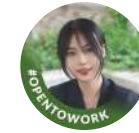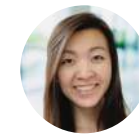HealingHand
TECH

Team

Erik Zimmerman
User Experience Lead

Yongwen Dai
UX/UI

Cindy Chang
UX/UI

Emily Huang
UX, Physical Therapist

Olga de Luna Demenev
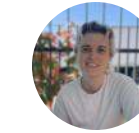UX, Registered Nurse

Alexa Juarez
UXR, SLP

Stakeholders

Raisa Pokrovskaya
Founder, CEO

Schuyler Vink
Founder, CTO

Product

Clinician portal — Desktop

Industry

Healthcare startup

Timeframe

12 months

HealingHand.Tech

- Home
- **Patients**
- Devices
- Support
- Settings
- Logout

LW — Laura White

Manage devices | RSHHT1012 | RMHHT2013

Overview | Exercises | Charts | Check in

👤 Patient details
Edit information

Date of birth
June 7, 1973

Email
lwhite73@gmail.com

Address
456 Casterly Rd, apt 303, Lannisport, LA, 20156
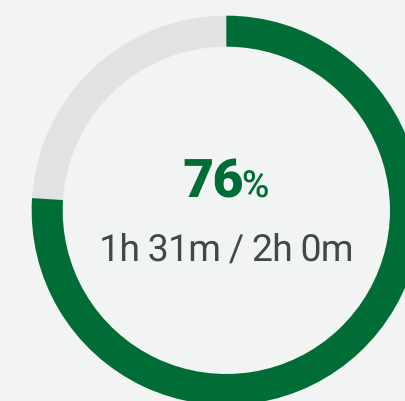
Phone number
301-324-9087

Treatment information

📄 Patient notes
Last updated 10/20/24 by Emily Huang

- **Add a note**
- A short note about the patients scheduling preferences
- A longer note about what other therapy the patient is receiving
- A note about limitations the patient has
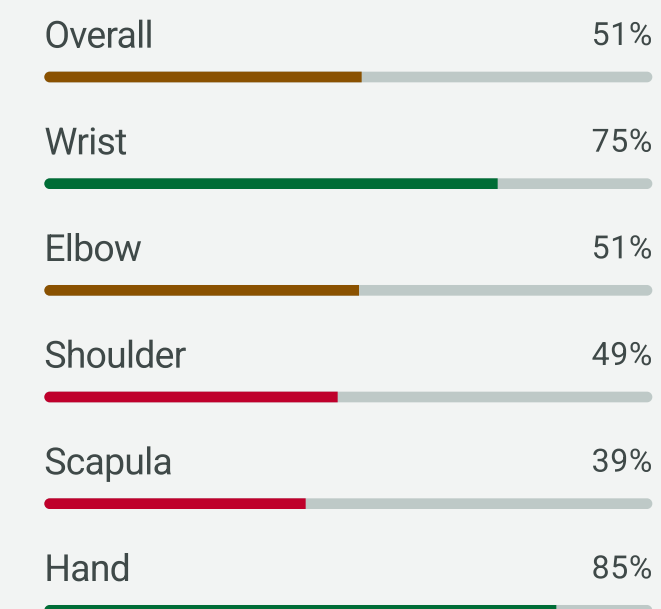- A self-reminder about this patient

◷ Weekly compliance
View details

76%
1h 31m / 2h 0m

| Sun | Mon | Tue | Wed | Thu | Fri | Sat |
| ✓ | ✗ | ✓ | − | | | |

◄ **Week 1** ►

✓ Success rate

Overall	51%
Wrist	75%
Elbow	51%
Shoulder	49%
Scapula	39%
Hand	85%

◎ AROM progress
View details

Wrist Flex. / ext.
Shoulder Abd. / add.
Wrist Rad. / uln. deviation
Shoulder Int. / ext. rotation
Elbow Flex. / ext.
Elbow Sup / pro

- Initial
- Current

Messages

🔍 Search message history

10:32 AM
My right arm feels so weak. Will I be able to use it normally again?

Recovery takes time and effort. We'll focus on strengthening exercises and techniques to improve your arm's functionality.
10:34 AM

10:38 AM
I keep forgetting things easily. Is this normal?

Memory challenges are common after a stroke. We can practice some cognitive exercises to help enhance your memory skills.
10:45 AM

New message

My Role

Project Leadership

Led the UX design team, providing guidance, direction, and mentorship to ensure successful delivery of designs.

Strategic Planning

Collaborated with stakeholders to define project goals, user requirements, and design objectives to develop a UX strategy aligned with business goals.

User Research

Oversaw user research activities to gain insights in user behaviors, needs, and motivations. Used findings to prioritize design implementations.

Information Architecture

Defined structure, organization, and navigation by developing sitemaps and user flows to ensure a logical and intuitive user experience.

Interaction Design

Provided feedback and direction on wireframes. prototypes, and mockups to ensure user needs and project requirements were met.

Cross-functional Collaboration

Worked with product managers, developers, and mobile UX team to ensure design feasibility, scalability, and alignment.

Intro

HealingHand Tech uses innovative medical technology for stroke survivors to improve upper limb function. The product incorporates a gamified mobile app for enjoyable exercising and a wearable for real-time feedback.

I led the design of the clinician portal, where therapists manage these patients and their treatment program. It employs specialized tools for building exercise programs, progress tracking, and remote therapeutic monitoring to **make providing effective treatment easier.**

Our Problem

In remote therapy, **the connection between therapists and patients is vital to successful treatment**. This presents challenges including efficient patient management, safety concerns, and making effective care plans outside clinic visits.

Key Challenges

With the goal to create a clinician platform that enhances therapist-patient interaction, **these key challenges to providing effective treatment were identified.**

To simplify the design context, a remote setting was focused on because of its unique complications. Success here would likely translate well to outpatient and inpatient settings.

Patient Management

Help therapists manage multiple patients efficiently

Patient Safety

Feel confident that patients are safe while exercising

Personalized Exercises

Ensure that exercise activities are engaging, appropriate, and useful

Progress Tracking

Provide real-time feedback, data insights, and tracking on patient exercises

Heuristic Evaluation

Initially, I reviewed existing design work to understand stakeholder approaches and team dynamics better. Each screen was carefully examined to determine design requirements, focusing on usability. **It quickly became evident that deeper insight into users' perspectives was required** to understand if the designs were intuitive.

