

The Power of Process

Outlining The UX Design Process

About Me

Hello 🙌

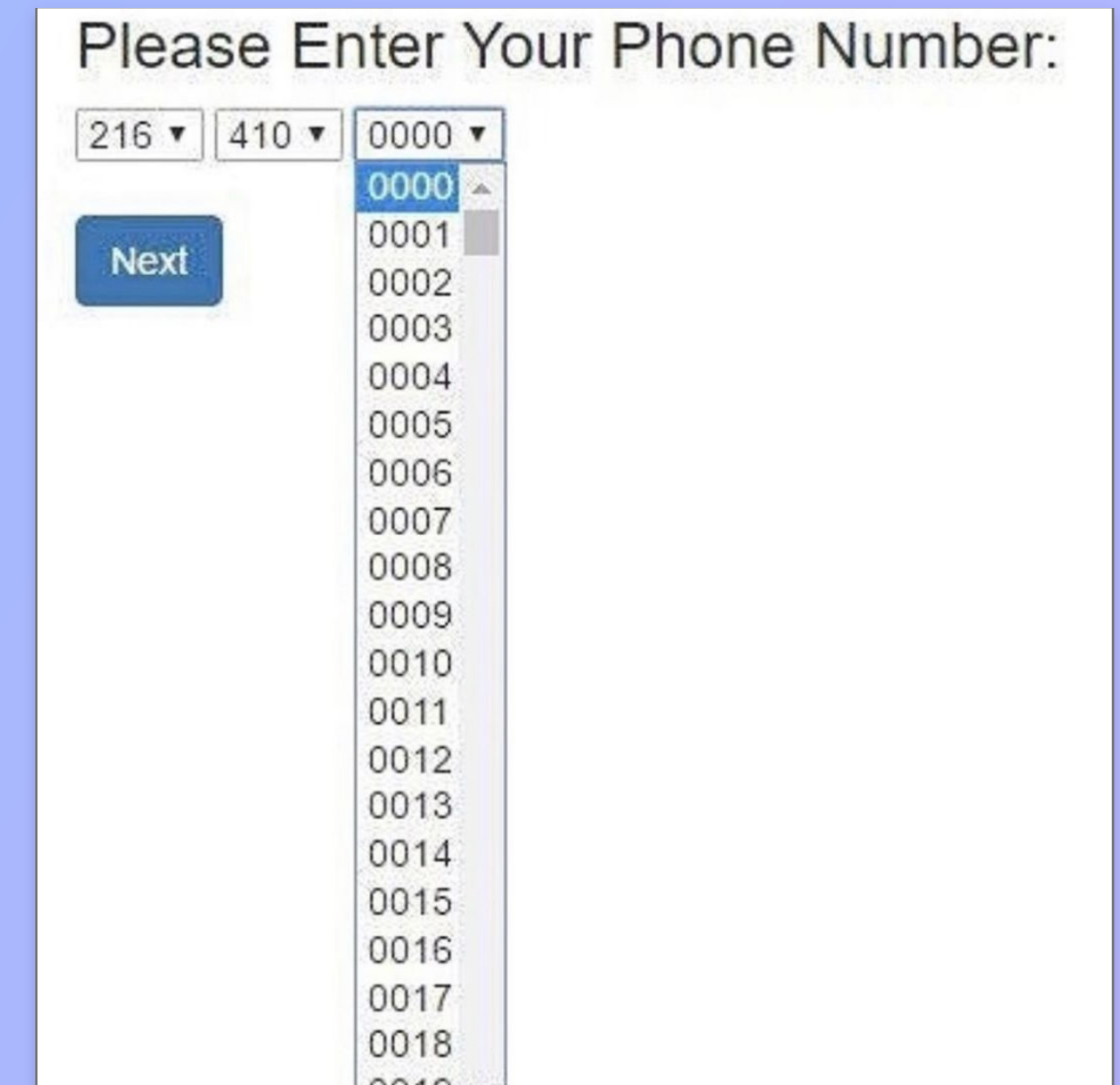
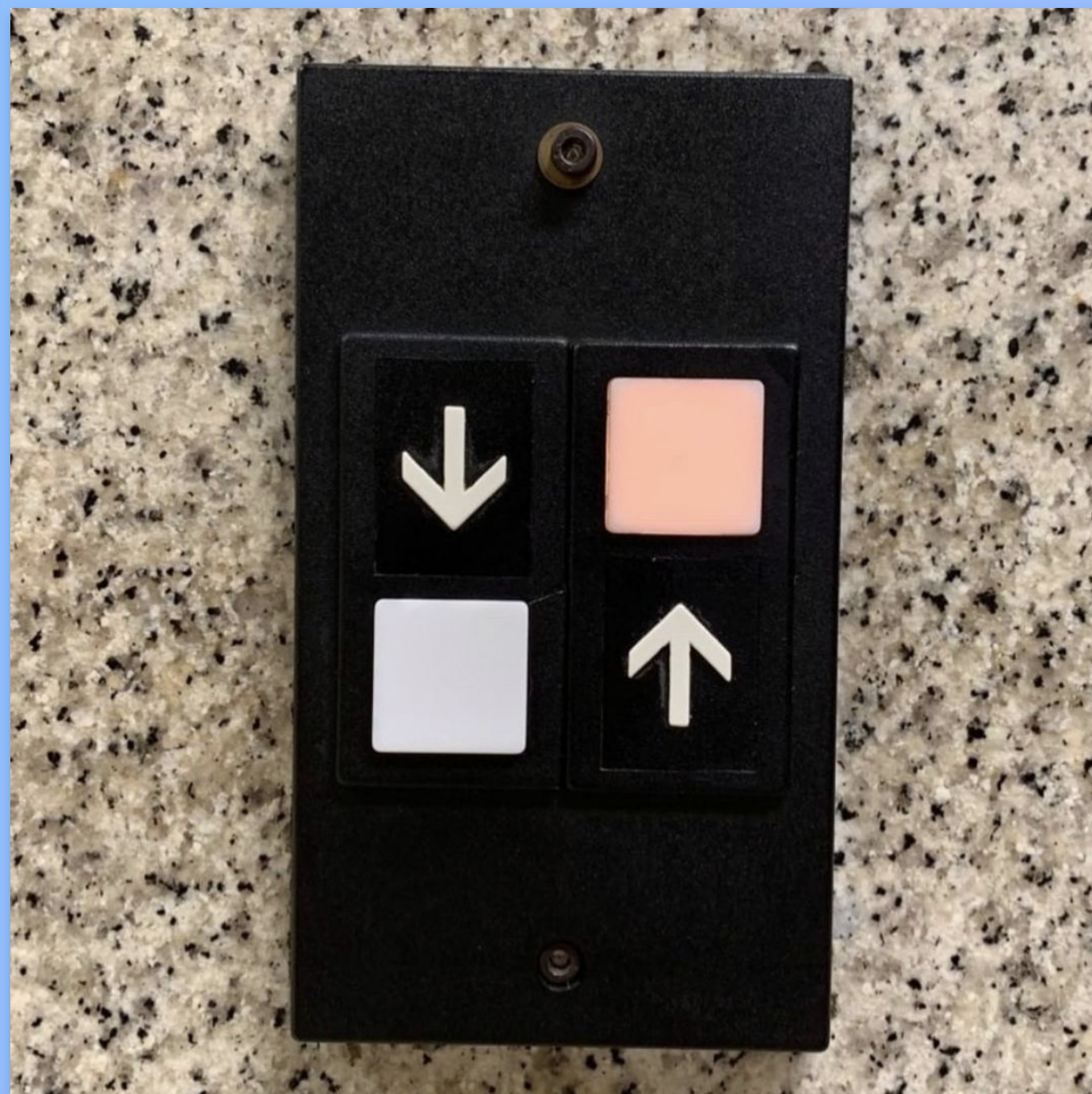
- 2019 University of Cincinnati DAAP graduate
- 4th generation designer
- UX/UI Designer for Mile2
- Based in Columbus, OH
- Dog and sushi lover



