Doc.

Kilian Ettlinger, Mathias Thomsen & Sonia Tao
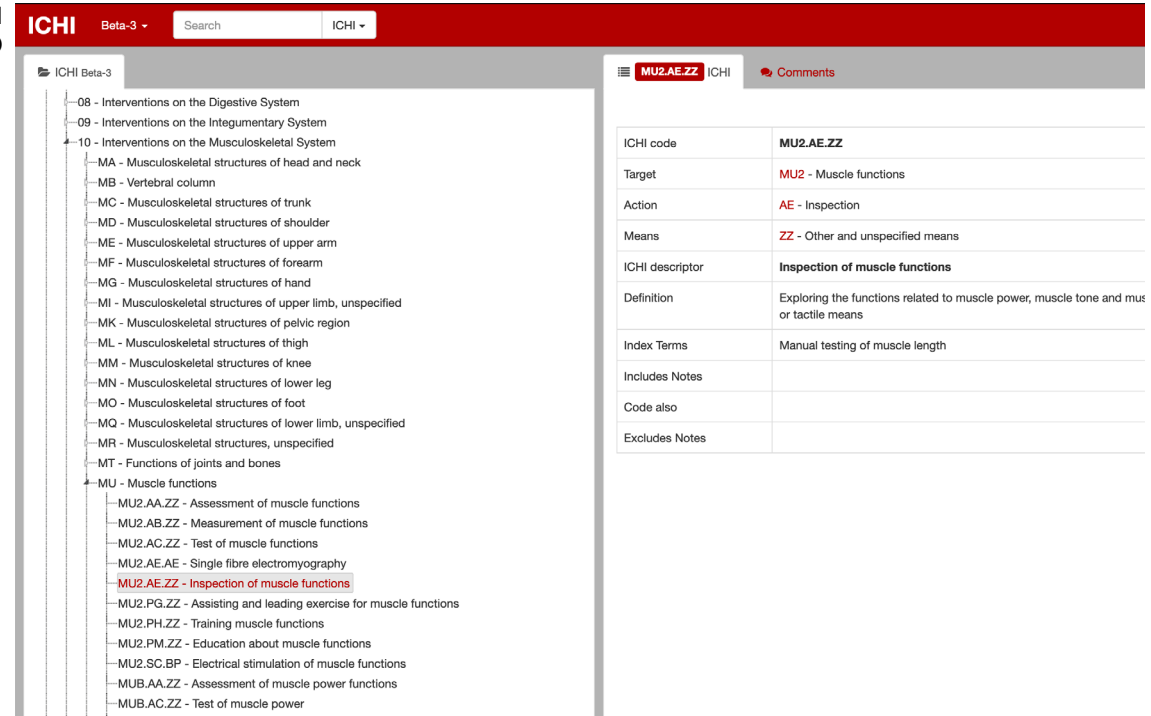
Documentation, Basic GUI 2020
Prof. Jürgen Späth & Martin Dušek

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introduction

Assessments and interventions are an elementary resource for health professionals, such as physiothera-pists, and also other interest
groups like scientists.
This kind of collection of knowledge should be accessible for everyone with a legitimate
interest. In this module we put the focus on the ICHI classification from WHO, where every
possible intervention is „clearly" structured.

The problem behind the whole system is, that it's too overwhelming and imprecise to actually use it in the everyday life as a physiotherapist. Due to the inaccuracy, valuable information is lost in order to better adapt the interventions.

The goal in this module was to design a service to simplify the documentation and in the same time,
a more accurate classification
for research purposes.

MU2.AA.ZZ - Assessment of muscle functions

MU2.AB.ZZ - Measurement of muscle functions

MU2.AC.ZZ - Test of muscle functions

MU2.AE.AE - Single fibre electromyography

MU2.AE.ZZ - Inspection of muscle functions

MU2.PG.ZZ - Assisting and leading exercise for muscle functions

MU2.PH.ZZ - Training muscle functions

MU2.PM.ZZ - Education about muscle functions

MU2.SC.BP - Electrical stimulation of muscle functions

MUB.AA.ZZ - Assessment of muscle power functions

MUB.AC.ZZ - Test of muscle power

MUB.AE.ZZ - Manual testing of muscle power

MUB.PG.ZZ - Assisting and leading exercise for muscle power functions

MUB.PM.ZZ - Education about muscle power functions

Interview mit Tiziana Grillo

Wir sind...
Kilian Ettlinger, Mathias Thomsen und Sonia Tao.

Zurzeit studieren wir Interaction Design an der Zürcher Hochschule der Künste im 2. Semester. Im Moment beschäftigen wir uns im Rahmen eines Moduls mit der Anfertigung einer Applikation für Physiotherapeut*innen.
Ziel ist es, die Interventionsdokumentation einer Therapie in einer schnellen, unkomplizierten und effizienter Weise zu digitalisieren.

Fragen

DOKUMENTATIONEN UND INTERVENTIONEN

1. **Wo arbeiten Sie im Moment?**

2. **Wie dokumentieren Sie ihre Therapiesitzungen? Analog, digital? Weshalb?**
   - Wenn bisher analog, wie wäre die Vorstellung auf das Digitale umzusteigen?
   - Wenn u.a. auch digital, gefällt es ihnen? Was weniger?

3. **Wie sind die bisherigen Erfahrungen mit Ihrem Dokumentationstool?**

4. **Was und wann wird dokumentiert bei den Therapien?**
   - Wie gross ist dabei die Rolle der Wichtig- und der Genauigkeit?

5. **Gefällt Ihnen im Moment die Art die Interventionen zu dokumentieren und archivieren?**
   - Wenn ja/nein, weshalb?

6. **Gibt es Templates/Vorlagen wie und was man dokumentieren sollte?**
   - Wenn nein, fänden Sie das praktisch/effizient/präzise?
   - z.B: interaktive Schmerzskala

7. **Wie wichtig ist der visuelle Aspekt in der Intervention und Dokumentation?**
   - Aspekte wie Skizzen, Visualisierungen, Fotos/Videos, Animation, etc.

8. **Wie sieht die momentane Datenbank aus? Sind sie zufrieden damit?**
   - Wenn ja/nein, weshalb?

ICHI

1. **Sagt Ihnen ICHI etwas?**
   - Wenn ja, nutzen Sie die ICHI Datenbank regelmäßig?
   - Aus welchem Grund oder um welche Informationen zu erhalten?

2. **Gibt es spezielle Funktionen die Sie sich in der neuen Datenbank wünschen würden?**

UNTEREINANDER

1. **Wie wichtig ist Ihnen der Austausch zwischen Therapeut*innen bezüglich Methoden/Interventionen?**

2. **Wie fänden Sie eine Funktion im Service, die eine Diskussion über diverse Interventionen ermöglicht (zwischen Therapeuten und Therapeutinnen)?**

3. **Was wären die Pro's, wenn man die einzelnen Sitzungen eines Patienten, oder sogar von verschiedenen Patienten, in den direkten Vergleich stellen könnte? Wäre dies sinnvoll?**

4. **Wie fänden Sie eine digitale Plattform für Sie und ihre Patienten und Patientinnen?**
   - z.B: Home-Übungen filmen für Analyse (praktisch in der Zeit der Pandemie)

Kontakt E-Mails
+ Telefonnr. (für Notfälle)

kilian.ettlinger@zhdk.ch
mathias.thomsen@zhdk.ch
sonia.tao@zhdk.ch
078 921 3523

Zeit:
07.05.20
um 09:20h
ca. 30min

Zoom-Link:
https://zhdk.zoom.
us/j/95173493125?pwd=Sy-
92a2p1TnNMVUpKU-
UNvRDFPWk8rZz09

Passwort:
group2

research & interview

The research and the interview kind of walked hand in hand. Since we didn't really have enough time to dive into the subject, we decided on quickly formulating the questions for the two interviews we've had with physiotherapists. We tried to ask question which can help us understand the needs and the problems from the physiotherapists better, since it was a completely new subject for all of us in the group. Another thing we tried to find out is whether they've ever heard of the ICHI classification or not.