The initial designs assumed seamless integration with the clinic's Electronic Health Records (EHR) system to extract patient data, outcome measures, and clinical notes. While this integration seemed ideal, its practicality was questioned for the MVP.
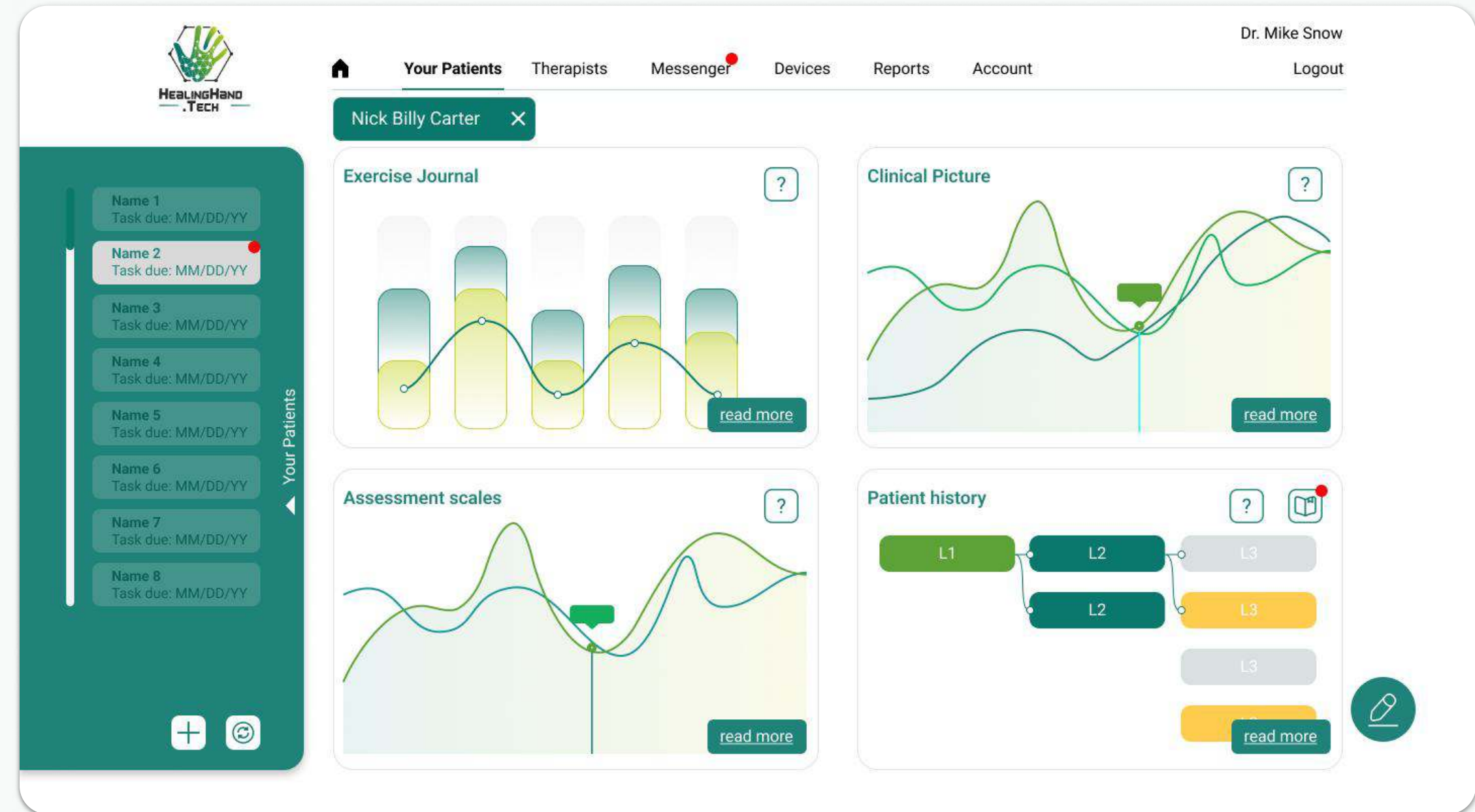
Competitive Analysis

Other gamified wearable interventions for stroke survivors were identified, including **Neofect** and **MindMaze**. While the context differs with these in therapeutic goals and clinical setting, they were **studied for insights on progress tracking and patient management.**

While looking for indirect competitors, Home Exercise Programs (HEPs) were discovered. This was a huge insight because it framed how our product improves on standard practices. **Analysis of Medbridge and Sword Health helped to understand how exercise programs are created and managed.**

neofect

Direct competitor

"Clinically proven neurorehabilitation devices maximize arm and hand use through fun and functional gameplay"

✓ Gamified	✗ Remote therapy
✓ Upper limb focus	✗ Mobile app
✓ Motion tracking	✗ EHR integration
✓ Stroke specific	✗ Templates

mindmaze

Direct competitor

"Evidence-driven therapy and assessment portfolio powered by medical-grade software, tailored interactive content, and proprietary peripherals"

✓ Gamified	✗ Mobile app
✓ Motion tracking	✗ EHR integration
✓ Stroke specific	✗ Templates
✓ Remote therapy	✗ Upper limb focus

sword

Indirect competitor

"Digital physical therapy combines the expertise of a Doctor of Physical Therapy with the power of AI"

✓ Remote therapy	✗ Gamified
✓ Mobile app	✗ Upper limb focus
✓ Motion tracking	✗ EHR integration
✓ Templates	✗ Stroke specific

MEDBRIDGE

Indirect competitor

"Make therapeutic home exercise easy, effective, and accessible. Keep patients engaged in their therapy"

✓ EHR integration	✗ Gamified
✓ Templates	✗ Upper limb focus
	✗ Remote therapy
	✗ Stroke specific
	✗ Mobile app
	✗ Motion tracking

User Interviews

Understanding how therapy works for patients with neurological conditions from initial evaluation to discharge was required to decipher how the product fits into existing workflows.

An added challenge was to understand how treatment changes in **different clinical settings among various types of therapists**.

At the time, it wasn't clear who to recruit or what questions needed answers. We took an organic approach with a semi-structured plan, adapting it as 16 therapists were interviewed.

Research Participants

4 Occupational Therapists (OT)
2 Physical Therapists (PT)
1 Certified Hand Therapist (CHT)
1 Speech-Language Pathologist (SLP)

---

8 Doctoral OT Students

Occupational therapy post-professional students for a neurorehabilitation course at Howard University

Patient onboarding/initial evalaution

Therapy evaluation involves....

Goals

Goals are adjusted based on....

Other factors that affect goal setting

Individualization of Patient Treatment Programs

Factors that affect HEP customization

Therapy Interventions

Types of therapy interventions

Caregiver/family involvement

Patient Management System/softwares

Modes of Communication

Telehealth / Telerehab

HEP
Problems/Opportunities

Opportunities
With tech

Collaboration among professionals

PT / OT Collaboration

Research Goals

1. Understand the high level process therapists use to provide rehabilitative treatment to patients.

2. Learn how the product fits into the existing treatment process and identify opportunities to use tech to improve it.

3. Uncover nuances to treating patients with neurological disorders, specifically stroke.

4. Understand how treatment changes based on setting and the benefits of telerehabilitation.

Key Insights

After a month of interviews with sixteen therapists and affinity mapping over 500 notes, research yielded four key insights:

Goal-oriented Collaboration

Therapists work closely with patients to set personalized goals that align with their daily life, ensuring the treatment remains relevant and focused.

Incremental Plans

Complex treatment plans are broken down into smaller, manageable steps, aiding patients in following and progressing through rehabilitation.

Responsive Adjustment

Care plans are upgraded and downgraded frequently based on how the patient responds to treatment, whether it be pain, fatigue, or lack of progress.

Monitoring & Tracking

A comprehensive view of patient compliance and improvements via wearable data is innovative and useful in validating therapy effectiveness.

Defining the User

An important discovery from the interviews was **identifying the primary user as an Occupational Therapist.** Working closely with Physical Therapists, they primarily focus on upper limb function rather than the entire body.

