Concept Presentation for Careband at home

Team
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Overview

1. Project overview / goals of the project
2. Research results
3. Design principles
4. Design Concepts
5. Review
6. Q&A
7. Appendix
01. Project Overview

Project goal and deliverables
Project Goal

In order to improve the quality of life and standard of residential dementia care, we would like to further elevate the current user experience including digital & physical touchpoints.

Deliverables

- Secondary research presentation (2020-10-03)
- User research & design opportunities presentation (2020-10-09)
- Draft concepts presentation (2020-11-13)
- Refined concepts presentation (2020-12-11)

Understand + define
Understand, through primary and secondary research, the stakeholders’ needs and context to uncover opportunity areas.

Synthesis + Ideation
Synthesize insights on the dynamics around hardware & software usage. Explore ideas within each opportunity area.

Prototype + Refinement
Choose ideas from rounds of ideation and refine them into prototypes and renderings.
Where we are on the Timeline

1. **Understand + Define**
   - Research
   - Opportunity Areas

2. **Synthesis + Ideation**
   - Concepts
   - Interviews

3. **Prototype**
   - Scenarios
   - Sketch Models
   - Physical Prototypes
   - Concept Development

- **Start of B session**
- **Careband Concept Review** November 13
- **Careband Final Present**

**Timeline**
- **Design Development**
- **Current week**
- **Interviews**
- **Review with Careband**

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02. The research results

Three Goals in the Opportunity Area
Research process

We have conducted multiple stages of user research in order to better understand the products and users.

- Primary research (2020-9-16)
- Secondary research presentation (2020-10-03)
- Stakeholder meeting (2020-10-14)
- Careband Expert Interview with M (2020-10-26)

**Primary research**
Understand how dementia affects people and their families.

**Competitive product analysis**
Analyze the functional design and market demand of similar competing products.

**Stakeholder interview**
Deepen the understanding of product design through interviews with stakeholders and product managers of careband.

**Expert interview**
Understand the opinions of experts in the field of dementia.
Key insights from research

- **Autonomy**
  People with dementia want, and still can, make decisions and do things on their own.

- **Release mental burden**
  Change care partner’s mindset from taking care of another person’s life to giving that person support.

- **Feel needed**
  It’s important to maintain the sense of being needed through social connections.

- **Remove label**
  Don’t call people with dementia “patient”, don’t label them.

- **Support**
  Let people with dementia feel supported by our product design.
Research findings

After multiple stages of research, we decided to focus our design on the relationship between people with dementia and their care partners.

- **Careband interview with M**: Understand the opinions of experts in the field of dementia.
- **Primary research**: Understand how dementia affect people and their families.
- **Stakeholder interview**: Deepen the understanding of product design through interviews with stakeholders and product managers of careband.
- **Competitive product analysis**: Analyze the functional design and market demand of similar competing products.
Healthier relationship between care partner and people with dementia.

Let the technology handle the basic needs, allowing care partner and people with dementia to build a stronger emotional bond.
**Structure of Opportunity**

**Research**

**Healthier relationship between care partner and people with dementia**

- **Desirable Independency**
  - With careband's support, patients have confidence to complete tasks by themselves.
  - With careband's support, caregivers could live an easier life by allowing patients decide their own way of living.
- **Strong emotional connection**
  - With careband's support, caregivers believe they could reach out the patients whenever they need help.
  - With careband's support, caregivers gain emotional satisfaction from supporting people with dementia.
- **Remove "patient label"**
  - Make people with dementia feel that they are needed by their care partners.
  - Make people with dementia feel that they are not seen as "patients", but people with personalities.
  - Allow people with dementia to show their abilities to learn, adapt and still live a meaningful life.

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Stages of Ideation

First round
- Drafts of concept
- Concept related research

Second round
- Refined concept

Peer review & Instructor feedback
Stages of Ideation

First round

Included social, wearable, charging, IOT and personalized care.
Stages of Ideation

Second round

After peer review and instructor feedback, we distilled the previous ideas into a clearer direction.
03. Design Principles

The Way We Make
Design Principles

**Conversational**
Our use of language, images, and interactive elements allows us to communicate with users in easily understood ways.
- Plainspokenness
- Guide with image
- Clear visual hierarchy
- Release cognitive load
- Tunneling (one thing at a time)
- Smooth learning Curve

**Transparent**
We are clear and up front about what’s happening and why.
- Keep users on track
- Nudge towards better behaviors
- Be transparent about behind the scenes processes

**Respectful**
We respect users no matter their preferences.
- Openness
- Personalization
- Respect their habits
- Lifestyle
- Optimized for seniors
- Adaptive
- Smart recommendation

**Connected**
We strive for making users feel more connected to others through our technology.
- Enhance social/emotional connection
- Mutually beneficial for all stakeholders
- Stylish
04. Design Concepts

From unboxing to use
Welcome, my friend!