In conclusion we'd say, that interviews are really important. It really helps to put yourself into their position and in their situation. It's a great way to empathize with your target group.

image 1: resulting overall-mind-map of all informations we've collected so far from research and the interviews

findings

From the two interviews and also research we've collected a few findings that really helped us to get a clearer picture of the whole task we had to do in this module.

Most of the therapists work with pen and paper and have no experience in direct digital documentation. Many haven't even heard of the classification system ICHI. It was not at all a term our interview participants knew of. They thought it's not relevant for their sessions. Most of them didn't get the sense behind the ICHI. The therapists we've interviewed wished to have digital tools to document.

They have the urge to see the progress and want to show the patients, what their issue is (via video, photo, illustration).

One of the key learnings are the need of templates. It can be really helpful for therapists who aren't experienced in the field. As well as visual aspects, like pictures. Therapists, patients or researchers need to be able to see the progress. Therefor, picture/video documentations could be really helpful.

Personal connection is really important for therapists. That's why they wish to have a tool where you don't have to spend a lot of time looking at the screen, so they don't lose the connection to their patient. Which means, that a simple built up interface without having to write a lot, would be really helpful.
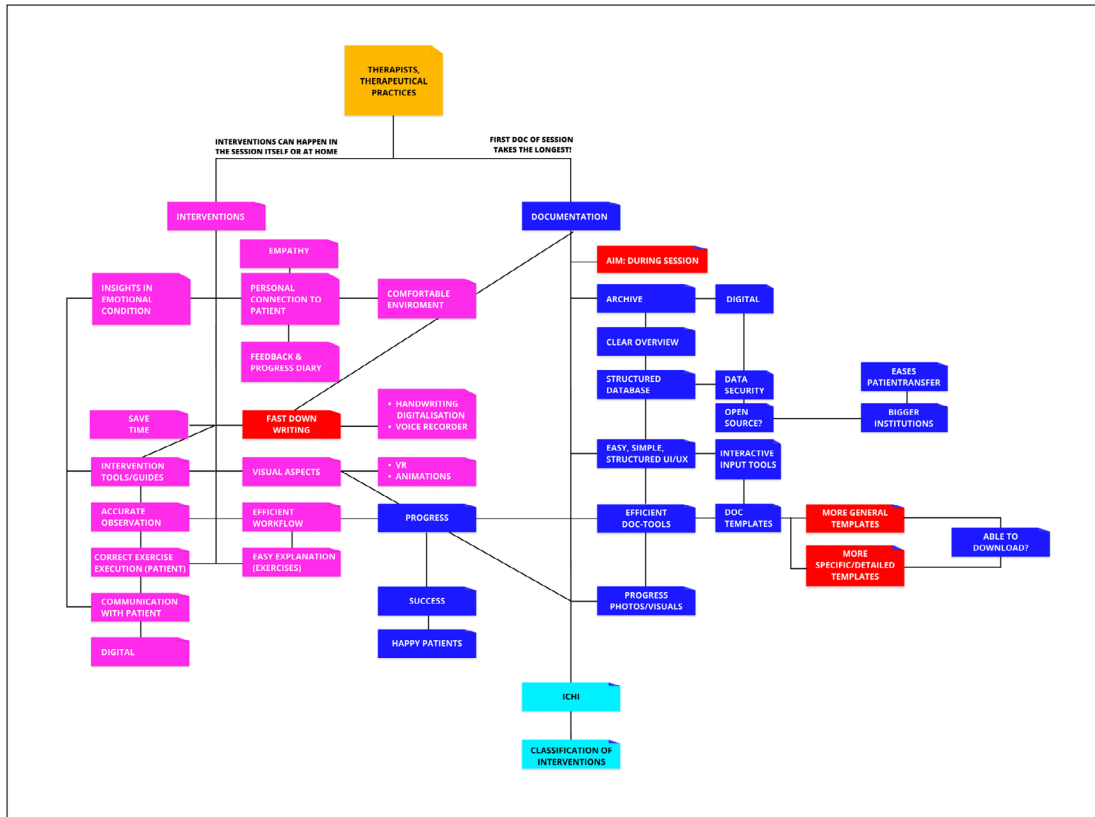
image 1
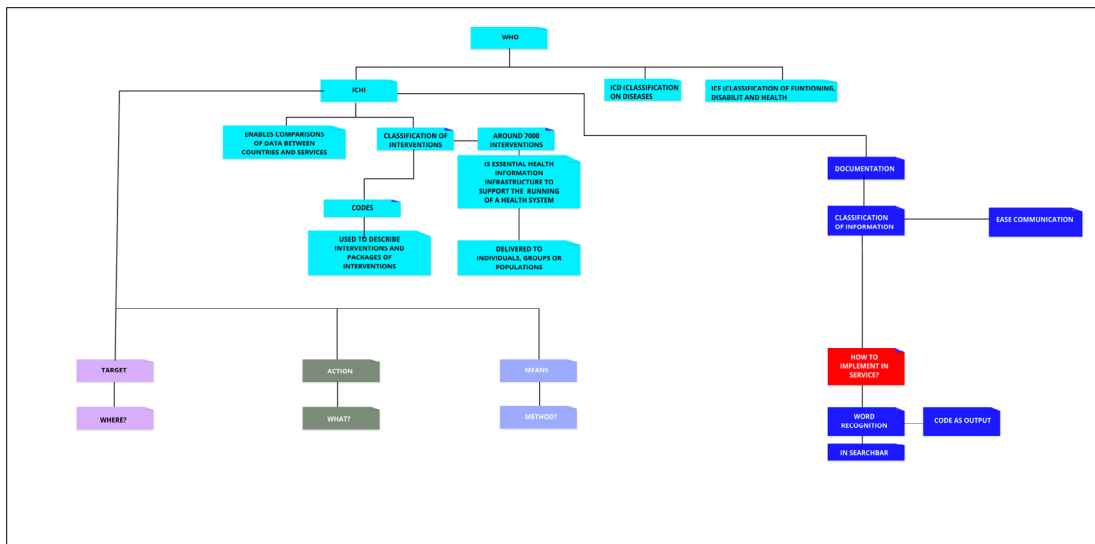
image 2
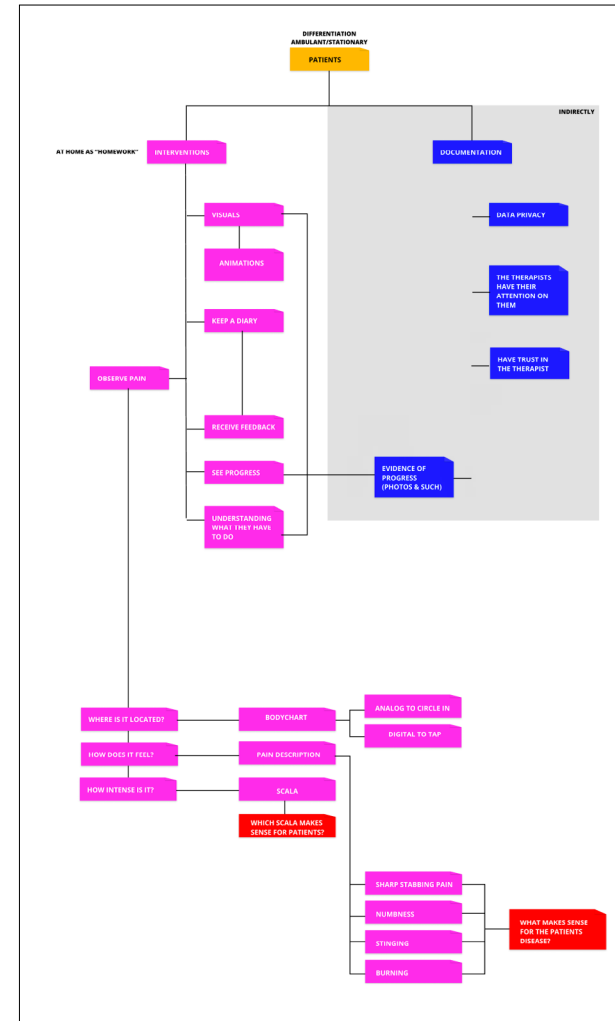
image 3