Zoe Holiday
OT, Outpatient care

Background

Zoe is a certified stroke rehabilitation specialist with 8 years of experience. Though her clinic offers telerehab services, all her visits with stroke patients are conducted in-person. With a busy schedule, she prioritizes efficient time management. She's open to using stroke rehab technology, but gets frustrated when setup isn't quick and easy.

Tools

Epic EHR, Medbridge HEP, MyChart, Theraputty, adaptive utensils

Core needs

- Patients to take an active role in their rehab
- Assurance that patients are doing their HEPs with proper form
- Adequate training to use neurorehab technology efficiently

Frustrations

- Lack of patient compliance with HEP
- Minimal caregiver support
- Difficulty motivating patients who lack insight into their impairments

Journey Mapping

Research data was used to outline the typical sequence of activities OTs employ in stroke patient care.

This broader context shed light on how HealingHand's product fit into the process. It was crucial to recognize how therapeutic activities happen in conjunction in order to integrate with existing workflows.

HealingHand is introduced to the patient at the treatment/intervention stage. This iterative, multi-step process demanded a comprehensive understanding to effectively tackle the key challenges.

Phases	Patient's (P) first visit, evaluation	Documentation, setting plan of care	Treatment / Intervention	Discharging the patient
Actions	1. P/caregiver is interviewed to understand baseline function, home set up, caregiver support 2. P's function is assessed 3. P's physical and cognitive impairments are noted 4. OT collaborates with P/caregiver to determine goals	1. Baseline function, home set up, caregiver support, ADL assist level, outcome measure results, goals are documented 2. Plan of care is determined: frequency of visits, possible interventions 3. Charges determined for the session	1. OT works with P for a number of sessions 2. Treatment approaches vary: rehabilitative, compensatory strategies, assistive devices, education, caregiver training 3. Activities adjusted based on P response (pain, fatigue, frustration) 4. HEP is assigned, customized to P ability level 5. Progress is documented after each session 6. Status of goals is updated, may or may not be adjusted	1. Occurs when: goals are met, progress stagnates, lack of participation, therapy no longer appropriate 2. Recommendations provided for continuing therapy elsewhere 3. Appropriate assistive equipment is recommended 4. HEP provided for continued progress/maintaining function

Emotions & Thoughts

- Let's see what's going on with your affected limb...
- Only 15 mins until the next patient. Let's document everything before I forget anything
- Cognition is pretty good, compensatory strategies and assistive devices is a good place to begin
- This isn't working, we should try rehabilitation. Maybe HealingHand's device will be a good fit
- Wow, they are making great progress. It's nice I can see that right in the portal
- Good luck with your new life!

Pain points				
	• Unsupportive caregivers that are not actively engaged • Home set ups that create unnecessary risk to the P	• Having to make duplicate documentations across multiple platforms • Insurance policies that don't support patient needs	• Setting attainable goals that align with the P's personal needs • Lack of an effective tool to monitor patient compliance and progress with at-home activity • Problems with motivating patients, continuous refusal to participate in therapeutic activities • Using session time to troubleshoot medical technologies • Unexpected pain or fatigue during therapy	• Ensuring medical devices that belong to the hospital are returned

Information Architecture

Backed with research insights, I worked with stakeholders to map out the portal sections and planned features. This **framed the scope of the work and aided with assigning out design tasks**.

Clinician portal

Homepage
- Tutorial (first open)
- Alerts
- Messages
- Compliance overview
- Add a patient
- Enter onboarding flow

Patients
- Search patients
- Add a patient
- Enter onboarding flow
- Patient cards
- Check-in
- View profile

Devices
- Gloves
- Sleeves
- Repair devices

Support
- Tutorial
- Troubleshooting
- FAQs
- Contact technician

Settings
- Change password
- Manage smart phrases
- Notifications
- Dashboard appearance

Patient profile

Manage devices

Messages

Overview
- Patient information
- Edit
- Discharge
- Patient notes
- Weekly compliance
- AROM chart

Goals
- Add a goal
- Extend goal
- Edit goal
- Abandon goal

Exercise programs
- Create program
- Enter builder flow
- Edit parameters
- Edit session
- Disable exercises

Self reports
- Pain
- Fatigue
- Mood
- Goal independence

Check-in
- Weekly check-in
- Weekly metrics
- Patient comments
- Therapist comments
- Check-in history

Approach to Design

Stakeholders wanted to use **Google's M3 design system** for efficiency and accessibility purposes, as well as the clinical appearance of the UI. The development team advocated for it due to its integration with Flutter.

Using an existing system proved advantageous for the design team, removing a lot of small questions and **allowing us to focus on the key challenges**.

Styles
Text

Aa
Roboto

Display Large

Size: *61px*   Spacing: *-0.25%*

Height: *64px*   Weight: *Semibold*

Display Medium

Size: *49px*   Spacing: *0%*

Height: *56px*   Weight: *Semibold*

Display Small

Size: *39px*   Spacing: *0%*

Height: *48px*   Weight: *Semibold*

Headline Large

Size: *31px*   Spacing: *0%*

Height: *40px*   Weight: *Medium*

Headline Small

Size: *25px*   Spacing: *0%*

Height: *32px*   Weight: *Medium*

Title Large

Size: *20px*   Spacing: *0%*

Height: *24px*   Weight: *Medium*

Body Large

Size: *16px*   Spacing: *0%*

Height: *24px*   Weight: *Regular*

Body Medium

Size: *14px*   Spacing: *0%*

Height: *20px*   Weight: *Regular*

Body Small

Size: *12px*   Spacing: *2%*

Height: *16px*   Weight: *Regular*

Label

Size: *14px*   Spacing: *2%*

Height: *20px*   Weight: *Semibold*

Styles
Icons

Navigation

Icons - 24px

Icons - 32px

Alert Icons - Small

Alert Icons - Large

Styles
Key Colors

Primary	Secondary	Tertiary	Error	Neutral	N. Variant
P	S	T	E	N	NV
#0B796C	#2DB061	#CD7B00	#F3003A	#E3F0EE	#9FC0BD

Key Challenge 1

Patient Management

Occupational Therapists juggle evaluating patients, implementing care plans, follow-up visits, and detailed clinical notes, leading to an overwhelming workload.

In teletherapy, effective communication of patient status is crucial. **The homepage highlights ongoing patient activities to support quick reactions to patient needs**.

Integration with existing workflows was a key adoption strategy. This was achieved through incremental onboarding, a smart phrase feature, and easy documentation transfer.

The alerts feed tells the therapist what requires their immediate attention. They are color coded to indicate urgency and can quickly be resolved with a click.

Higher program compliance translates to better outcomes. Low compliance signals the therapist to work with them to find a solution through education, program adjustment, or a different intervention.

HealingHand.Tech

- Home
- Patients
- Devices
- Support
- Settings

Logout

Home

Welcome back, Alicia. Thank you for choosing HealingHand as your partner in delivering exceptional patient care. Together, we can make a difference in the lives of those we serve.

