

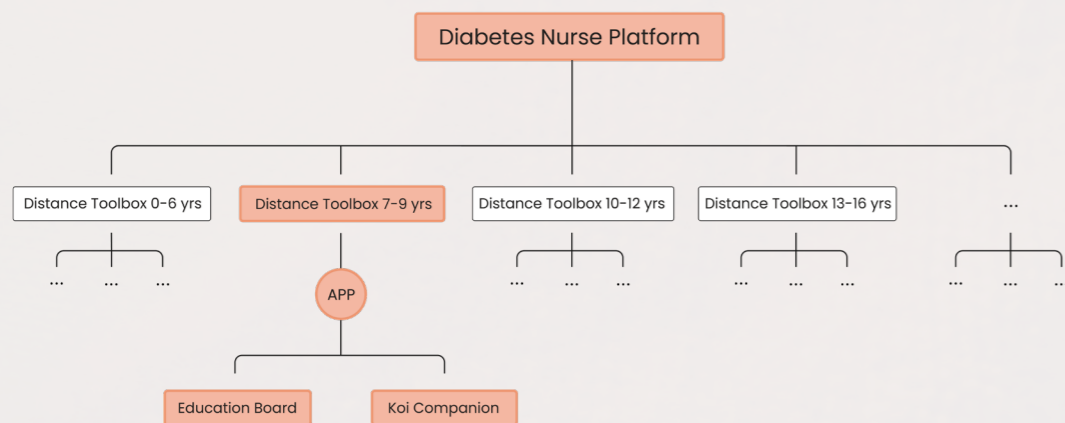


Empowering Healthcare

Koi consists of a series of Distance Toolboxes that diabetes nurses can prescribe, using the Nurse Platform, to kids living with diabetes type 1. We see that there would exist different Toolboxes for kids of different ages. However, in this project, we choose to focus on the one for kids 7–9 years old. This is, according to diabetes specialists, the age where kids would be expected to start learning how to handle their diabetes by themselves. Around this age they would also start school and be put into a new social context, where also community members (such as teachers), would benefit from learning more. In the Toolbox for kids 7-9 years old two tools were developed; Koi Companion to answer to the kid’s emotional needs, and the Education Board for practical support.

The amount of kids diagnosed with diabetes type 1 has increased considerably in the last few years and if not managed well, diabetes can lead to devastating complications. Having diabetes as a kid means that you go on regular hospital visits every year, however, in between these visits a lot of families experience a lack of support. Using the Koi Toolboxes the diabetes nurse can support kids, as well as the people around them, in-between hospital visits at a distance in order to create a safety net around the kid living with diabetes type 1.

Overview of the Koi system



- Toolboxes we choose to develop for this project
- Potential Toolboxes to develop further



Distance Toolbox for kids 7-9 years old

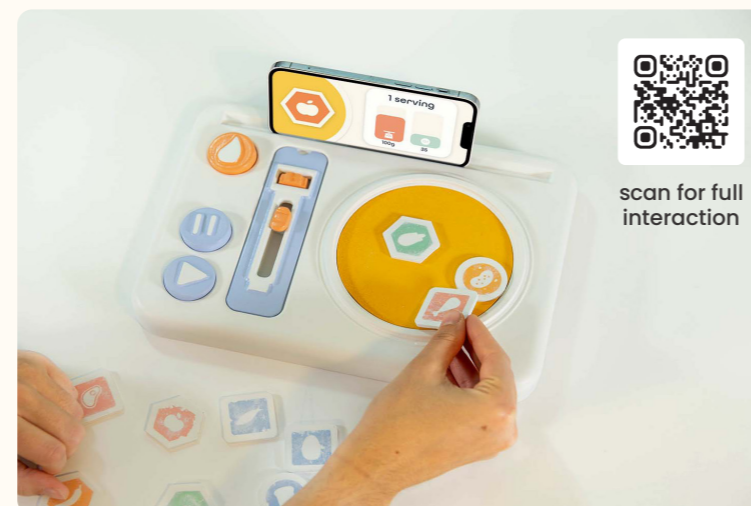


1. Koi Companion: Emotional Support

The Koi Companion is meant to answer the emotional support the kid need. When the Koi Companion is hugged it reads the blood sugar level from the glucose sensor on the kid's arm, using a NFC reader. Through providing haptic and visual feedback it enables the kid to externalize their disease — by taking care of the toy they are also taking care of themselves.

2. Education Board: Practical Support

The Education Board responds to the kid's practical learning requirements, for example, calculating the amount of insulin needed based on what they plan to eat. The board connects to an app where the kid will be able to participate in both general as well as customized challenges sent out by the diabetes nurse - this since everyone's diabetes is different!

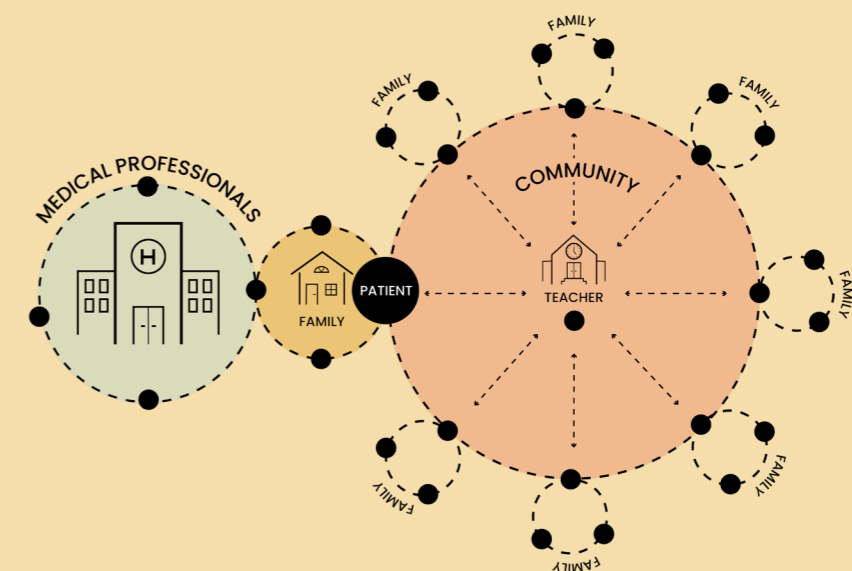


The overarching Nurse Platform



The Nurse Platform keeps everything together. Here diabetes nurses can keep track of kids' health data while, at the same time, support them through their learning journeys at a distance. They can see how the kids are interacting with their Distance Tools and how this relates to their blood sugar levels at any given time. Later they can use this material in discussions while meeting with kids and their families during hospital visits.

The impact of Koi in the community



We envision that through distributing Toolboxes to both the patient, their family and community, we will create a safety net around kids living with diabetes type 1. Our aim is to make life easier for the kid, take some of the responsibility away from the parents as well as give members of the community confidence while interacting with and helping the kid.