image 1: target group analysis, focus on therapists' needs
image 2: target group analysis, focus on patients' needs
image 3: target group analysis, focus on ICHI structure

It really helped us to do these mind-maps to get a clearer overview. In the end, the mind-maps didn't really help us, but since we were kind of overwhelmed in the beginning, they were a good help for us to don't lose the overview.

image 1: first wireframe
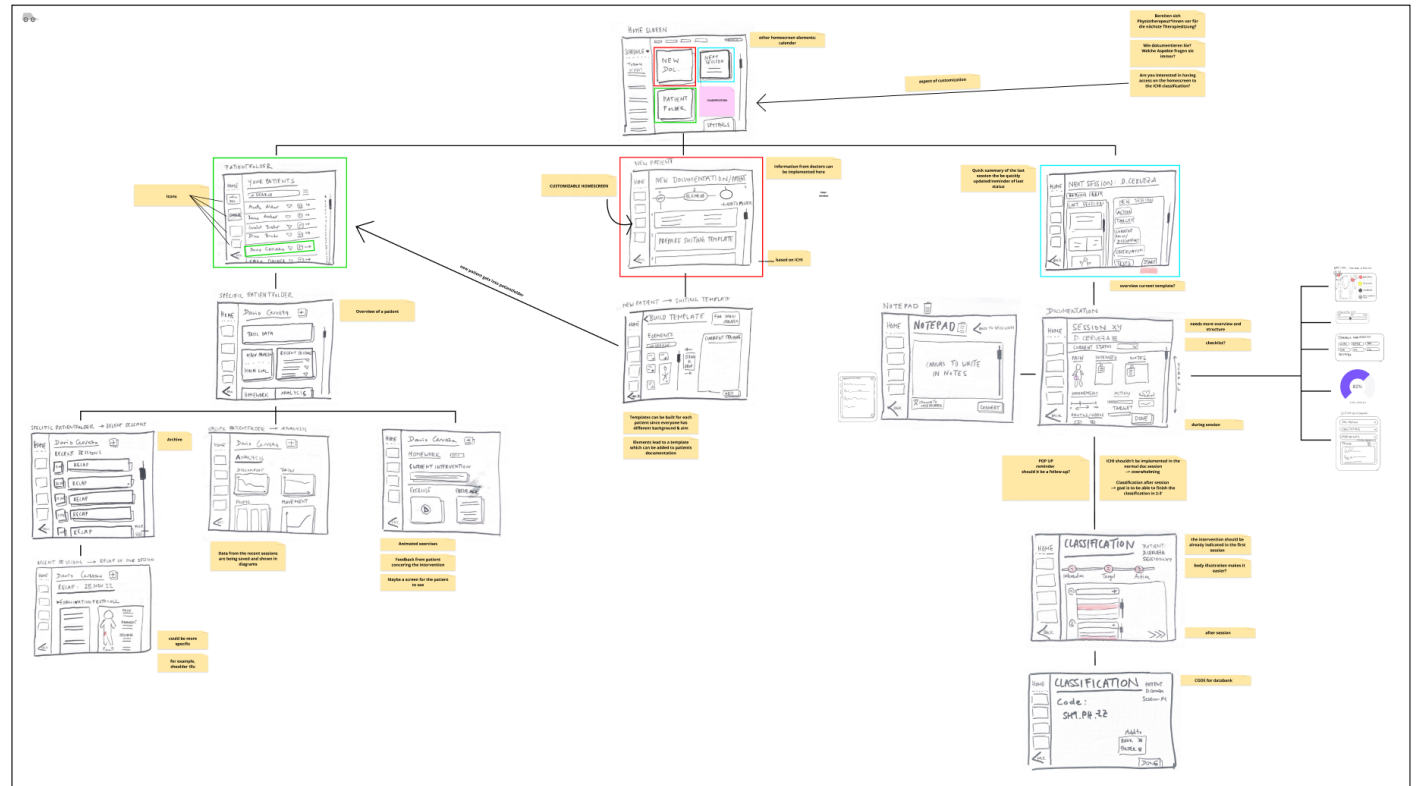
screenflow diagram

After structuring the needs of each targets and the learnings and findings, we implemented all important and necessary elements into our first wireframe.
After drawing everything down on paper, we discussed about it whether few elements are really necessairy or not.

The problem with this wireframe was, that we kind of lost the focus on the classification aspect. Things like log in screens should have been ignored.
So the next step was to adjust and specify it on the classification and the actual intervention screens, digitally on Figma.

H1 & p Text Styles

Image Placeholders (Landscape + Portrait)

This is a H1 text style
This is a p text style

Button State 1 (Inactive)

Button State 2 (Active)