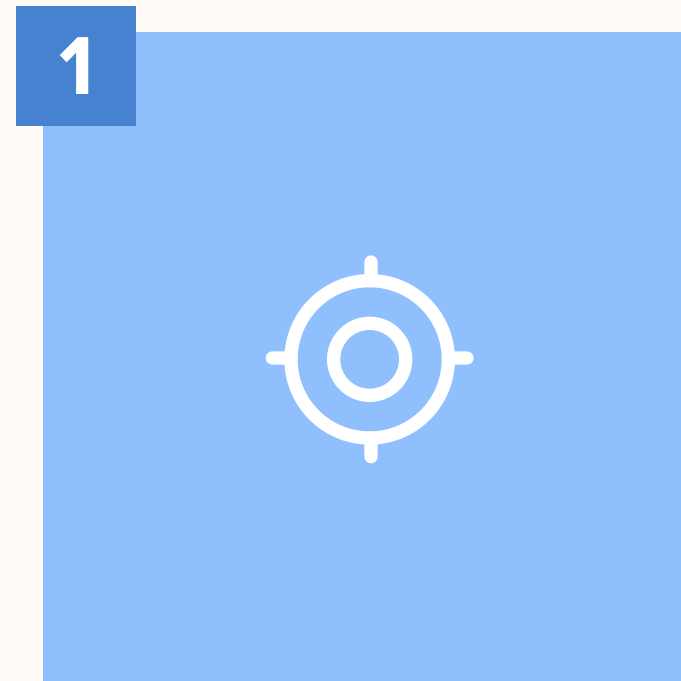
Why Is Process Important?

- Prevents instances of bad user experience and usability problems
- But more importantly...
If there's no thought or research behind the usability of your design, you increase the risk that your product will fail
- No sound organization would want you to take that risk
- Just creating pretty looking products and designs does not cut it!
- Process = proof
- Especially in the digital world where you are competing for peoples time and mindshare

Successful Process Can Help Us To Avoid Designing Like This....