Alerts

Show hidden alerts

Ava Davis reported a 7/10 pain level during their wrist flexion activity
11:59 pm

Ava Davis reported extreme fatigue during their exercises.
1 day ago

Ken Fife took the device home 24 hr ago. Time played: 0 min
1 day ago

Benjamin Patterson-Jones' check-in is due today
2 days ago

Ava Davis has been inactive for one week
5 days ago

Benjamin Patterson-Jones' progress has stagnated
1 week ago

Ava Davis reported that their glove is not working
2 weeks ago

Ava Davis device detected abnormal activity
2 weeks ago

Weekly activity

‹ Sunday, December 10 - Saturday, December 16 ›

76% **Benjamin Patterson-Jones**
Played 1h 31m / 2h 0m

51% **Ava Davis**
Played 0h 45m / 2 hr 0 min

49% **Benjamin Patterson-Jones**
Played 1h 15m / 2h 45m

Michael Smith
No program assigned

Patrick Grey

Add patient

Messages

KF **Ken Fife**
2:57 pm
I don't understand what I'm doing wrong. I keep getting interrupted when I'm playing my body washing game.

AD **Ava Davis**
Yesterday
This bloody thing won't turn on!

BPJ **Benjamin Patterson-Jones**
2 days ago
I'm not sure I recall how to play the new games I was assigned. Can you remind me how to play those ones again?

Patrick Grey

The messages feed closes the gap between alerts and not as urgent patient questions and concerns.

Patient Safety

In a remote setting, **feeling confident that the patient is safe is paramount**. Severe pain can lead to an increase in blood pressure and result in fainting.

A focus on safety led to the "Break Triggering Moment" (BTM) feature. This is when the patient is forced to stop playing due to an elevated pain or fatigue level.

Recognizing that forcing patients to stop using the app is bad for user experience, I advocated for alternative activities to be recommended in this situation.

12/17   ✕

Ava Davis reported a 7/10 pain level

For patient safety, this game has been temporarily disabled. Use the toggle switch to enable the exercise if you wish to adjust the parameters.

Wrist flexion / extension

In this game, the patient uses wrist extension to pull the object out of the ground. Wrist flexion is used to place the grabbed object in a bucket.
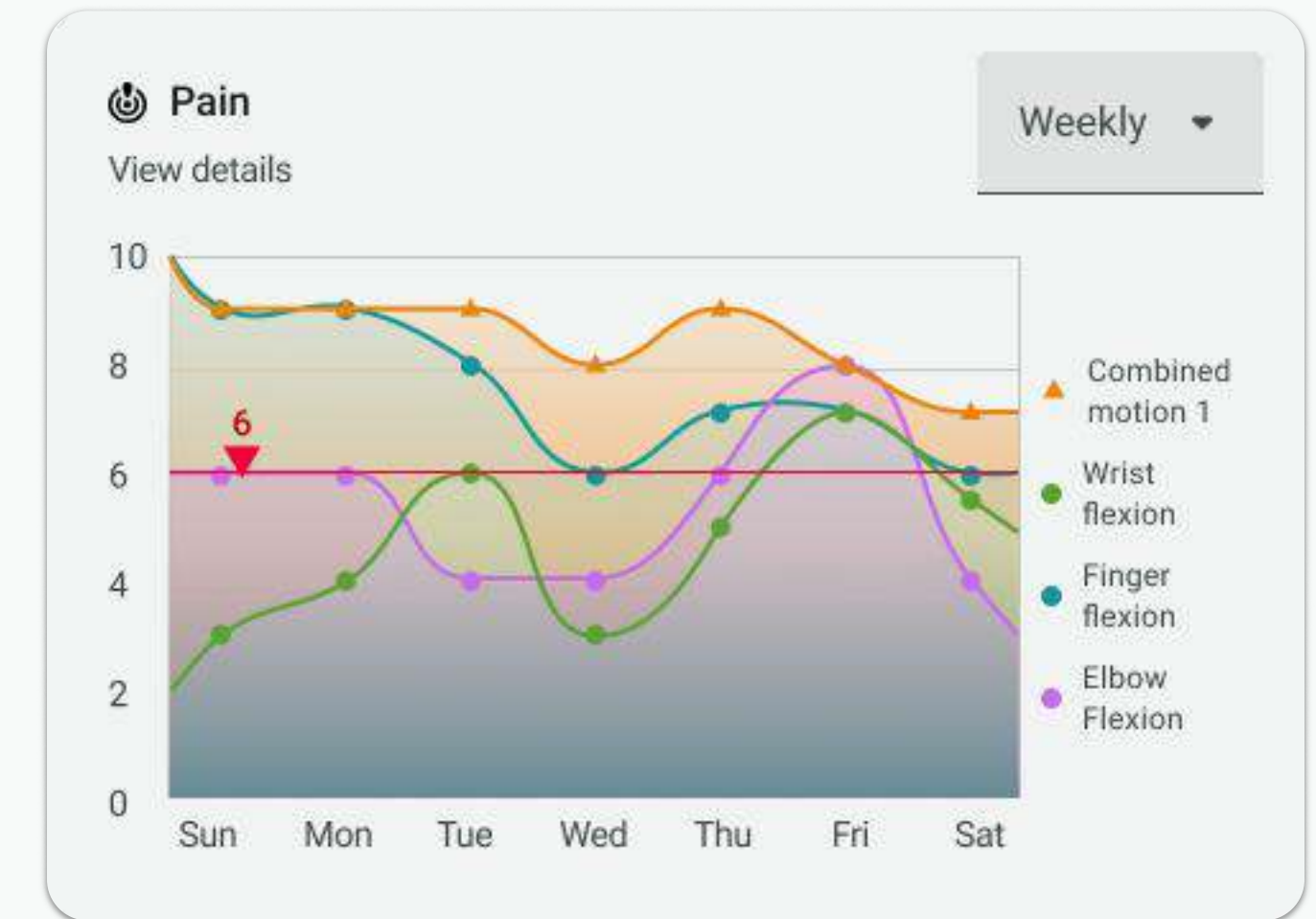
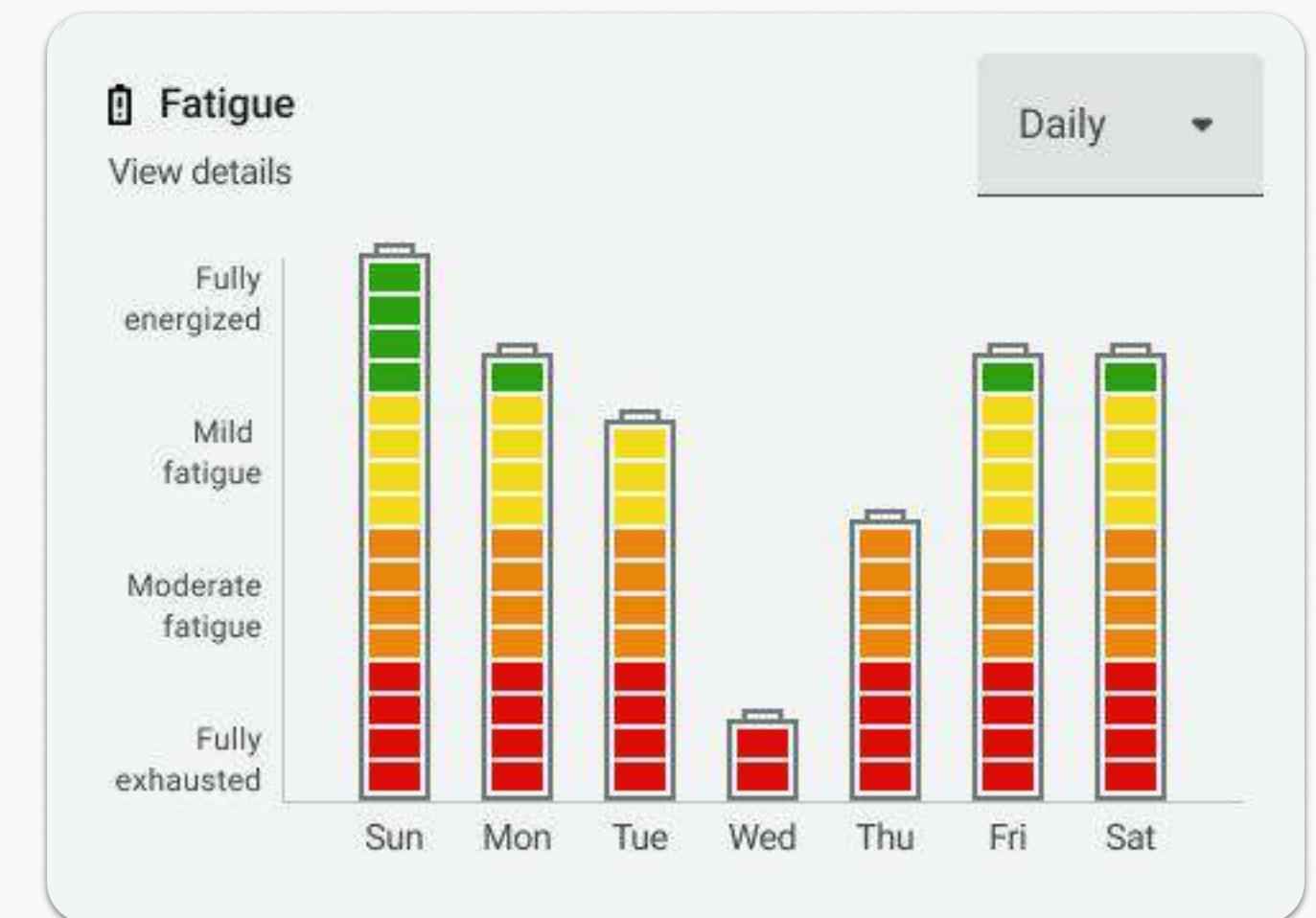| Frequency, per day	Frequency, per week	Time (min)
1 x / day	3 x / week	1 : 30