Button 2

Main Navigation Version 1

Drop-Down Menu

Unsorted List + Accordion

Drop-Down Menu +

Accordion +

Accordion +

Drop-Down Menu −

Option 1

Option 2

Option 3

Option 4

Option 5

Accordion −

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Accordion +

image 1: screenshot of the workspace on figma of the digitalized wireframes
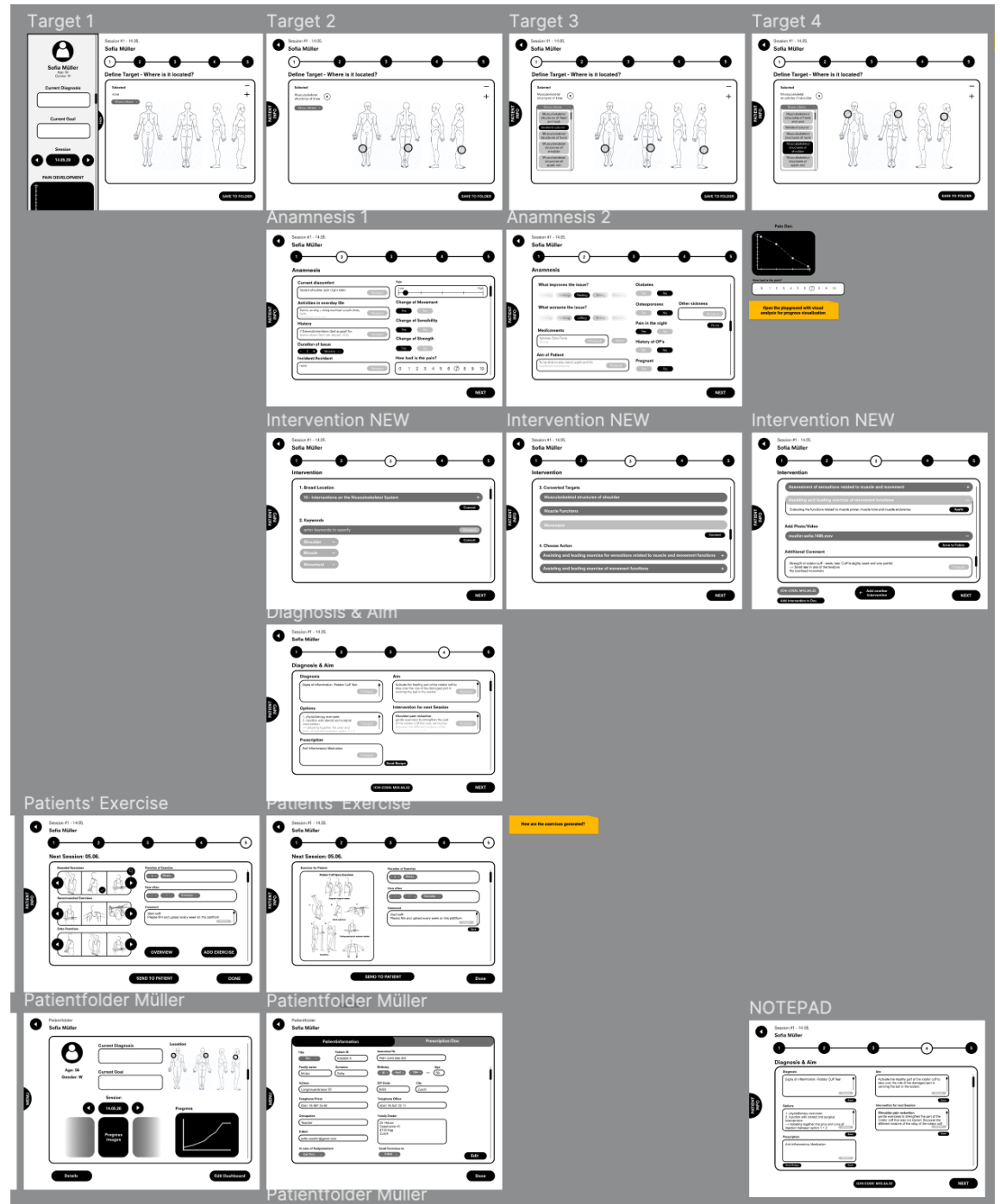
images: first skin approaches
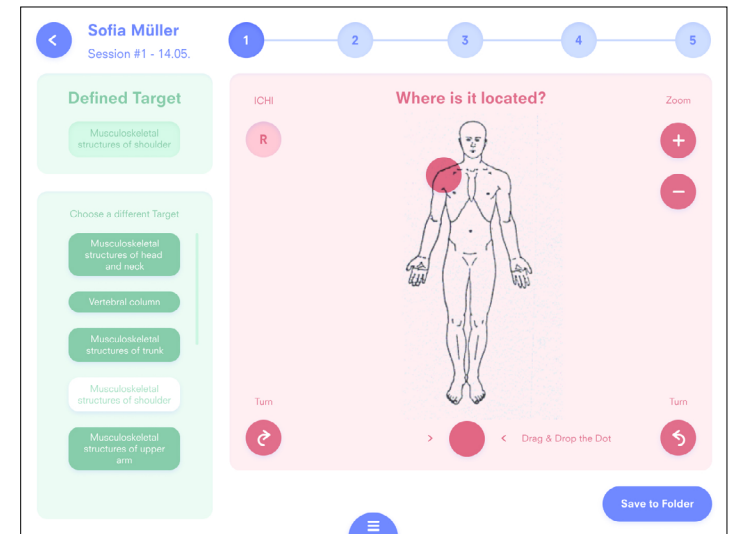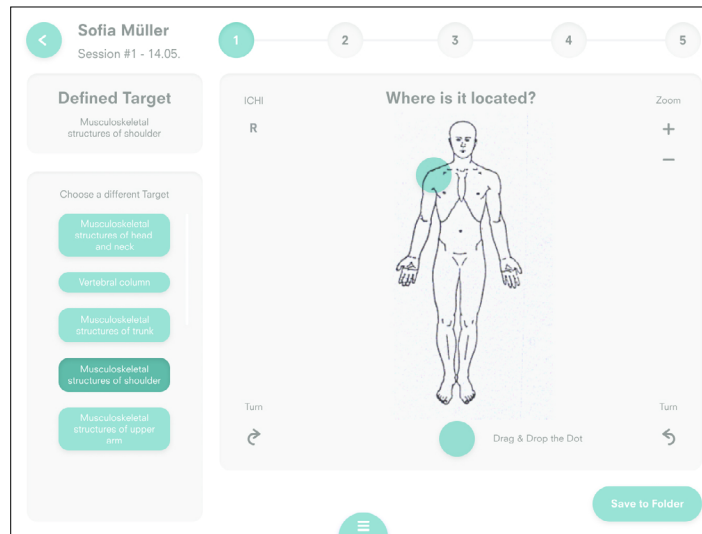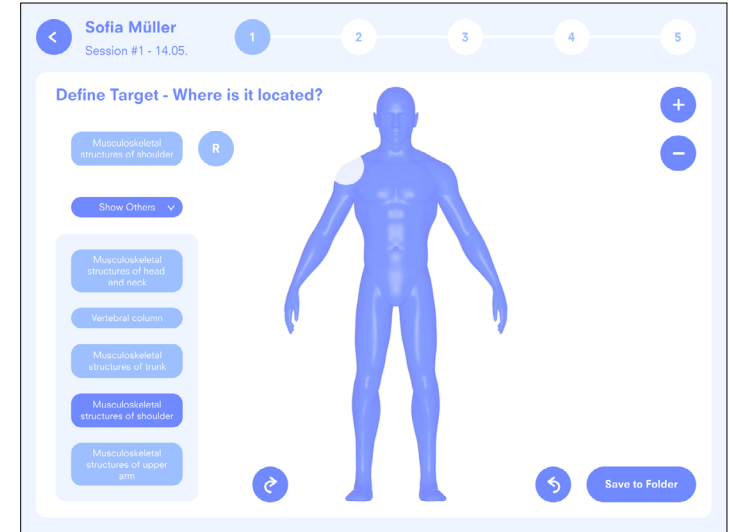
skin drafts

When we were done with our wireframes, we continued with thinking about how the skin is going to look.

What was clear from the beginning is, that the skin needs to have light and soft colors, and a clean appearance and overview, to keep the affinity to the the pyhsio therapy topic.

skin

After the mentoring we realized, that we had to enhance the contrast, since too many soft colors make it appear foggy.
The hirarchy of text and buttons also needed to be defined more clearly.

So we defined this styleguide for our application:

Colors

The two greens define the accent colors of the app. Mostly used for buttons.

Dark grey is used for text on light background, and the white is for text on dark background.