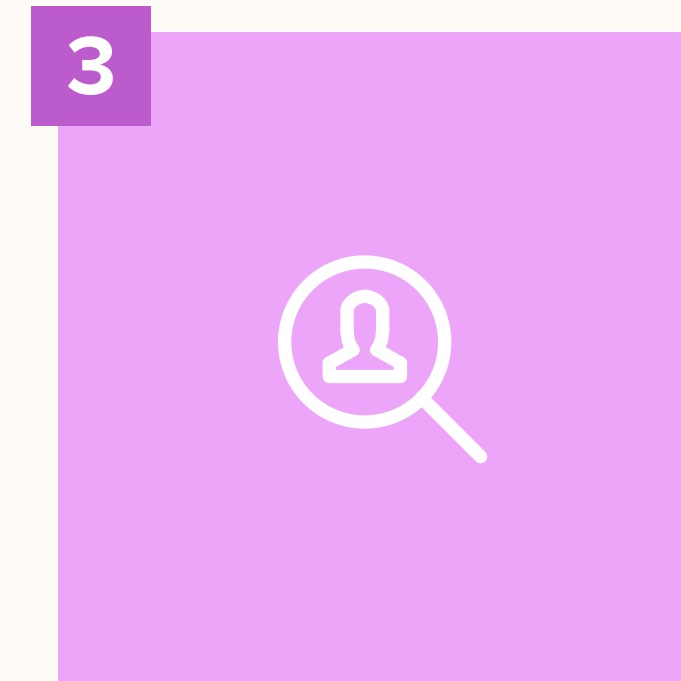
UX Process



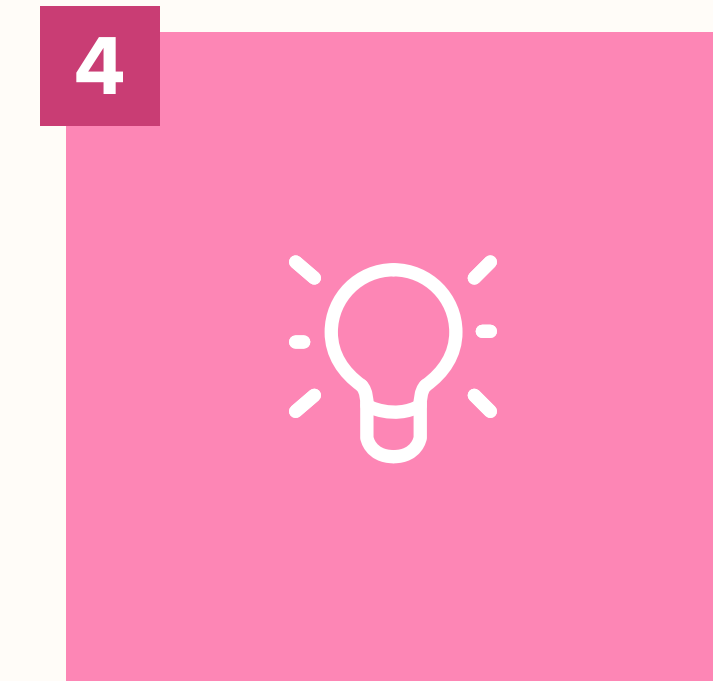
Define



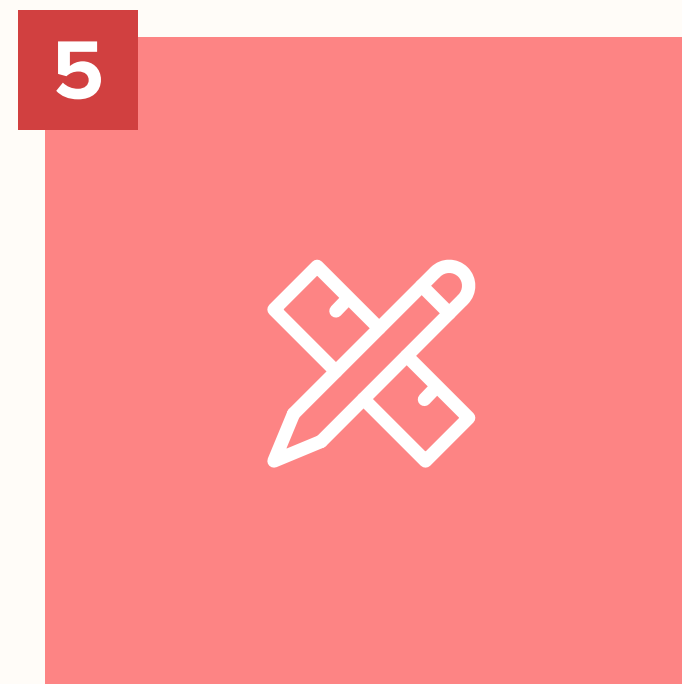
Research



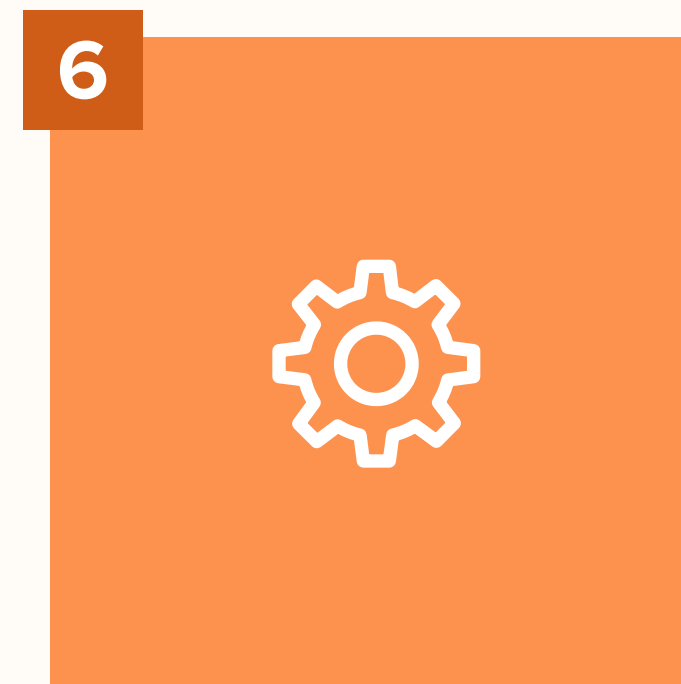
Analyze



Ideate & Prototype



Refine



Implement

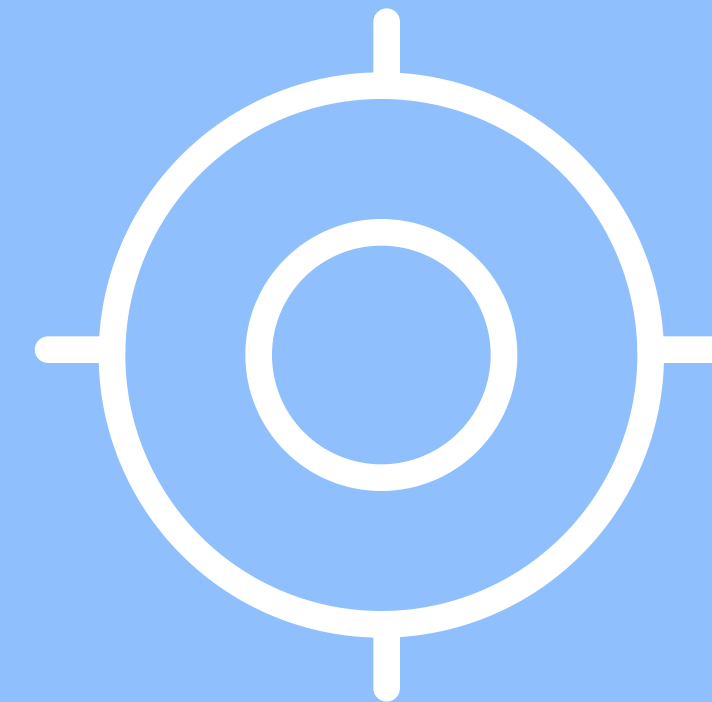


Evaluate & Reflect

Phase 1

Define: Problem Analysis and Early Domain Research

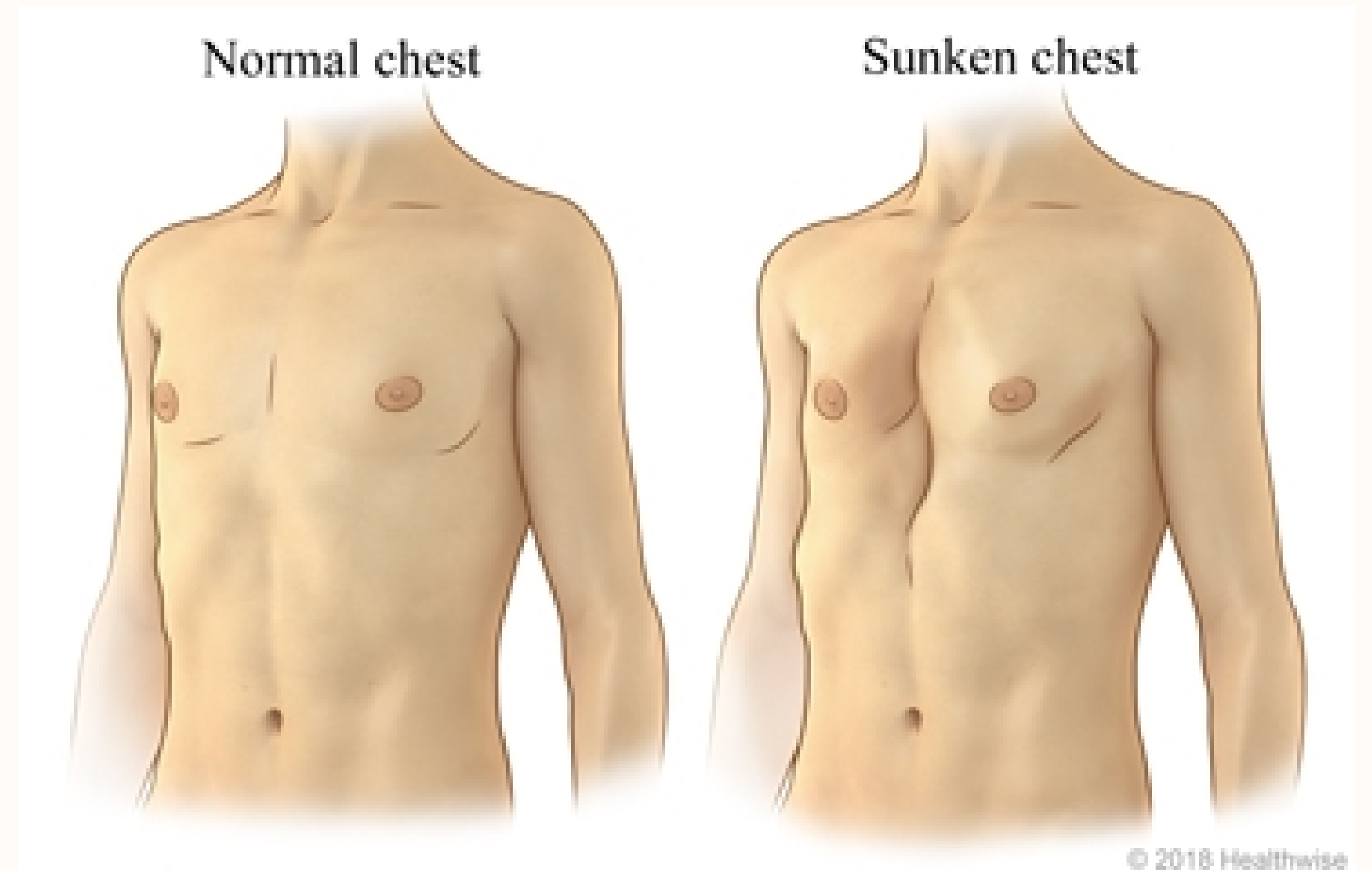
- UX is about solving problems. Take the time to understand what the problem is and who is experiencing this problem.
- It's alright to be novice on your topic/ problem. Use google search to lay the research foundation
- Figure out what what questions you have or what areas of your domain you need to learn more about.



Define: Problem Analysis

Case Study: Pectus Empowerment

- The surgeries for pectus excavatum are the most painful surgeries performed at Cincinnati Children's Hospital. The fear of pain and lack of education on pain management tools can cause patients to feel heightened anxiety about the surgery.
- How can we support pectus patients to feel empowered throughout their surgery journey?



https://www.youtube.com/watch?v=E2Xyhhd7Cia&ab_channel=CincinnatiChildren%27S

Phase 1 // Case Study

Define: Early Domain Research



Cincinnati Children's Hospital // Chest Wall Center

Case Study: Pectus Empowerment

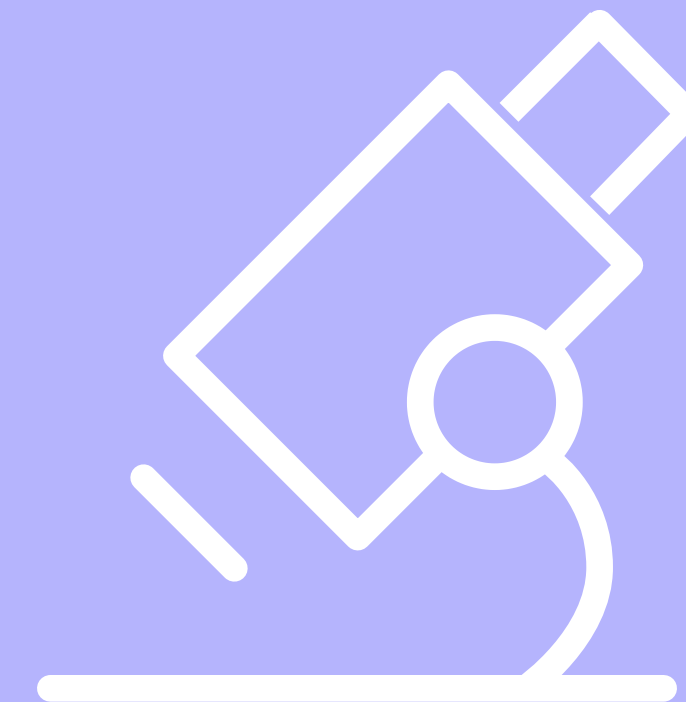
- Special thank you to **Dr. Garcia** and his team for the opportunity to use the UX and design thinking process to improve patient experience .