01 Unboxing
02 Onboarding
03 Safe Scenarios
04 Industrial Design
UNBOXING

STEP 1 OPEN WITH GUIDANCE

The box is printed with visual cues to help the user to open the box with the right sequence.
UNBOXING

STEP 2 UNCOVERING

The packaging is set up in a way that is easy to comprehend by the user. The first thing the user see would be the user manual.
UNBOXING

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The packaging is set up in a way that is easy to comprehend by the user. The first thing the user see would be the user manual.
UNBOXING

STEP 3 FLATTENING

The packaging will unfold to a flat “map”, showing the relationship between different devices.
UNBOXING

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UNBOXING

STEP 3 FLATTENING

The packaging will unfold to a flat “map”, showing the relationship between different devices.
ONBOARDING

STEP 1 PAIRING DEVICE

To switch careband into the pairing mode, the users will press the side button until they see the “ready to pair” sign.
ONBOARDING

STEP 1 PAIRING DEVICE

The sign will be flashing blue indicator light when the phone and the watch are paired.
ONBOARDING

STEP 1 PAIRING DEVICE

While the system is checking the pairing status, the light on the interface will show its progress. When the dotted lights resemble a full circle, pairing is successful.
ONBOARDING

STEP 1 PAIRING BEACON

The users will find the beacon in the box and get ready to pair it with their phones. There is a QR Code on each beacon that the users can scan for pairing.
ONBOARDING

STEP 1 PAIRING BEACON

The beacon will be secured on the wall next to a front door (inside/outside). When our users enter or exit the door, our system will keep track of the record.
ONBOARDING

STEP 2 CONNECT WITH CARE PARTNER

The users can choose the stages of dementia in order for the system to generate tags of what we can do to help. Also, the users can send invites to their care partners to complete this process with them.
ONBOARDING

STEP 2 CONNECT WITH CARE PARTNER

On the care partners’ end, they will receive an invitation to collaborate, adding more tags of tasks that care partners can help the users with.
ONBOARDING

STEP 3 CONNECT WITH IOT DEVICE

We would like to help users develop a habit of charging the careband watch. While the users are charging, they can set up their careband to connect to the indoor IOT device for a customized experience.
ONBOARDING

STEP 4 TEST WITH SCENARIO

Wrap up the onboarding process with tests that engage users with real-life scenarios.
SAFE SCENARIOS

SELF HELP

When lost outside, the band will guide people with dementia home utilizing visual cues and voice reminders.
CAREBAND 2.0

We created this simple but elegant design with a friendly square body and a sleek round plate.

It’s not just a healthcare device but a way to celebrate their life in style.
Setup Scenarios

Let’s setup a scenario about the “bedroom” you just added to validate the connection.

If mom leaves the bedroom, send a text message to Nancy.

Text Message Content

Hi Nancy, mom just leaves the bedroom.
CUSTOMIZABLE PLATE

The interchangeable face plate attaches to the body magnetically, providing users with many stylish replacement options.
A CAREBAND JUST FOR YOU

Careband provides people with a great degree of personalization, by offering a wide array of different band, plate and body options.
WEAR THE WAY YOU LIKE

Wrapping on the wrist, clipping on the pocket or draping from the neck; Decide the way you like wearing it!
WEAR THE WAY YOU LIKE

Slide the block to detach the “hook and loop” wrist band.
WEAR THE WAY
YOU LIKE

Slide the block to detach the “hook and loop” wrist band.
WEAR THE WAY YOU LIKE

Click and attach the clip module.
We placed the emergency button on the side to avoid labeling users as patients. The brightly colored extruded button is easy to access if needed.
05. Review

HMW reform the relationship through design
Healthier relationship between caregiver and patient

Desirable Independence

Strong emotional connection

Remove "patient label"
Healthier relationship between caregiver and patient

Desirable
Independence

Strong emotional connection

Remove
"patient label"

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06. Q&A

Questions & feedback
Thank you
07. Appendix

Some other ideas
Concept 1 | Draft Prototype