Therapist notes

Provide feedback to the patient here.

Go to patient profile   Send check in

⏻ **Pain**
View details

Weekly ▾

- Combined motion 1
- Wrist flexion
- Finger flexion
- Elbow Flexion

Pain reports are visualized over time by activity to help the therapist make adjustments to the program before a BTM occurs.

🔋 **Fatigue**
View details

Daily ▾

- Fully energized
- Mild fatigue
- Moderate fatigue
- Fully exhausted

The patient reports their fatigue level when the wearable detects abnormal movement, prompting adjustment of program parameters.

When severe pain reported, the triggering activity is disabled. An urgent alert is sent that must be resolved before exercise can continue.

Personalized Exercises

Building an exercise program is a cognitively demanding task that involves selecting appropriate activities, determining their order, and setting parameters.

The product offers two types of activities: **Isolated movements for patients with limited function** to practice the basics. **Combined movements for higher-functioning patients,** that simulate functional tasks like dressing.

Examination of competitors like Neofect and Mindmaze provided an understanding into how traditional HEPs could be translated to gamified products.

Using a navigation pattern for activity management allows therapists to focus on one exercise at a time and go back as needed.

Instructional videos of a person doing the exercise along with the gameplay helps therapists decide if it's appropriate for the patient.

Manage exercises

Select parameters and add notes for each activity.

1	Wrist	Flexion / extension
2	Elbow	Flexion / extension
3	Elbow	Forearm pronation / supination
4	Shoulder	Internal / external rotation
5	Shoulder	Horizontal abduction / adduction
6	Scapula	Retraction / protraction
7	Finger	Flexion / extension
8	Thumb	Flexion / extension

Wrist flexion / extension

In this game, the patient uses wrist extension to pull the object out of the ground. Wrist flexion is used to place the grabbed object in a bucket.
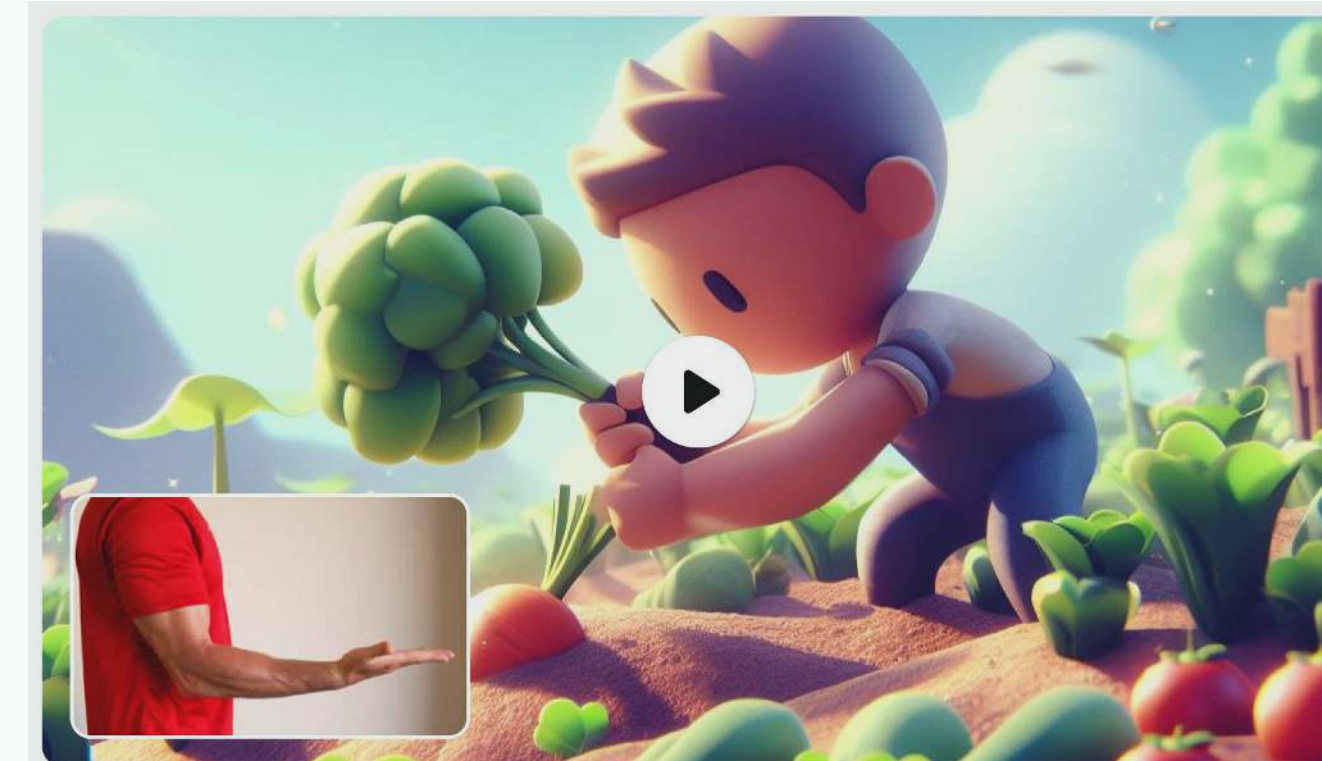
Exercise notes

Enter additional exercise notes for the patient here, optional.