Phase 2

Research

- Research = lifeline of your project
- This is primarily where you gain insight, establish facts, find problems, and empathize with your users perspective.
- Common Research Methods
 - 1:1 Interviewing
 - Ethnographic Observation
 - Card Sorting
 - Surveys



Research

Patients

1. What do you see as the goal of your Pectus surgery? Is there anything specific that you'll be able to do after surgery that you can't now?

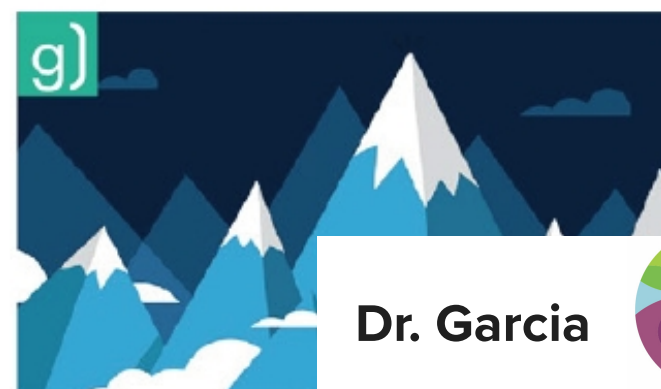
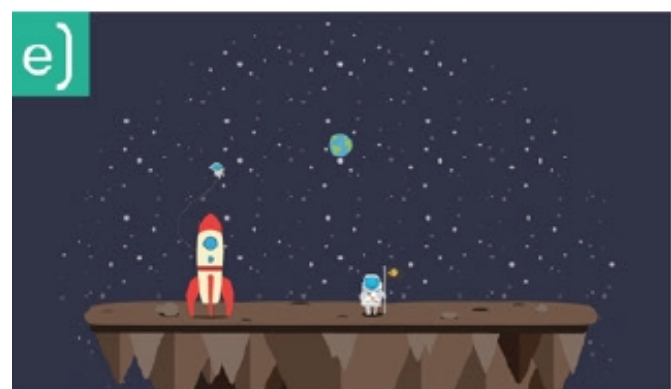
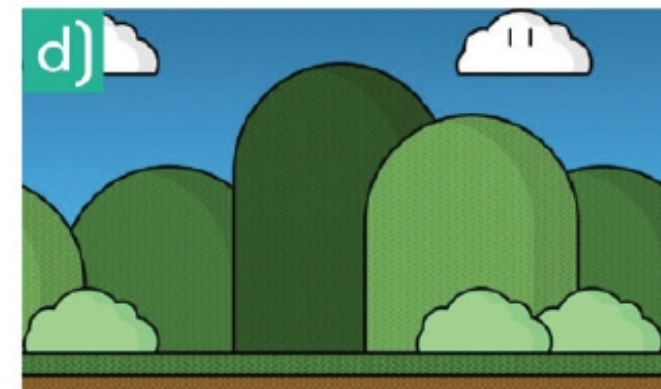
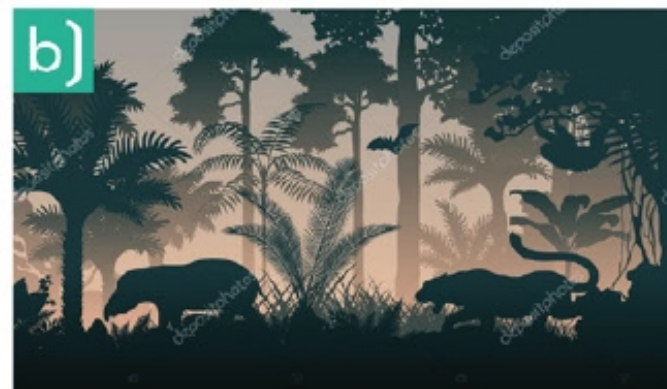
2. What do you enjoy doing in your spare time? Please be as specific as possible.

3. If you had to pick a visual narrative to tell a story, which one would you pick? Of the options below, circle the one you are most drawn to.

Gender:

Age:

Number of siblings:



Dr. Garcia



Dr. Garcia



Phase 3

Analysis

- What were the most important findings?
- How are these findings going to shape your ideation?
- Turn these findings into visual representations (artifacts)
 - Personas
 - Journey Maps
 - Process Maps



Phase 3 // Case Study

Analysis

CLINICIANS

Handwritten notes on blue sticky notes detailing clinician perspectives.

MARKETING

WHY DID YOU CHOOSE CGHMC?

- BECAUSE IT'S THE BEST OF THE BEST
- Expertise
- Trust
- Location
- Local
- Local doctors
- Recommended by friends
- Referral from pediatrician
- Recommended after a colleague's experience
- First hospital I went to as a resident
- Child has been attending (CGHMC) since birth

CONCEPTS

Handwritten notes on pink sticky notes detailing key concepts.



Two screenshots of a website. The first shows a German Shepherd with the text "You got German Shepherd". The second shows a child with the text "You got Needs Attention".

PATIENTS

Grid of handwritten notes on pink and yellow sticky notes detailing patient experiences.

CAREGIVERS

Grid of handwritten notes on pink and yellow sticky notes detailing caregiver experiences.

BEHAVIORAL MED

Handwritten notes on yellow sticky notes detailing behavioral medicine concepts.

HOLISTIC HEALTH

Handwritten notes on yellow sticky notes detailing holistic health concepts.

Phase 3 // Case Study

Analysis

HANDOUT 23 (page 1 of 2)

THINKING, FEELING, AND DOING

Thoughts affect how you feel emotionally, what body responses you have, and what actions you take. It is important to pay attention to your thoughts and figure out whether they are helping you or making situations harder. Let's look at a few pictures that can help you understand how thoughts affect feelings and actions.

This child won a trophy. What is she thinking? How does she feel?



This child is standing on a diving board. What is she thinking? How does she feel? What are her body responses?

(continued)

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HANDOUT 15 (page 2 of 2)