Light grey is mostly used for background tiles, to keep a structured overview.
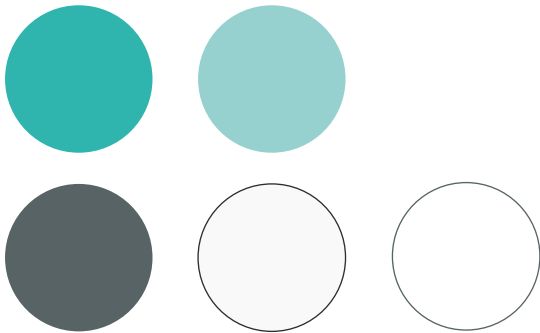
Buttons

The bigger button defines the main buttons, such as the "Next" button.

The smaller buttons are used for secondary buttons.

The light green displays the inactive state of the button and the dark green the active state.

Next

Joint

Muscles
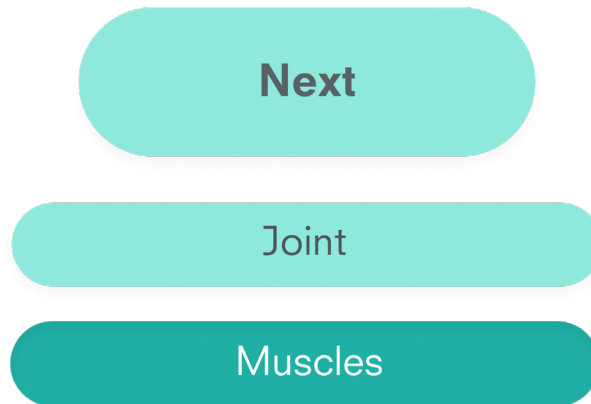
Fonts

Our fonts are Neuzeit Heavy and Book, since it has a quite calming appearance and is easily readable.

I am a Title

Lots of pain when stepping on the right foot. Always trying to put the feet up when not active. Foot is still quite swollen.

Key elements

The tiles behind most elements make the appearance of each page more overseeable and structured.

Current discomfort

Lots of pain when stepping on the right foot.
Always trying to put the feet up when not active.
Foot is still quite swollen.

Our Icons have soft lines and round edges, to fit to the appearance of the skin.

images: final skin examples

images: this is what our figma file looked like after connecting everything for the prototype.

click-dummy

Our click-dummy was directly created in Figma, since we created the whole project in Figma.

This was essentially important for our user-test that we did later-on, since it makes it easier to imagine how the final product is going to look like.
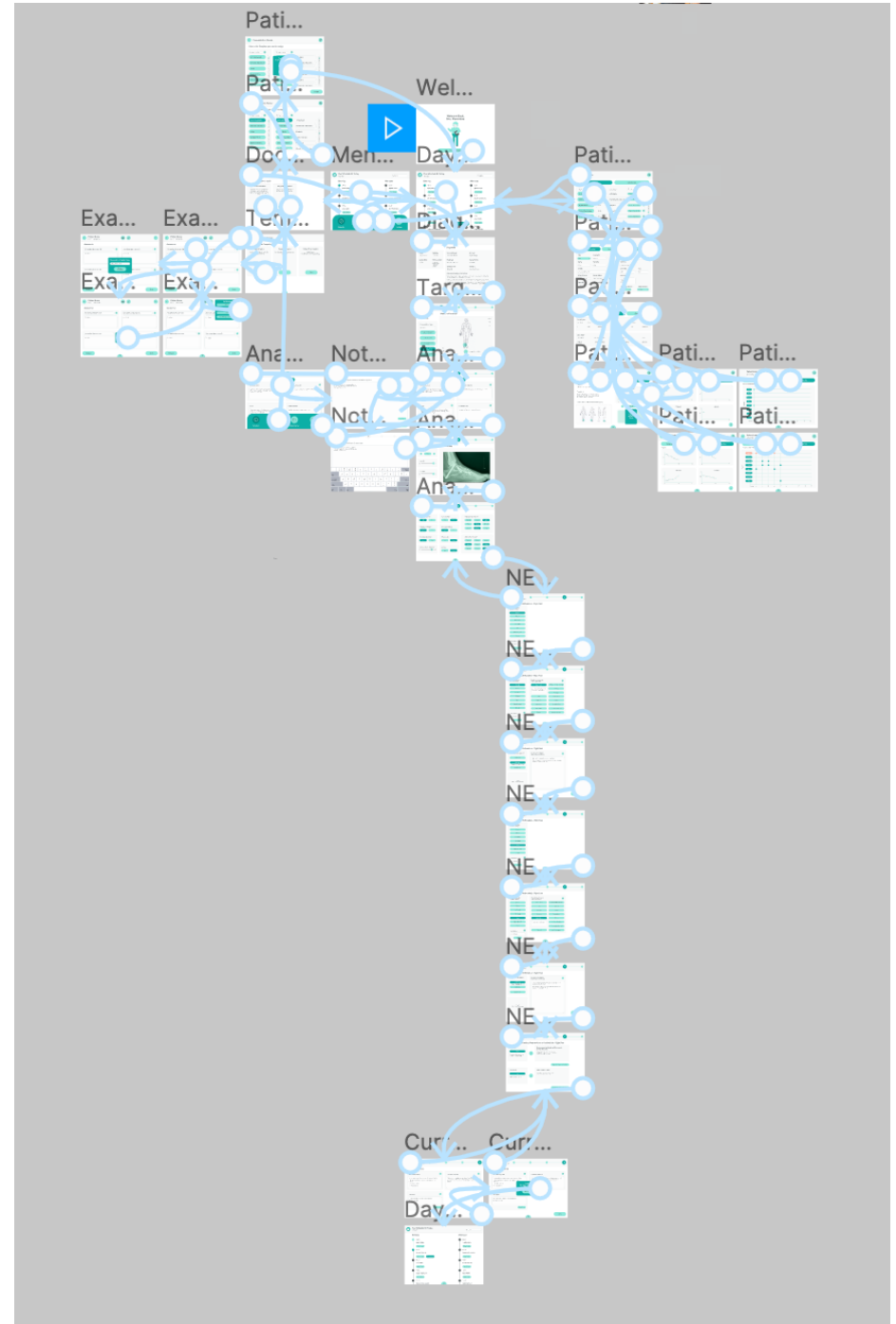
user-test

After we had our skin done, it was time to let a user test it. We used our click-dummy to test it on our first interview partner.

The key learning we received from our tester is, that the ICHI-Classification is way to complex to go through during an active therapy session. Additional to that, our tester wasn't familiar with the structure of the Interventions of the ICHI.

That's why we decided to simplify the classification system as much as possible for the therapist and have the classification generated somehow in the background.

Despite that we only got small obscurities from our tester, which were easily solvable.