Exercise target ⊘

Basic ▾

For beginner patients to focus on movement quality

Duration

▾ 1 min 30 sec ▴

Daily frequency

▾ 1 time(s) ▴

Weekly frequency

▾ 3 time(s) ▴

Back

Next

Every exercise has notes for the therapist to communicate specific details based on how the patient presents and their needs.

The parameters are designed around our gamified context. Duration replaces sets and reps because it's easier to implement in game design.

Key Challenge 4

Progress Tracking

Tracking patient progress relies on wearable and self-reported data. It was important to question the utility of data visualizations in the context of **does this help the therapist take action to improve on treatment?**

The assumption was examining multiple data points would provide a bigger picture. For example, a low fatigue combined with high success rate might signify the exercises are too easy, necessitating a program upgrade.

Visualizing improvements in the patient's active range of motion is important to understanding the interventions effectiveness. Taken from Neofect, this provides a snapshot of movement function in accordance with their exercise program.

← Back to patients

LW **Laura White**

Manage devices | RSHHT1012 | RMHHT2013

| Overview | Exercises | **Charts** | Check in |

◎ AROM progress
View details

- ● Initial
- ● Current

Wrist Flex. / ext.
Wrist Rad. / uln. deviation
Elbow Flex. / ext.
Elbow Sup / pro
Shoulder Int. / ext. rotation
Shoulder Abd. / add.

⏱ Pain
View details   Weekly ▾

Combined motion 1
Wrist flexion
Finger flexion
Elbow Flexion

6

Sun Mon Tue Wed Thu Fri Sat

☺ Mood
View details

‹ December › 2023

S M T W T F S

23

24 25 26 27 28 29 30
31

🔋 Fatigue
View details   Daily ▾

Fully energized
Mild fatigue
Moderate fatigue
Fully exhausted

Sun Mon Tue Wed Thu Fri Sat

Messages

🔍 Search message history

10:32 AM
My right arm feels so weak. Will I be able to use it normally again?

Recovery takes time and effort. We'll focus on strengthening exercises and techniques to improve your arm's functionality.
10:34 AM

10:38 AM
I keep forgetting things easily. Is this normal?

Memory challenges are common after a stroke. We can practice some cognitive exercises to help enhance your memory skills.
10:45 AM

New message

Mood is self-reported by the patient in the app and is an important data point relative to compliance. Consistently negative mood reports may prompt the therapist to check-in with them to ensure satisfaction with their treatment.
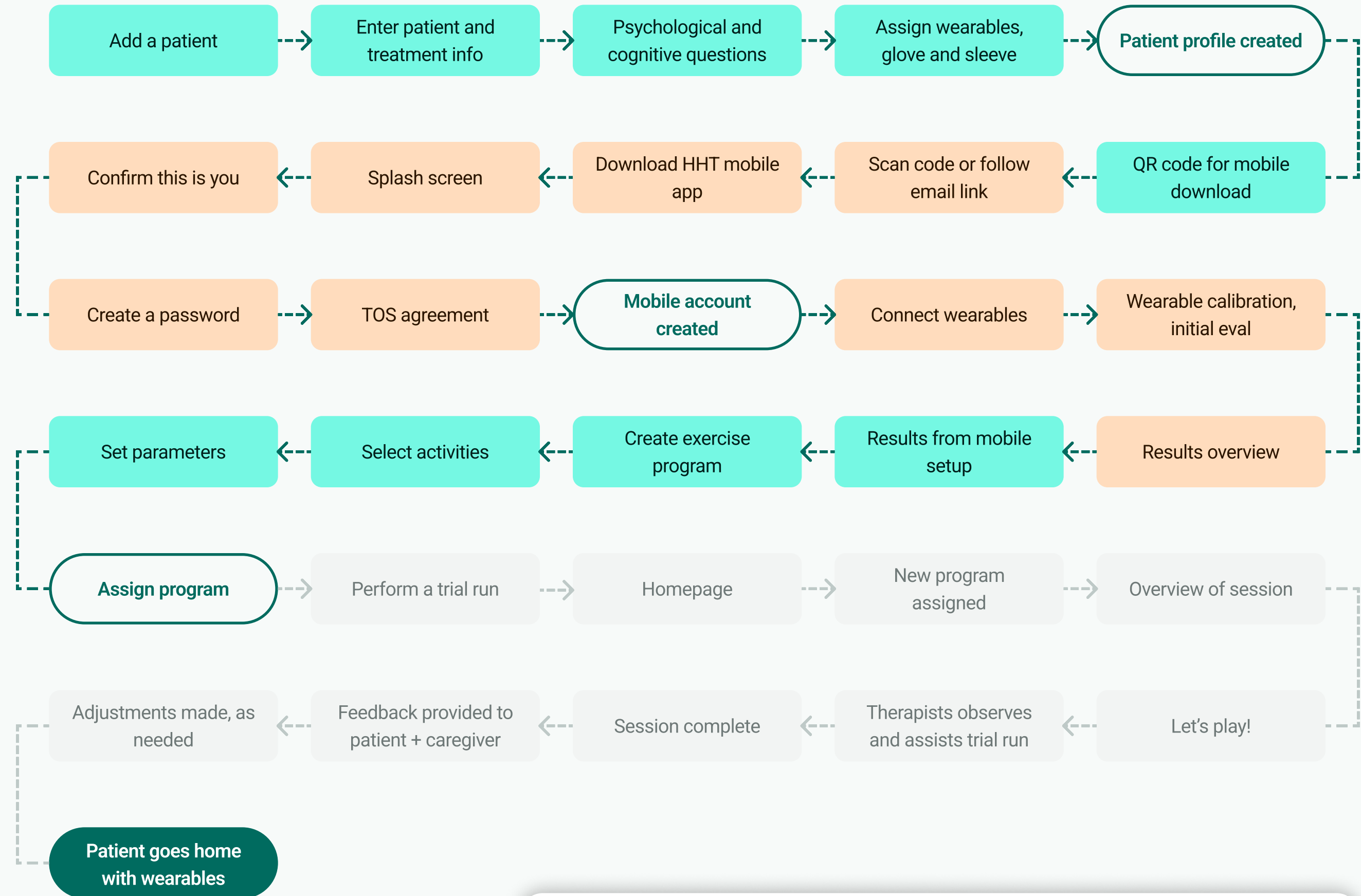
Building the Prototype

Research indicated that **setting up the intervention with patients is a major problem therapists have with new medical technology.**

Since therapists typically have hour-long sessions with various other tasks, an incremental onboarding process that could occur over multiple visits was needed.

During testing, it was important to analyze the process's efficiency to ensure optimization of the subtask pattern.

