal and health insurance app. It would require you to grant patient portal access to your pharmacist and health insurance provider. How interested are you in this app. Why?



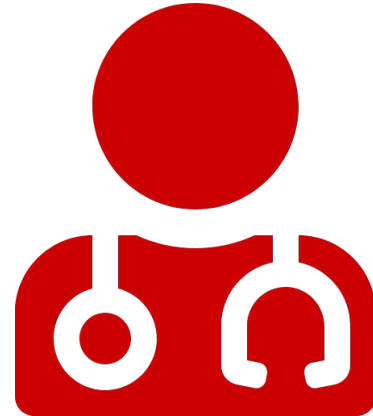
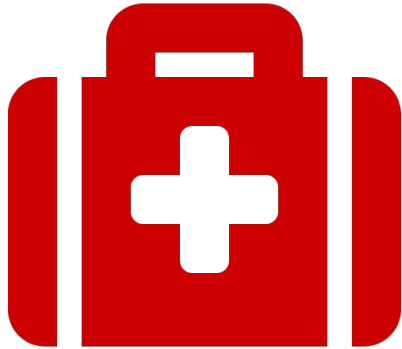
## FINDINGS PATIENTS

-  80% of participants had positive notations about the app
-  21% of those notions were also meant with fear of security, insecurity over not being able to give definitive answer without seeing the interface, not knowing it would include additional features.

## RECOMMENDATION PATIENTS

-  Create a **prototype** and have them **usability test** the app in an effort to see if those who were positive but apprehensive would be more in favor of using it once they are able to visualize the app

**THANK YOU!**



Link to: [All Major Findings](#)