DISTRACTING AND PLEASANT ACTIVITIES

- | | |
|---|---|
| <input type="checkbox"/> Dance or imagine myself dancing | <input type="checkbox"/> Plant a garden |
| <input type="checkbox"/> Think about something I did well | <input type="checkbox"/> Work out to exercise videos |
| <input type="checkbox"/> Invite someone to sit and talk | <input type="checkbox"/> Try karate |
| <input type="checkbox"/> Run through the sprinkler | <input type="checkbox"/> Take a dance class |
| <input type="checkbox"/> Take a walk | <input type="checkbox"/> Play Frisbee |
| <input type="checkbox"/> Play on a softball team | <input type="checkbox"/> Jump rope |
| <input type="checkbox"/> Train for a running race | <input type="checkbox"/> Chew my favorite gum |
| <input type="checkbox"/> Be with other people | <input type="checkbox"/> Clean/organize my room |
| <input type="checkbox"/> Think about what makes me special | <input type="checkbox"/> Use colored pens |
| <input type="checkbox"/> Imagine the future | <input type="checkbox"/> Paint |
| <input type="checkbox"/> Look up new words | <input type="checkbox"/> Sketch |
| <input type="checkbox"/> Do a jigsaw puzzle | <input type="checkbox"/> Go for a scenic drive |
| <input type="checkbox"/> Go rollerblading | <input type="checkbox"/> Go to the park |
| <input type="checkbox"/> Put on temporary tattoos | <input type="checkbox"/> Hike/take a nature walk |
| <input type="checkbox"/> Take the stairs instead of an elevator | <input type="checkbox"/> Join a new club |
| <input type="checkbox"/> Join a swim team | <input type="checkbox"/> Invent something |
| <input type="checkbox"/> Play an active video game | <input type="checkbox"/> Take a bubble bath or shower |
| <input type="checkbox"/> Keep a gratitude journal | <input type="checkbox"/> Volunteer |
| <input type="checkbox"/> Light a candle/aromatherapy | <input type="checkbox"/> Look up tutorials online |
| <input type="checkbox"/> Make a homemade gift | <input type="checkbox"/> Do a word search |
| <input type="checkbox"/> Play cards/solitaire | <input type="checkbox"/> Do a logic puzzle |
| <input type="checkbox"/> Try skiing | <input type="checkbox"/> Create or build something |
| <input type="checkbox"/> Spend time with a pet | <input type="checkbox"/> Make a playlist |
| <input type="checkbox"/> Give myself a facial | <input type="checkbox"/> Pop bubble wrap |
| <input type="checkbox"/> Squeeze a stress ball | <input type="checkbox"/> Solve a maze |
| <input type="checkbox"/> Take a bike ride | <input type="checkbox"/> Make a video |
| <input type="checkbox"/> Swing on a swing | <input type="checkbox"/> Go to the library |
| <input type="checkbox"/> Go mountain biking | <input type="checkbox"/> Hula hoop |
| <input type="checkbox"/> Paddle a canoe or kayak | <input type="checkbox"/> Send an encouraging e-mail |
| <input type="checkbox"/> Row a boat | <input type="checkbox"/> Learn a new language |
| <input type="checkbox"/> Complete a random act of kindness | <input type="checkbox"/> Play I Spy |
| <input type="checkbox"/> Cook or bake | <input type="checkbox"/> Go on a scavenger hunt |
| <input type="checkbox"/> Learn a card game | <input type="checkbox"/> Be silly |
| <input type="checkbox"/> Read/write poetry | <input type="checkbox"/> Build a blanket fort |
| <input type="checkbox"/> Walk around the mall | <input type="checkbox"/> Climb a tree |
| <input type="checkbox"/> Call a relative | <input type="checkbox"/> Play outside |
| <input type="checkbox"/> Play tennis | <input type="checkbox"/> Watch cute animal videos |
| <input type="checkbox"/> Go swimming | <input type="checkbox"/> Play a board game |
| <input type="checkbox"/> Watch the clouds | <input type="checkbox"/> Rearrange my room |
| <input type="checkbox"/> Sit in nature | <input type="checkbox"/> Plan my dream vacation |
| <input type="checkbox"/> Think about happy times with my family | <input type="checkbox"/> Blow bubbles |
| <input type="checkbox"/> Solve a riddle | <input type="checkbox"/> Build with Legos |
| <input type="checkbox"/> Walk around the block | <input type="checkbox"/> Go fishing |
| <input type="checkbox"/> Walk a dog | <input type="checkbox"/> Video chat with a friend |
| <input type="checkbox"/> Play volleyball | <input type="checkbox"/> Jump on a trampoline |
| <input type="checkbox"/> Go sledding | <input type="checkbox"/> Open a lemonade stand |
| <input type="checkbox"/> Rake the leaves | <input type="checkbox"/> Add my own idea: _____ |

HANDOUT 17

DIAPHRAGMATIC BREATHING

Under conditions of stress, either physical or emotional, the body takes short breaths through the upper chest. This kind of shallow breathing disrupts the balance of oxygen and carbon dioxide and increases the heart rate, which makes the body feel *more* stressed as part of the fight-or-flight response.

Diaphragmatic breathing, or belly breathing, reduces stress by lowering heart rate and increasing relaxation. This kind of breathing uses the diaphragm muscle, which is a dome-shaped muscle located under the ribs and above the stomach. Instead of moving the chest, diaphragmatic breathing moves the stomach because the lungs are taking in more air. When inhaling, the diaphragm muscle pushes the stomach *out*; when exhaling, the diaphragm moves back to resting position and the stomach goes back *in*. There is little or no upper chest movement. Diaphragmatic breathing is the process of taking deep breaths that provide a good balance of oxygen and carbon dioxide for the body and slow the heart rate, turning on the relaxation response.

GETTING STARTED: FIND YOUR DIAPHRAGM

Place one hand on your stomach at the bottom of your sternum and just above your belly button. Sniff quickly as if you have a runny nose to feel the diaphragm muscle move or jump under your fingers. Keep your hand on your stomach while you slowly breathe in and feel your stomach move out against your hand, then breathe out and feel your stomach moving back in. That is what breathing through your diaphragm feels like!

- Inhaling makes the diaphragm push down to inflate the lungs and the stomach moves out.
- Exhaling makes the diaphragm go back up to a resting position and the stomach moves in.

DIAPHRAGMATIC BREATHING TECHNIQUE

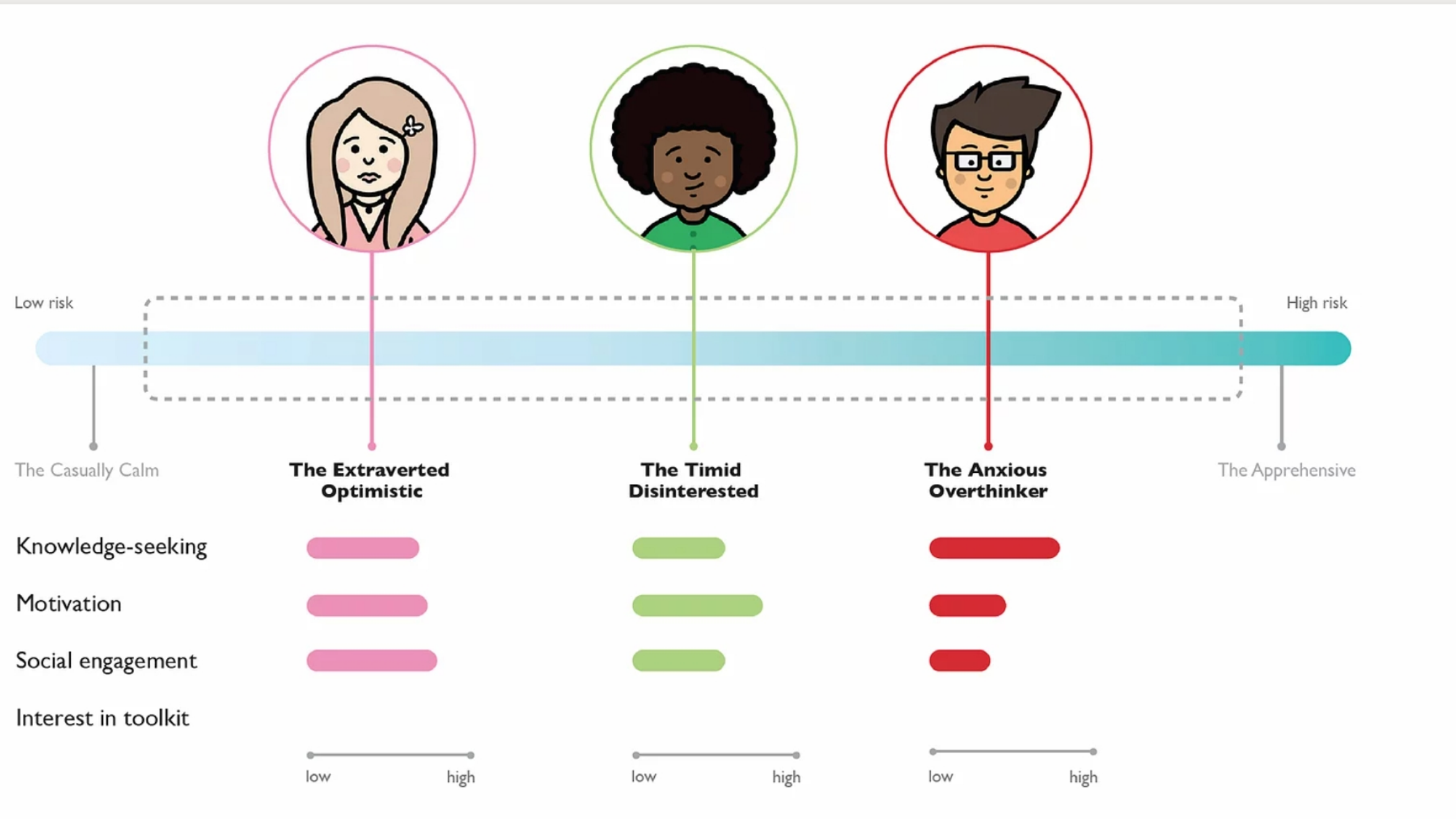
- Lie down or sit comfortably in a chair. When practicing this breathing technique, keep your upper chest and neck muscles as loose and relaxed as possible.
- Place one hand on your upper chest by your collarbone, and the other just below your rib cage at the bottom of your sternum. This will allow you to feel your diaphragm move as you breathe and make sure that your upper chest stays still. You can also try putting something light, like a stuffed animal, on your stomach as a visual reminder.
- Breathe in slowly through your nose so that your stomach moves out against your hand. The hand on your chest should remain as still as possible.
- Slowly breathe out, letting your stomach fall back in as you exhale through your mouth. Keep the hand on your upper chest as still as possible.