Patient Onboarding

Add a patient → Enter patient and treatment info → Psychological and cognitive questions → Assign wearables, glove and sleeve → Patient profile created

Confirm this is you ← Splash screen ← Download HHT mobile app ← Scan code or follow email link ← QR code for mobile download

Create a password → TOS agreement → Mobile account created → Connect wearables → Wearable calibration, initial eval

Set parameters ← Select activities ← Create exercise program ← Results from mobile setup ← Results overview

Assign program → Perform a trial run → Homepage → New program assigned → Overview of session

Adjustments made, as needed ← Feedback provided to patient + caregiver ← Session complete ← Therapists observes and assists trial run ← Let's play!

Patient goes home with wearables

Key

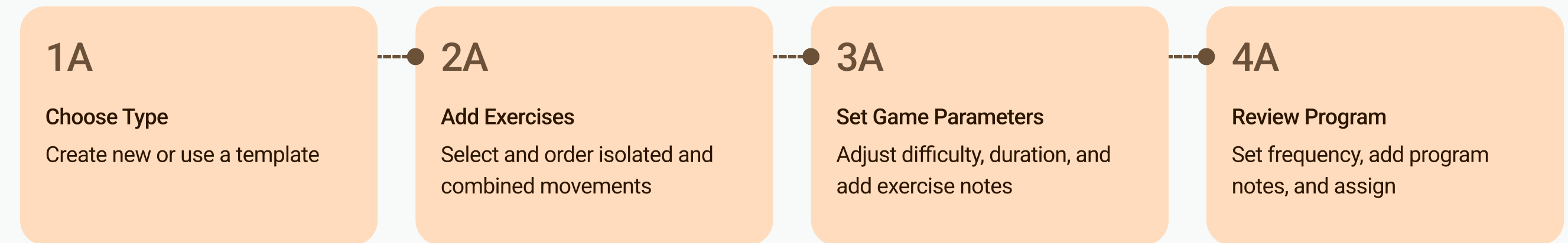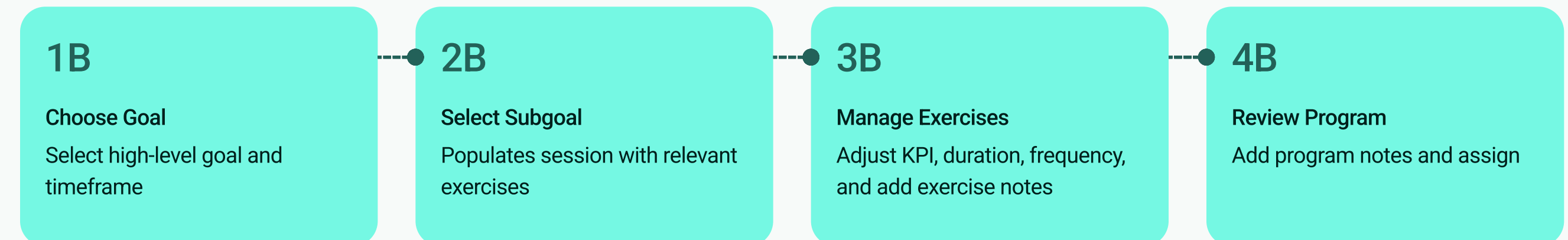| Portal step | Mobile step | Primary task | Subtask | Not tested |

Program Builder A vs. B

The exercise program builder is central to the clinician portal. Involving over 40 inputs, ensuring its intuitive for therapists required special attention.

Two versions of the program builder were designed and tested with six participants to gather usability insights.
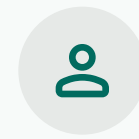
A **follows the conventional HEP approach,** aligned with the OT mental model for creating exercise programs.

1A	2A	3A	4A
Choose Type	**Add Exercises**	**Set Game Parameters**	**Review Program**
Create new or use a template	Select and order isolated and combined movements	Adjust difficulty, duration, and add exercise notes	Set frequency, add program notes, and assign

B **takes an innovative, goal-based approach,** using the stakeholder framework to program creation.

1B	2B	3B	4B
Choose Goal	**Select Subgoal**	**Manage Exercises**	**Review Program**
Select high-level goal and timeframe	Populates session with relevant exercises	Adjust KPI, duration, frequency, and add exercise notes	Add program notes and assign

Planning Research

Participants
4-8 Occupational Therapists that have experience working with stroke population in an outpatient setting

Methodology
One hour moderated sessions, remotely via Zoom

Tasks
1. Clinician portal tutorial
2. Patient onboarding
   a. Add patient to portal
   b. Connect mobile app
   c. Assign exercise program
3. Break triggering moment + resolution
4. Weekly check-in
5. Data visualization feedback

Research Objectives

1. Evaluate the overall usability of five different task flows within HealingHand's clinician portal

2. Observe target user behavior when interacting with a high-fidelity prototype and collect insights on user flow experience

3. Gather feedback on user interface, visual design, and data visualization charts

4. Identify pain points participants encounter while interacting with the Therapist Portal App

Research Findings

The feedback on the UI was overwhelmingly positive, with 100% of users finding it simple yet visually pleasing. Therapists especially liked the objective and subjective metrics, as well as the color coding system for alerts. They also found the messaging system within the portal to be a huge plus.

"It seems easy to pull information to put in my progress notes, or to explain improvements to my patient."

33% found assigning wearables too complicated

"I found the sizes helpful, but the serial number and name, not so much. I'd find the devices availability status more useful."

83% preferred program builder B

"I liked the template aspect of the A version, but I thought B was a bit more efficient. It's nice how goals relate to the exercises, but what if the patient has one that isn't supported here?"

100% thought the BTM was feature useful

"I wish more applications had a focus on safety. If I had a patient encounter a BTM, I would want to know more about their pain... I'd ask them to describe it in more detail."

50% liked the weekly check-in feature

"This is really helpful to have, but I anticipate frustrations with this because OTs already have to do a lot of documentation within their own systems."

33% wanted to see different data visualizations

"I don't know how honest patients will be when it comes to identifying their mood. Especially stroke patients... they often don't like to be open about it."

"Patient's want to beat their previous score - it's very motivating."

Actionable Insights

High priority

- Make assigning wearables more simple
- Add a custom goal option and template feature to builder B
- Describe how KPI selection impacts exercise activity
- Implement sticky note feature to patient profile page
- Include option to skip irrelevant movements during calibration
- Add a feature for copying exercise programs and check-ins to EHR

Low priority

- Clearly mark locked combined movements on builder B
- Option to disable all exercises in BTM occurence
- Match mental models with smart phrases feature
- Incorporate patient comments on check-ins and self-reports
- Simplify mood calendar with a thumbs up/down selection
- Replace goals self-reporting with a game score visualization
- Add IADL goals to program builder for high functioning patients
- Support multiple languages, specifically Spanish

Applying Insights

The overwhelming preference of program builder B was surprising. Despite being unconventional, it made sense because of the time saved by tying goals to exercises.

Therapists still wanted the flexibility to create custom programs for goals outside the supported ADL categories (hygiene, dressing, feeding). While combined movement games are designed around these categories, an assortment of isolated movements can support unique goals like golfing.

In support, a template feature was also designed, allowing therapists to save, share, and reuse custom programs.

Defining Responsiveness

The desktop use case was the sole focus for the MVP. While tablets are common in clinical settings, this could be addressed in later iterations after establishing core functionality and gathering more usability data.

