# MY SYMPTOMS

Today is a new day

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# **PHASE 1**

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# Neurology

A Neurology clinic helps patients with disorders of the Central Nervous System (CNS) and the Peripheral Nervous System (PNS). Due to the wide functionality of the CNS and PNS, patients' symptoms can be extremely varied, but most are dealing with chronic pain or persistent symptoms. Doctors often specialize even further into a specific neurological condition such as: Traumatic Brain Injuries, Epilepsy, Movement Disorders, Sleep Disorders or Multiple Sclerosis.

## **Multiple Sclerosis (MS)**

MS is an autoimmune disease where the immune system attacks healthy cells within the CNS. Specifically, MS attacks the myelin, the protective coating that surrounds nerves in the brain and spinal cord. This damage interrupts nerve signals from the brain to other parts of the body causing a variety of symptoms.

The causes are still being studied but MS affects nearly 1 million adults in the U.S. It commonly affects women more than men and patients will get a diagnosis between the ages of 20-40.

Disease modifying therapies are currently the most affective way to reduce the progression of MS. Lifestyle changes like eating healthy and exercising regularly have also helped MS patients improve their quality of life.

# **Making an MS Health Journal**

#### The Challenge

MS affects each patient differently and can impact functionality of the entire body. Most patients will be seen by several specialty practitioners to tackle individual symptoms.

#### Objectives

-Create a space for patients to gain clarity while going through their MS journey.

-Take self-reported information with them to all appointments.

-Connect with their MS care team at any clinic, with a registration code given to them by their Neurologist, patients will be able to sign up for the app.

#### **Users/Audience**

Majority of patients are diagnosed between 20-40. It is important to keep accessibility in mind by offering text to type and larger buttons to accommodate for all patient abilities.

#### **Nature of Content**

Mobile application, message care team, track physical and emotional well being, self-reporting data, website, smart watch, track health metrics (steps, activity levels, heart rate).

# *"MS is the clearest definition of an uncertain future."*



Nerve signals are slowed or blocked

# **Competitive Analysis - CareClinic**

A self-care wellness app and symptom tracker. Set reminders for your meds and record your symptom severity, measurements, engage in physical activity, and eat well. Automatically discover correlations and triggers through reports.

**Trackers Included:** Track medication, vitamins, supplements, chronic conditions, symptoms, diary, environmental factors, nutrition, physical activity, daily vitals and measurements, therapies, sleep, stool and notes.

MONITOR RESULTS RECORD WHAT MATTERS CARE PLANS with Check-ins Your Plan To Get Better Charts, Logs, Correlations Reports Personal Wellness Medicine & Supplements Correlations Logs Dersonal Wellness × .5 mg 🔵 Melatonin 200 🛕 Magnesium 😑 Diary O > 250 mg 🧧 Fish Oil Medicine & Supplements 0 > 50 mg 🔵 Zinc Symptoms 0 > 1000 iu 🕕 Vitamin D ♥ 1 Interaction Measurements 0 > ⑦ 70 Effects Nutrition 12 Nutrition Plan Activity Activity Plan Therapy 10.30 AM Gym Therapy Plan 1.35 AM Low Level Laser Therapy

#### **Cost:** \$9.99 per month or \$59.99 per year

#### **Pros:**

Apple Health inputs sleep measurements

#### Print reports

Customizable to be used for health records, reminders, health diary or symptom tracker

#### Cons:

Symptoms ask for a stop and end time when they are entered

"CarePlans" are blocked in the trail

No contact with doctors

# **Competitive Analysis - FlareDown**

Flaredown is a simple symptom tracking app and a community for chronic illness. Built by patients, for patients, and free forever.

**Features:** Track all conditions, symptoms, and treatments in one place, creates an easy check-in each day with previous details, Tag your day with details about things that may interact with your illness, automatic weather tracking, visually compare your data to test out your treatments and find triggers,

#### Cost: Free



#### **Pros:**

Serves many chronic pain conditions

Customizable lifestyle influences from food, activity and meds

Community chat

#### Cons:

Inaccurate weather tracking

Only input symptoms once a day

No contact with doctors

## **Interview Observations**



# Jenny | 23 | Single

"Just taking it one day at a time"

**Bio:** Jenny graduated college last spring with a degree in computer science. While studying, she was a part of the swim team and still likes to stay active. Since graduating she has joined the community swim team but with her recent fatigue it has become harder. Her family is very supportive, and her mom joins her at appointments to help take notes and ask questions. She is nervous about starting a new job with so much still unknown.

**MS History:** Jenny was diagnosed with MS this year. With her diagnosis she has felt completely overwhelmed. It took several months for her to be properly diagnosed. She is now in the process of consulting with neurologists to find the right preventative treatment plan. Her current flare up has affected her hands, feet, and balance. She uses Notes and a journal to write down symptoms and dates.

#### Needs:

Breakdown of information Better place to keep track of symptoms

#### **Frustrations:**

Feeling overwhelmed by all the information

Online resources are hard for her to trust



# Kay | 55 | Married

"Some days you have to remind yourself to take a breath and choose positivity"

**Bio:** Kay is married and has 4 children. Living in Duluth she likes to walk around the lake and enjoy time outdoors. Her family moved to the cooler climate to help with her symptoms during the summer. She does not work to reduce stress. At home she likes to stretch and meditate to alleviate pain and connect with her body. Her family is extremely supportive of her on good and bad days. One of the hardest parts when she was first diagnosed was learning how to advocate for herself.

**MS History:** Kay was diagnosed at the age of 30. It took several years to be properly diagnosed. Her first symptoms included vision problems and feet numbness. At the time she had never heard anything about MS. Over the years she has tried different treatment plans including pills, self-injections and now she goes in for IV infusions every 3 weeks. Occasionally she will use walking sticks to work on lengthening her stride.