KEEP PRACTICING!

Breathe in a cycle; the ideal time for a relaxed breath in and out is 10 seconds altogether—5 seconds in and 5 seconds out—for a total of six breaths per minute. Breathe in slowly and comfortably until your lungs feel like they are full but not bursting, then just hold your breath until it has been 5 seconds, then slowly let your air out and just pause until it has been 5 seconds before you slowly inhale again. Practicing this breathing technique for 10 minutes twice a day will strengthen the diaphragm muscle, train your relaxation response to turn on, and leave you with a nice relaxed feeling. Remember, you have to breathe anyway, so you can practice this strategy anytime, anywhere!

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Analysis: Personas



The Extraverted Optimist

Expressive and positive. However, she gets anxious as the surgery date approaches. She enjoys connecting with former patients and asking the doctors questions.



The Timid Disinterested

Nonchalant and very calm. He is not really interested in learning all the details about pectus; he just wants to get over with it. Although he might get anxious, he rarely expresses it outloud.

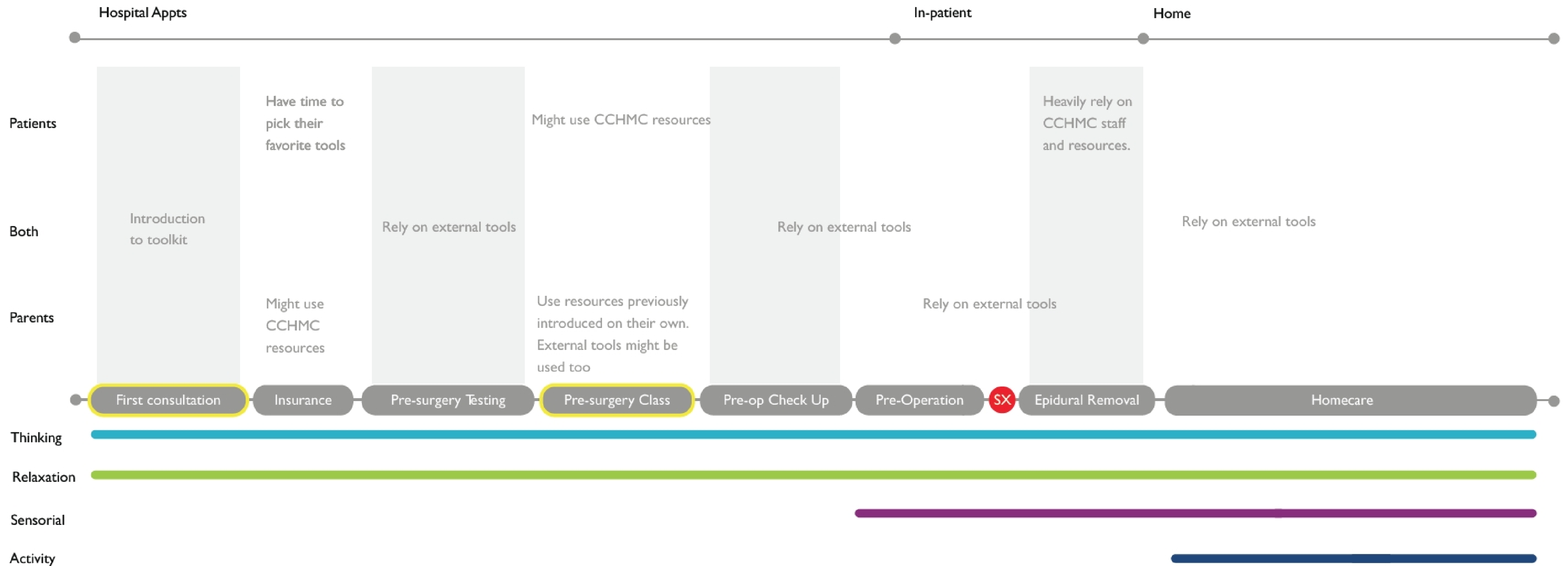


The Anxious Overthinker

Seriously concerned. The pectus procedure is something that keeps him up at night. He has done extensive research on the topic and often the clinicians 'what if' questions.

Phase 3 // Case Study

Analysis: Journey Map



Phase 4

Ideation & Prototyping


- Generate multiple concepts then compare and contrast
- Share your ideas and get perspective
- Test and verify
- Stay low fidelity with prototypes
- This is not the time to be concerned with visual design!



Ideation & Prototyping

Thinking


Goal Setting



Problem Solving




Reframing Thoughts



Relaxation


Passive Muscle Relaxation




Active Muscle Relaxation



Breathing




Guided Imagery




Sensorial


CranioSacral Therapy




Music



Massage




ASMR



Aromatherapy




Healing Touch




Activity


Scheduling




Distraction



Pacing



Exercise



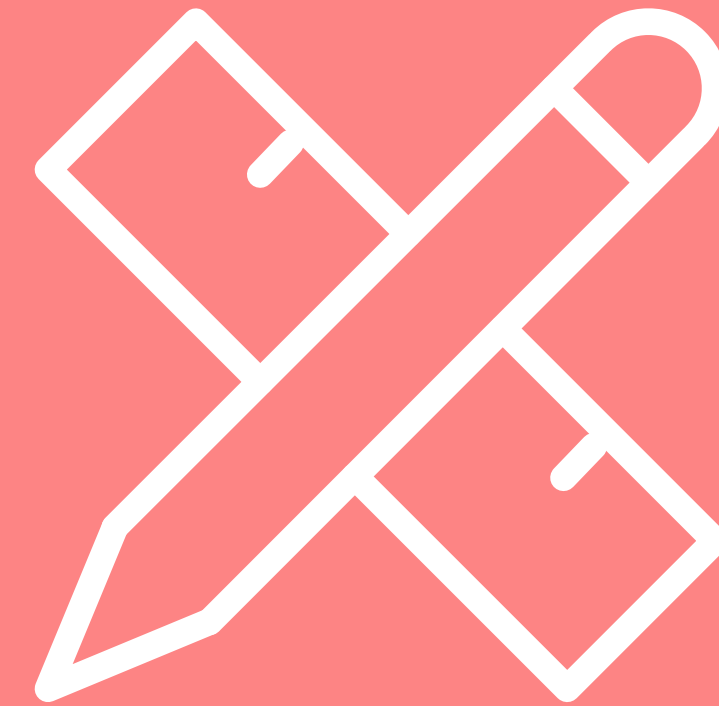
Ideation & Prototyping



Phase 5

Refine

- Now you can begin to focus on refining your visual design
- Be willing to analyze every detail...the devil is in the details
- This is the difference between okay and fantastic design



Phase 5 // Case Study

Refine: Deliverable 1

EMPOWERMENT CARD FRONT

SENSORIAL TOOL

Top of card identifies the category

Recommendation for parents or patients to use

Recommendation for where in the journey to apply the tool



Massage

- Recommended For:** Patients
- Recommended During:** Inpatient, Home Recovery

EMPOWERMENT CARD BACK

SENSORIAL TOOL

Simple explanation of the tool

Resource for further education or use. Includes videos, readings, printable tools/activities, apps, & links tools you can purchase.