Final Results

We have some key feautures in our app that we want to introduce in this last part of the documentation.
To see the full design, please see our click-dummy.
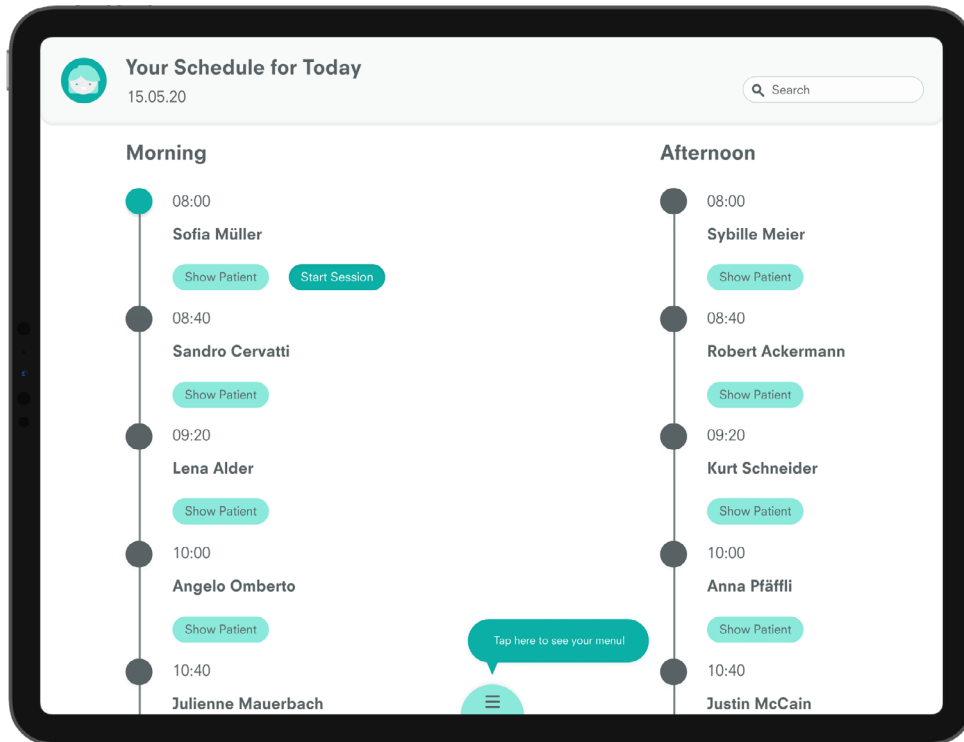
The Home-Site is the „todays schedule", since the schedule should be the easiest accessible thing.
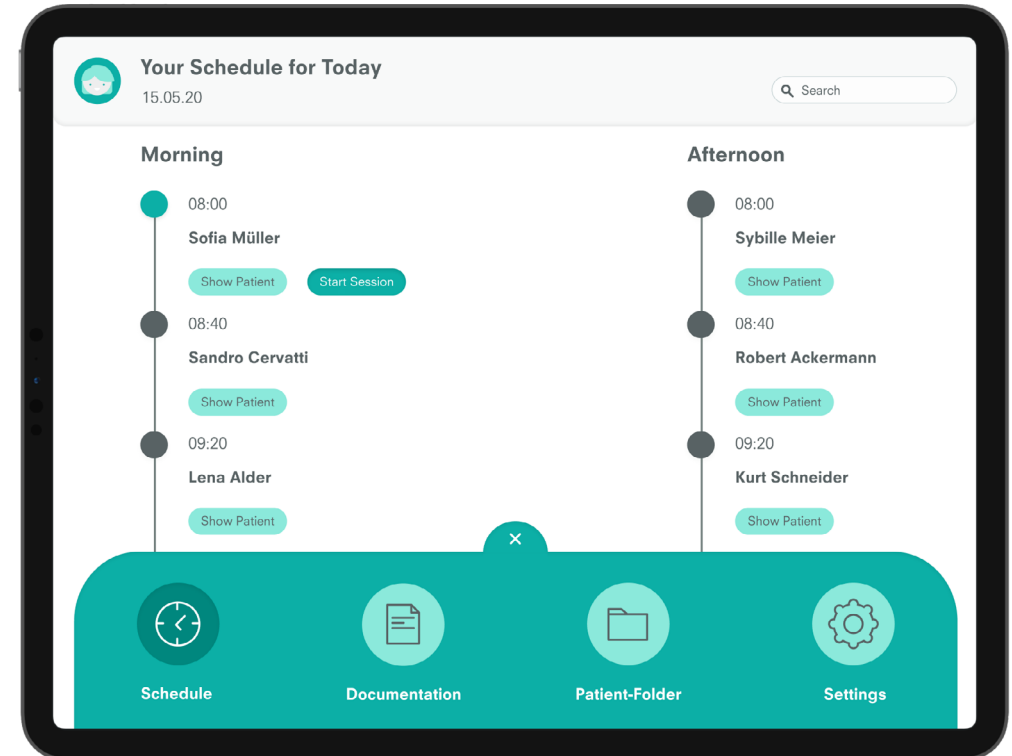