To accommodate various screen sizes, three categories were defined: Desktop - Large (1920), Desktop - Medium (1624), and Desktop - Small (1280). At the medium size, the navigation bar collapses into a rail to support the content on smaller screens.
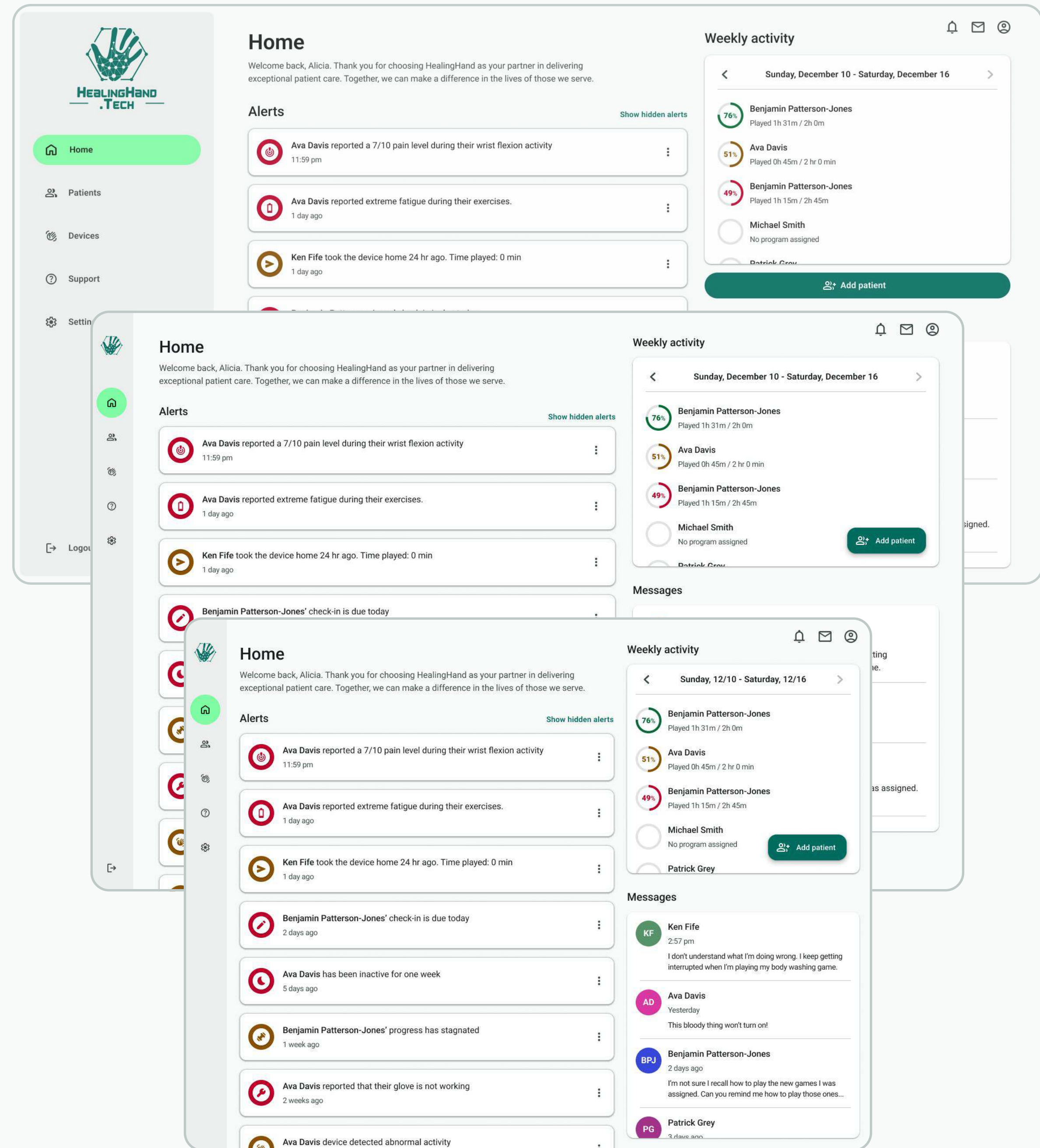
HealingHand.Tech

- Home
- **Patients**
- Devices
- Support
- Settings

Logout

Benjamin Patterson-Jones

BPJ

Manage devices | 🖐 RSHHT1012 | 🦾 RMHHT2013

Overview	Exercises	Charts	Check in

Hygiene — Body cleaning
Week 1 of 8

Program notes
If you experience any pain during your exercises, stop immediately. I gave you a few isolated movements to work on while you get used to the games. When you're ready, we can try the combined movements which more related to your

Isolated movements	Frequency		Duration (min)	Edit
1 Wrist — Flexion / extension	1 x / day	3 x / week	1 : 30	⋮
2 Elbow — Radial / ulnar deviation	1 x / day	3 x / week	1 : 30	⋮
3 Elbow — Flexion / extension	1 x / day	3 x / week	1 : 30	⋮
4 Elbow — Forearm pronation / supination	1 x / day	3 x / week	1 : 30	⋮
5 Shoulder — Internal / external rotation	1 x / day	3 x / week	1 : 30	⋮
6 Shoulder — Horizontal abduction / adduction	1 x / day	3 x / week	1 : 30	⋮
7 Scapula — Retraction / protraction	1 x / day	3 x / week	1 : 30	⋮

Messages

🔍 Search message history

10:32 AM

Patient was added to HealingHand Tech clinician dashboard. Have the patient download the game app or select "Connect game app" to get started with providing treatment.

10:45 AM

The patient's mobile account was created successfully. Create a new exercise program to finish onboarding them.

11:00 AM

An exercise program has been assigned to the patient. Next, perform a trial run to make sure they are able to perform their movements.

New message

😊 🖼 ➤

Impact

Therapist Productivity

Achieved a 20% boost in therapist efficiency compared to traditional exercise programs, allowing them to treat more patients concurrently

Competitive Edge

HealingHand Tech is 40% more likely to be chosen by therapists over similar medical technologies due to its integration with existing workflows

Safety Assurance

Therapists felt 83% more confidence in patient safety compared to other at-home interventions, thanks to the innovative monitoring features

Streamlined Development

Collaborated with the game design and mobile UX teams to implement the Material 3 design system, decreasing development time by up to 60%

Next Steps

Ultimately, the success of the product hinges on improving patient function with enjoyable gameplay. Thanks to my leadership and the team's dedication, development of the clinician portal is significantly ahead of the mobile app and wearable.

I've been urging the game and mobile UX teams to concentrate on creating a complete exercise flow for comprehensive testing. This will enable the gathering of crucial feedback from therapists regarding gameplay and wearable ease of use.

Conclusion

Leading the design of HealingHand's clinician portal was transformative. Managing the UX/UI, research, project coordination, and collaborating with the game and mobile teams required diverse skills and effective communication.

One of the biggest challenges I faced was bridging the gap between the startup's vision and the user's mental model. Balancing stakeholder desires for innovation with user research insights, which sometimes conflicted, demanded careful negotiation and advocacy for user-centered design principles.

Building my team with healthcare professionals interested in transitioning to UX was instrumental to the success of the design work. Their insights and expertise were invaluable to creating a platform that truly met the needs of therapists and patients alike.