Massage

Did you know that physical touch can lower stress hormones in the body and ease uncomfortable areas by increasing blood flow and oxygen? Ask your nurse or doctor about setting up a massage therapy session with the Holistic Health team at CCHMC. Caregivers can learn massage techniques to do at home, too.

READING RESOURCE

Trying to convince someone to be your free masseuse? Show them this article about how it helps with pain relief and they might just agree.



SENSORIAL TOOL

Aromatherapy

Aromatherapy uses natural oils like lavender, peppermint, and eucalyptus to enhance mood and promote relaxation. Side note: oil diffusers are great for use at home but should not be used in the hospital. Instead, bring a person to the hospital.

ACTIVITY TOOL

Schedule

Recommendation for Caregivers

Recommendation for Hospital Inpatient Home Recovery

THINKING TOOL

Problem Solving

Problem solving is all about finding a way to overcome an obstacle. Any of the tools in this stack can be used as a problem-solving tool. When going through a problem, consider the issue and try to find an achievable solution.

Ask yourself the following questions:

- 1) What is happening?
- 2) What do I want to happen?
- 3) What tool can I use to get the outcome I want?

SENSORIAL TOOL

Massage

Recommendation for Patients

Recommendation for Inpatient Home Recovery

RELAXATION TOOL

Active Relaxation

Recommendation for Patients

Recommendation for Inpatient Home Recovery

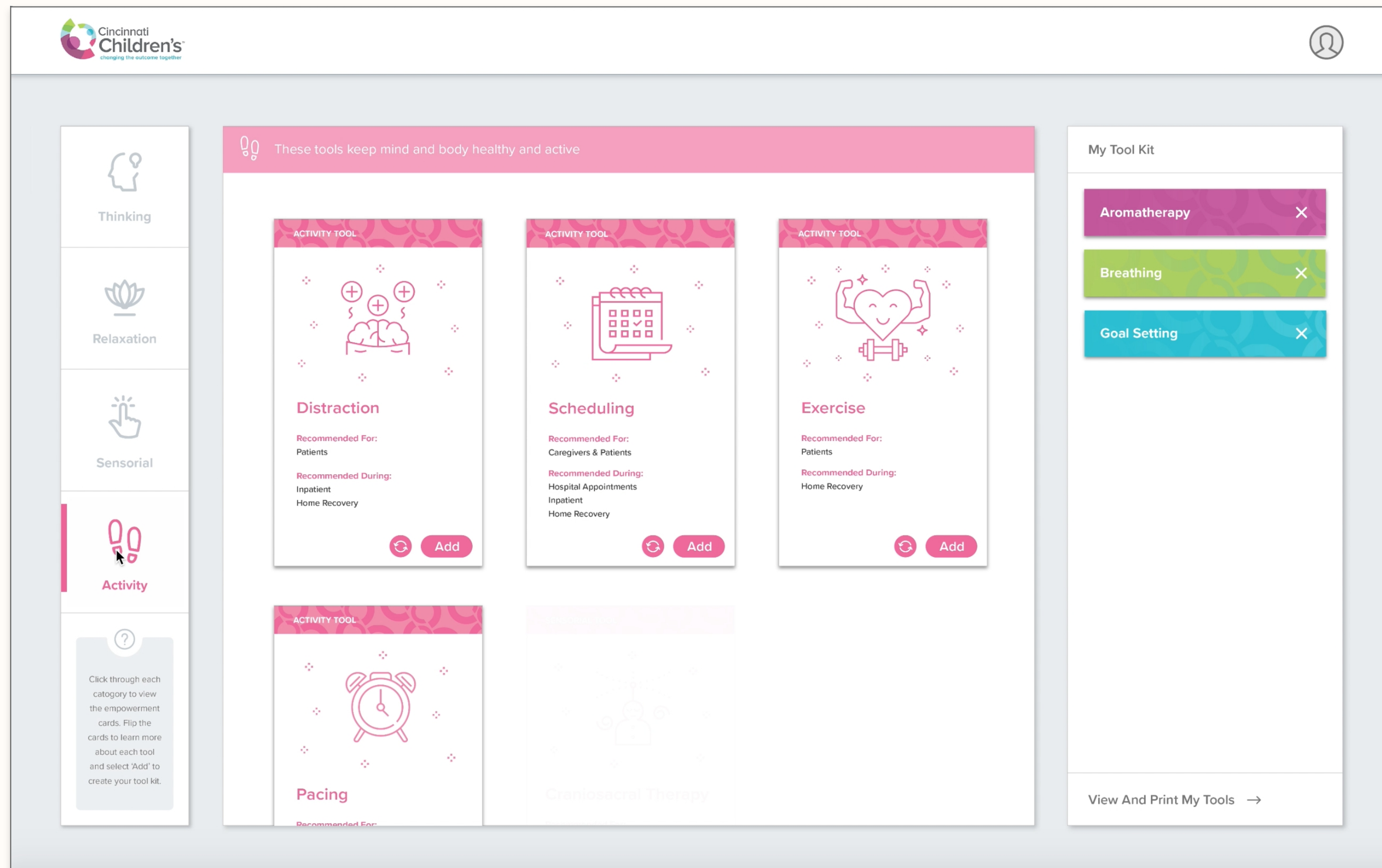
SENSORIAL

These tools can help soothe and relieve pain and anxiety through therapeutic sensory experiences.