The main menu is on the bottom of every page and opens if you pull it up, or just click on it. It contains the four main functions of the app.
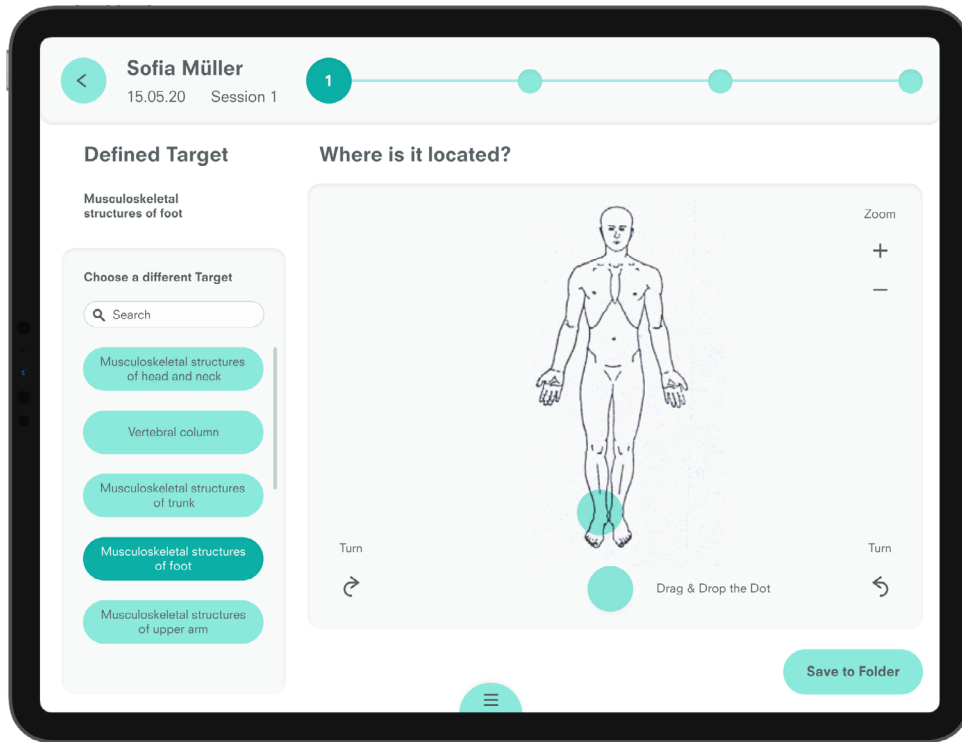
The whole app is supported by a lot of visuals that make the process of the session more efficient.
In this case, the human model eases the finding of the target area.
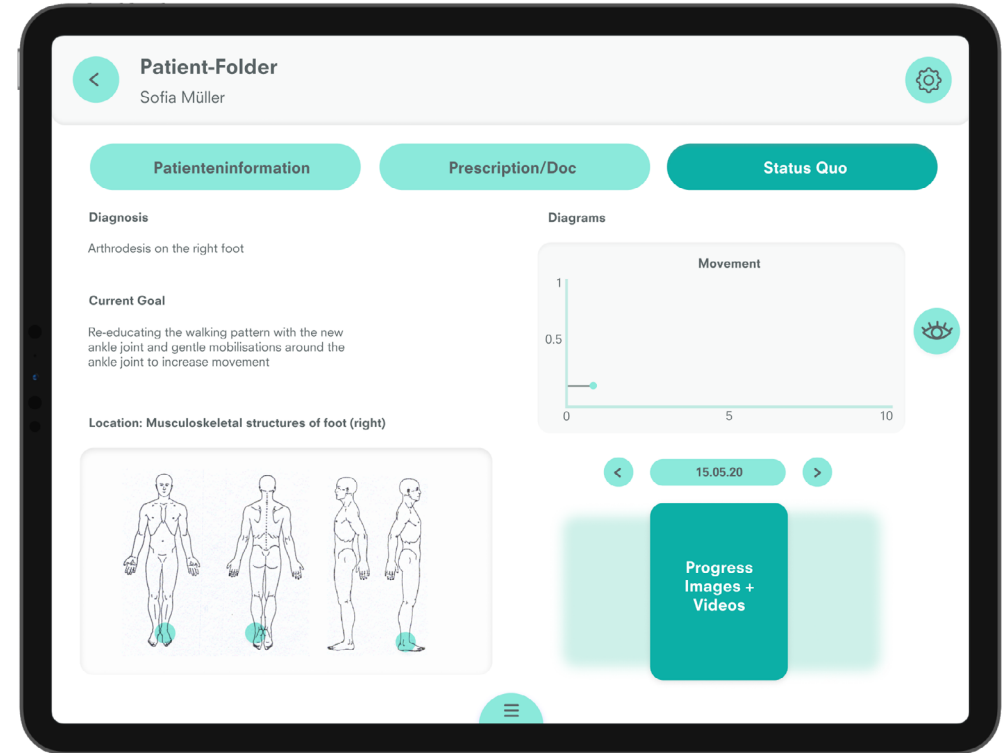
In this example visuals are used to better show the progress of the patient and their current status quo.
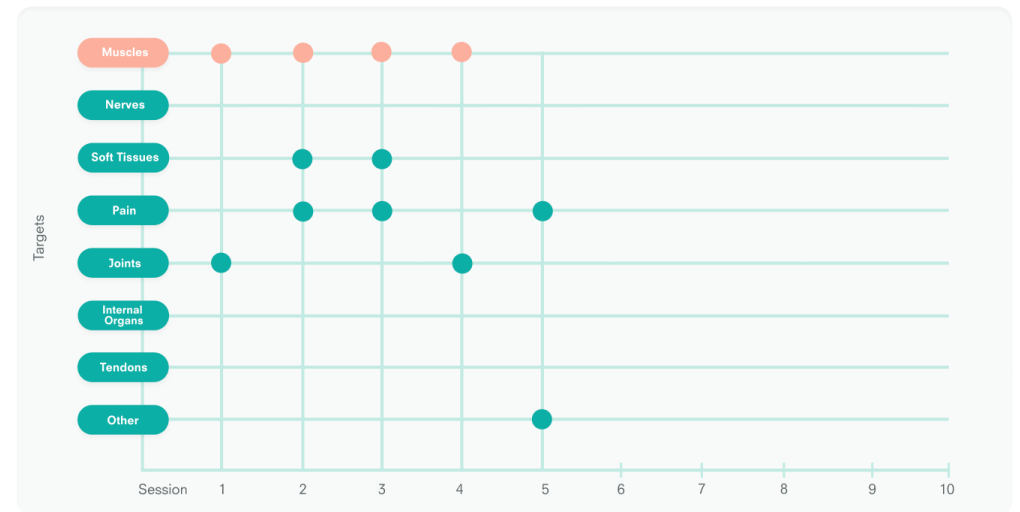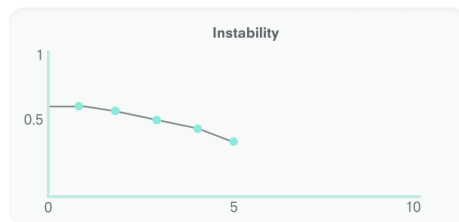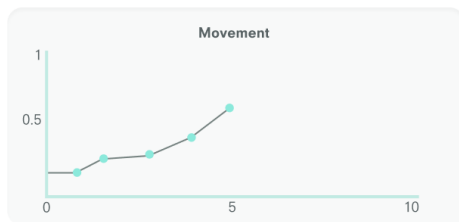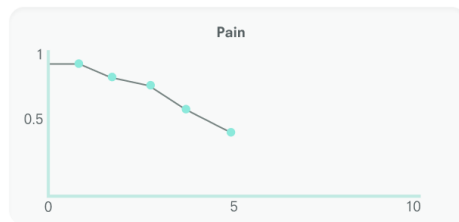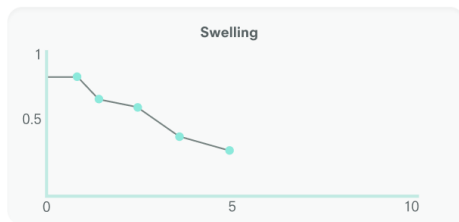
We also used diagrams to show the progress. This diagram shows the progress of these four aspects that are collected in each session, during the anamnesis