#### Needs:

Easily connect with her care team

Keep track of all appointments

#### **Frustrations:**

When she does have a flare up, it takes time to see her doctor Dealing with changes



### **User Stories**

"I see different doctors for the symptoms that arise due to my MS, I want one place to organize everything related to my MS experience."

"My MS symptoms seem so unpredictable, I want to keep track of my symptoms to see how things change over time."

"When my symptoms start to flare, I want to get in contact with my doctor right away."

"Keeping my appointments organized is difficult, I want one calendar with appointment information and reminders that I have upcoming visits."

## **Red Routes**



# PHASE 2

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# MOBILE

PIN

#### HOMEPAGE





#### **Registration Flow**



1 2 3 4 5 6 7 8 9 0 (x)		10:20 Today is a new day Today is a new day	10.20 <b>ul ?</b> How would you rate your current mood? 1 3 5 7 9 2 4 6 8 10	1020     ull ?       How would you rate your current mood?       1     3       2     4       0     10       What emotions are you feeling?       Add/Edit       1	10:20 1 out of 5, how would you rate your current energy level? C 3 2 C 5 C C C C C C C C C C C C C C C C C
1020 I out of 10, rate your pain and select where it's occurring I O O O I O O I O I O I O I O I	10.20 1 out of 10, rate your pain and select where it's occurring () () () () () () () () () ()	10:20 1 out of 10, rate your pain and select where it's occurring ( ) ) ) ) ) ) ) ) ) ) ) ) ) ) ) ) ) )	1020     uil ?       How would you describe the feeling in each area?       6     Hands       Add/Edit	Image: 10.20     all and cognitive symptoms       Add/Eart	

# DESKTOP

LOGIN

HOMEPAGE

MES	SAGES	APPOI	INTMENTS	REM	INDERS	JOL	JRNAL	мо	OD CHECK-IN	ENERGY CHECK-IN	во	DY CI	HECK IN	REP	ORTS	MED LIST	SETTINGS
	Search	E F	uture Appts.		Add New		Daily Prompts		Rating	Rating		Phys	sical	- 1	Search	Add New	Profile Info
	Inbox Make a New Appt. Complete			Blank Entry	Entry Emotions			Rating				Edit Current	Manage Reminders				
	New Message Department					Search						Diagram				Change PIN	
			Date										Describe				
			Time									Cog	nitive				
													Rating				
													Diagram				
													Describe				

#### HOMEPAGE



MESSAGES

	A Web Page						
<del>(</del> )	Https://	÷					
00000	Messages Dr. Johnson subject Dr. Johnson subject						

#### MEDICATION LIST





#### APPOINTMENTS-2

	A Web Page						
<b>← →</b>	C Https://						
00000	Vpcoming:	IMAGING	Avalible Times 8:00AM 9:00AM 11:00AM 2:00PM				



JOURNAL



CHECK-IN-2

A Web Page	A Web Page
← → O (Https://):	← → ④ (Https://
How would you rate your current mood?	How would you rate your current energy level?
1 3 5 7 9 2 4 6 8 10	
What emotions are you feeling?	
	< 3 >

#### CHECK-IN-4



#### CHECK-IN-3

CHECK-IN



# WATCH

LOGIN

#### HOMEPAGE

REMINDERS

MOOD CHECK-IN

Rating

#### Complete

## ENERGY CHECK-IN

Snooze



# PHASE 3

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# MY SYMPTOMS

Primary Logo

# MY SYMPTOMS

Alt. Logo

## **Headers- Gotham Black**

Body- Gotham Medium











# **PHASE 4**

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## **First Round Prototyping**

**Desktop:** Start a new message, Schedule an appointment, Look at reports *Screens 1-9* 

**Mobile:** Enter a complete check in *Screens 10-32* 

**Watch:** Enter a "quick check in", See reminders, Complete reminder tasks *Screens 33-46* 

https://xd.adobe.com/view/02d4d663-287e-4fcd-9885-fe90bf22c647-5787/

# PHASE 5

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# **Usability Testing - Desktop**

Users were instructed to complete the tasks below while I recorded observations.



# **Usability Testing - Mobile**

Users were instructed to complete the tasks below while I recorded observations.

Task 1: Log your current mood, energy level and physical symptoms



#### Task 2: Send a message



## **Usability Testing - Results**

#### **Critical**:

If we do not fix this, users will not be able to complete the scenario.

#### Serious:

Many users will be frustrated if we do not fix this; they may give up.

#### Minor:

Users are annoyed, but this does not keep them from completing the scenario.

Desktop-Tried the nerve button to go home Confused by diagram front/ back label

Suggested a check point, exit option Wanted dates on the calendar

## **HiFi Prototype**

**Desktop:** Start a new message, Schedule an appointment, Look at reports <a href="https://xd.adobe.com/view/a04c356f-3f70-478a-83e4-6739b000e421-f51f">https://xd.adobe.com/view/a04c356f-3f70-478a-83e4-6739b000e421-f51f</a>

**Mobile:** Log current mood, energy level and pain levels, Send a new message <u>https://xd.adobe.com/view/2e0388ef-cc93-43f6-af09-2e1cc8fa945b-7b50/</u>

**Watch:** Enter a "quick check in", See reminders, Complete reminder tasks <a href="https://xd.adobe.com/view/d57e0ec3-642e-41b8-85e9-adfe4903a2ec-802d/">https://xd.adobe.com/view/d57e0ec3-642e-41b8-85e9-adfe4903a2ec-802d/</a>

# MY SYMPTOMS

Today is a new day

Thank you for your time