Phase 5 // Case Study

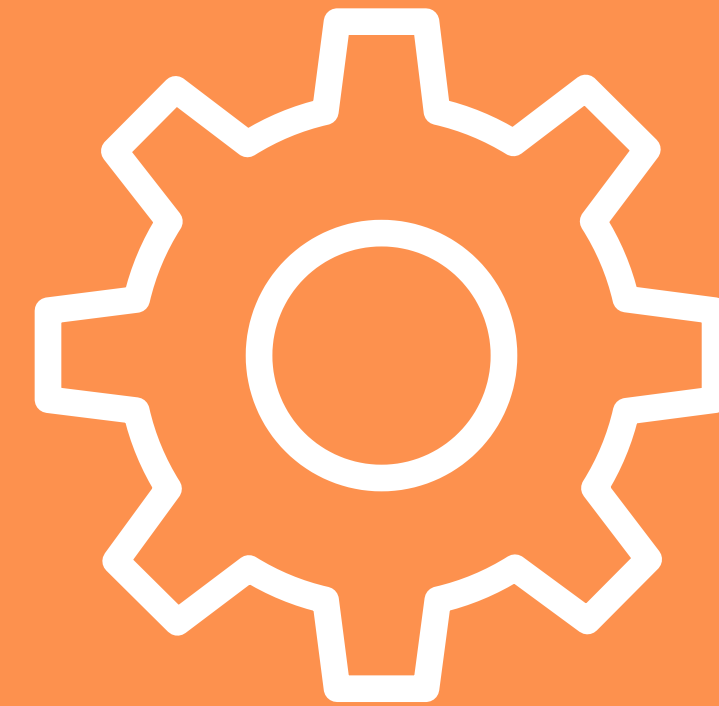
Refine: Deliverable 2



Phase 6

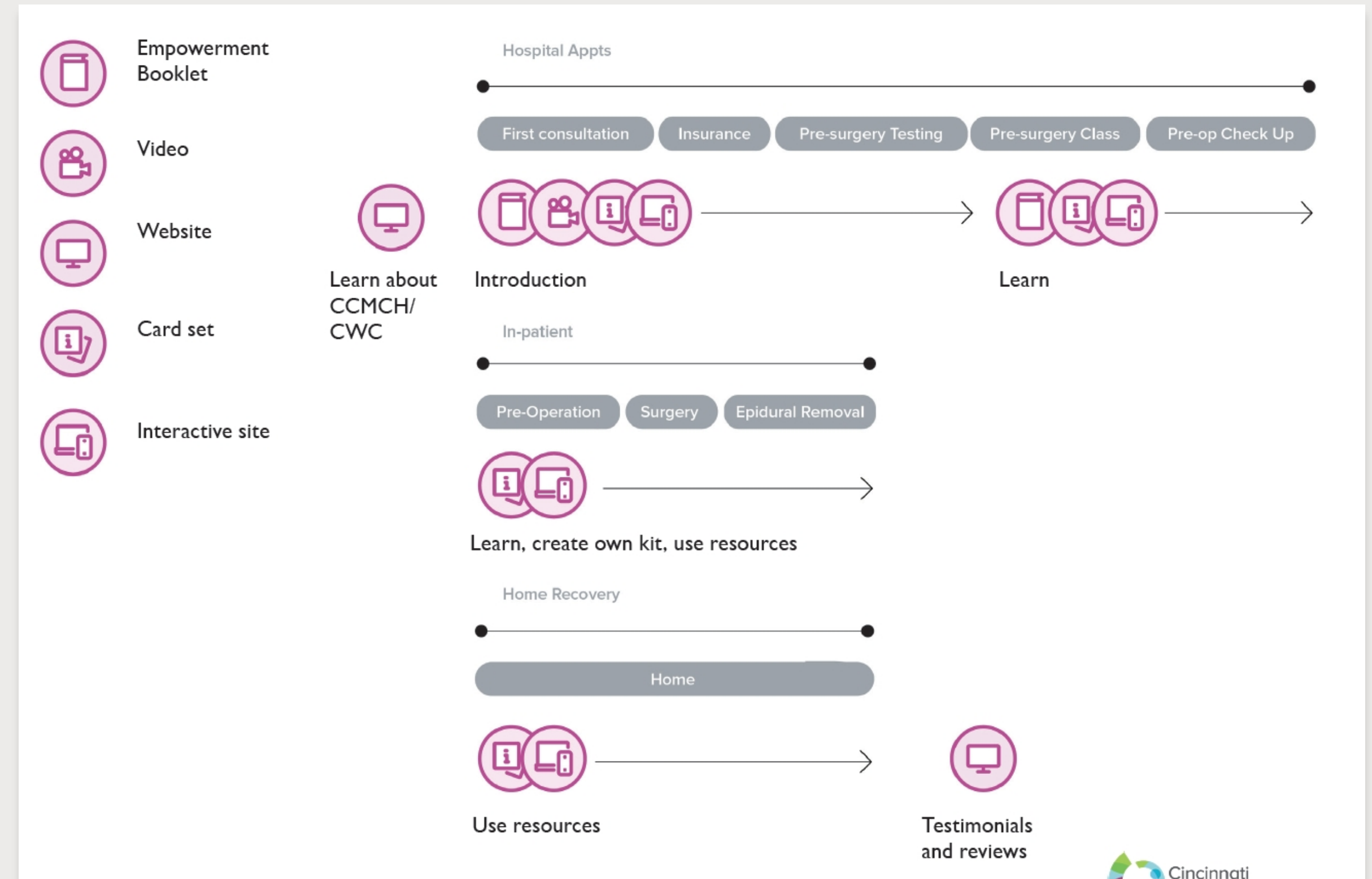
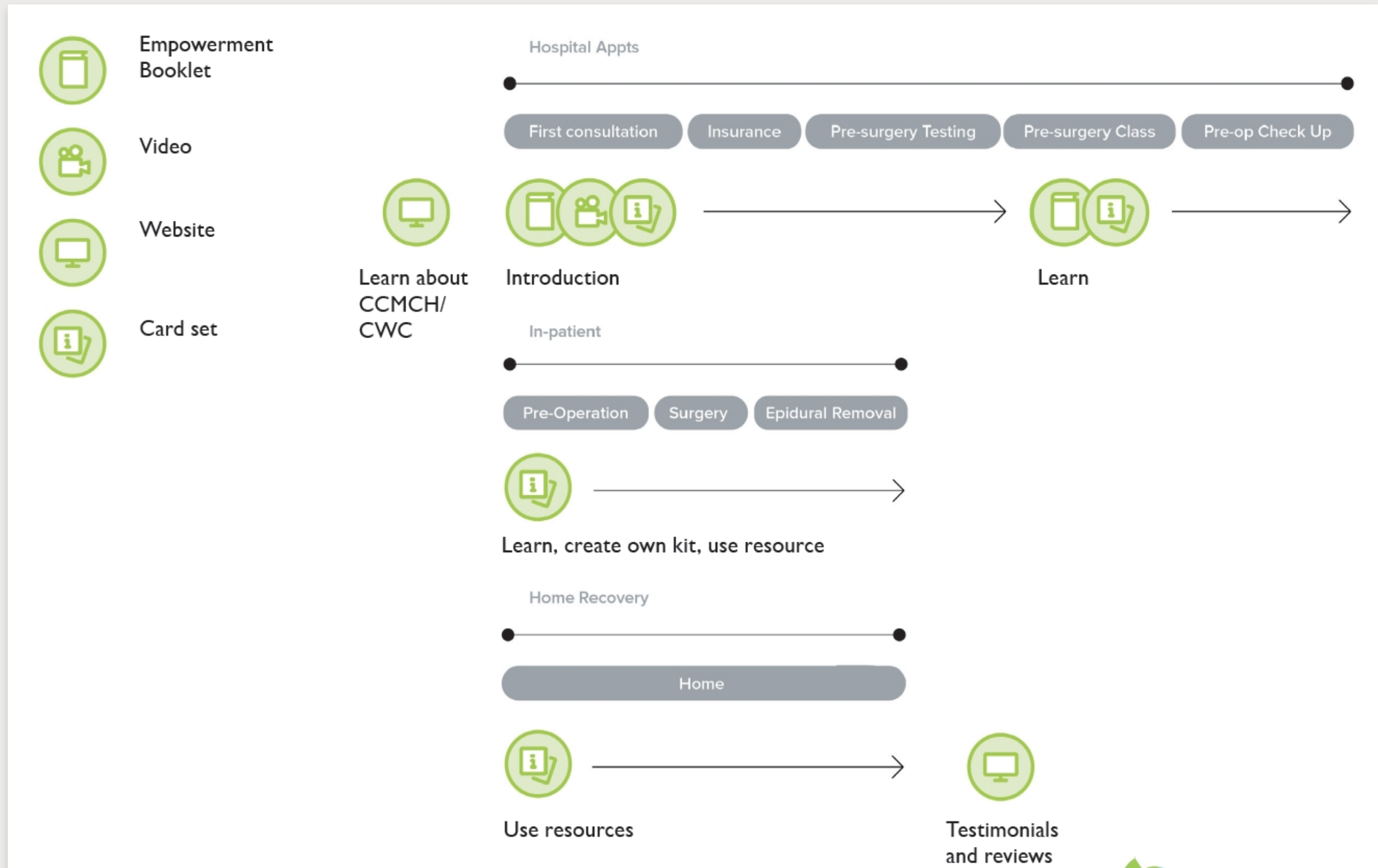
Implement

- Develop documents and assets detailing how to design is meant to be built and to look
- Track and measure success
- Get customer validation
- And if needed...keep iterating!



Phase 6 // Case Study

Implement



Phase 7

Evaluate & Reflect

Consider your process and ask yourself...

- What parts of the process were successful? And why?
- Where did you struggle? And why?
- How are users responding to the products? Did it solve their issues and pain points? Can it be improved?
- What lessons can you take away from this to improve on your process?



Thank You

Find Me On LinkedIn!



<https://www.linkedin.com/in/ariel-swift/>

:)