This diagram shows on what structures have been worked on in the past sessions and tells if something has to be paused or worked on more.
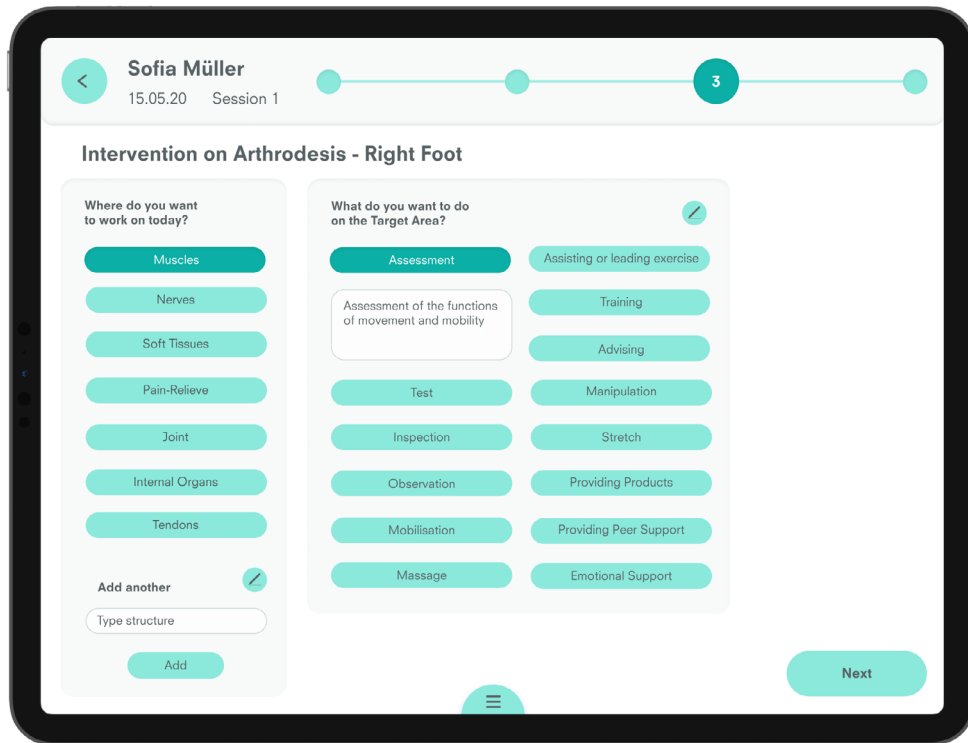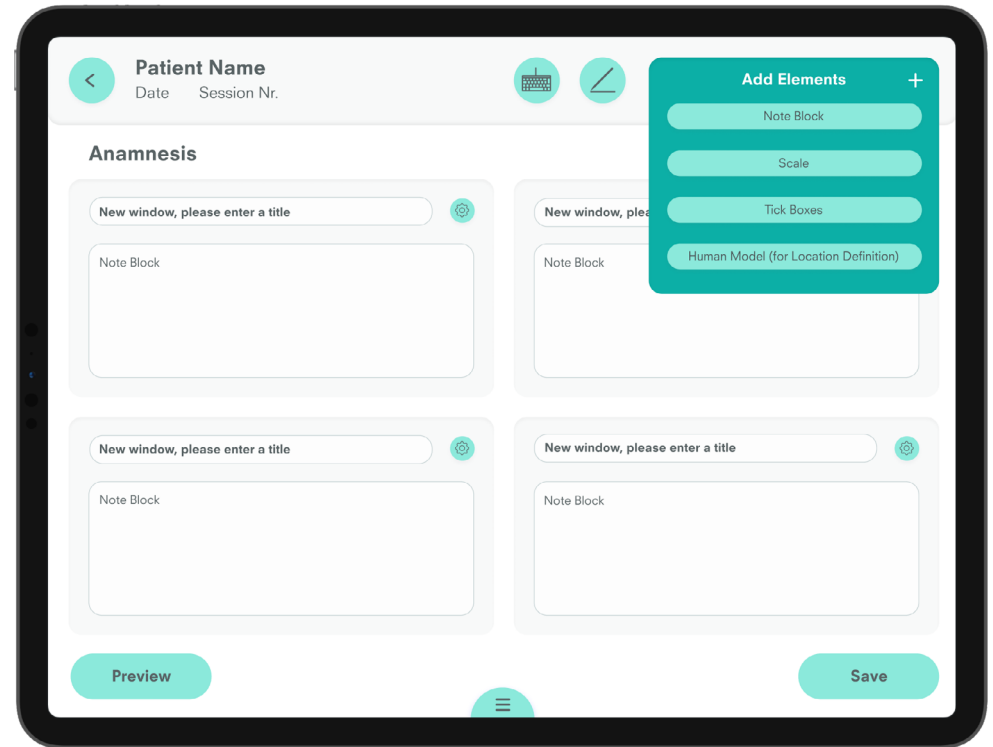
The Intervention and classification is built up it two parts. First, the target area has to be chosen and after that what action may be done on the area.
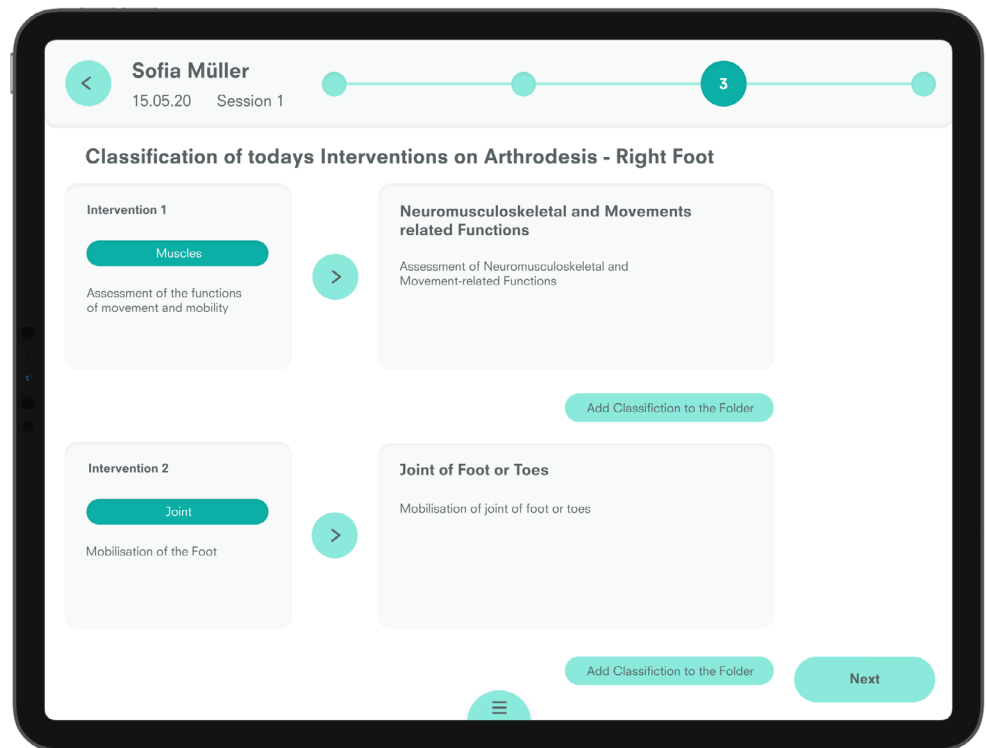
At the end of the Intervention the user receives a summary of the Intervention and the generated ICHI-Code.
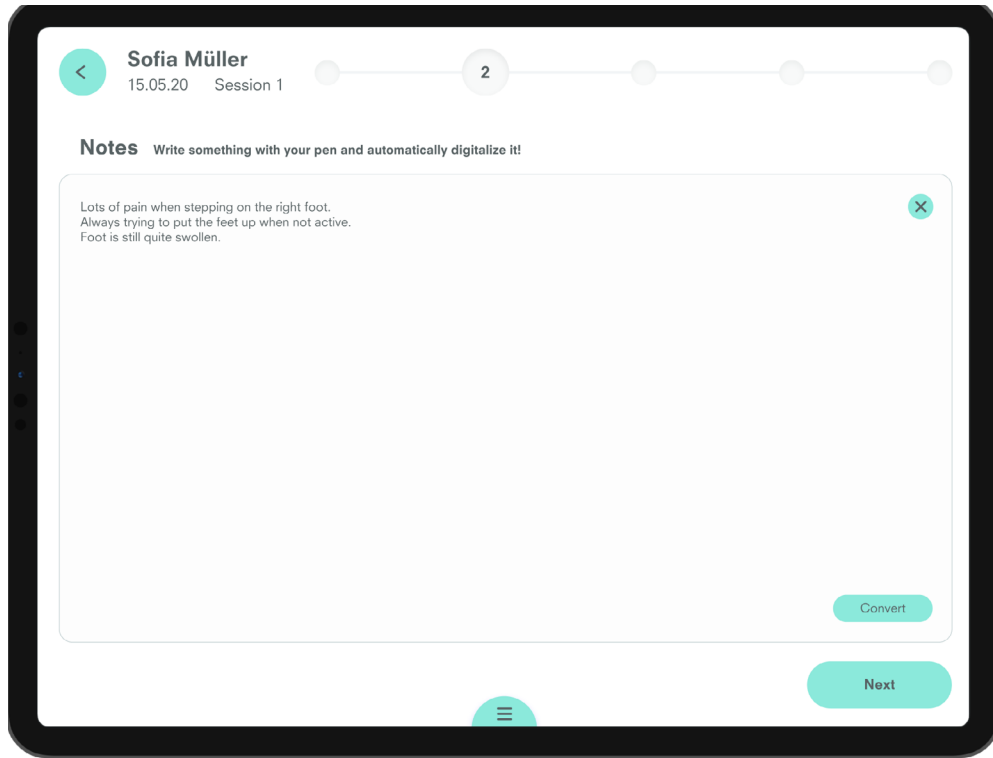
For every text block theres the ability to use the own handwriting and let it digitalize by the app.

The templates for the anamnesis are fully customizable, to have an individual template for each patient.