

# Raw data

## Introduction

This is the raw data from the test application. Here we show the answers that the users have given us. This is the unanalyzed data as noted down during the tests. This data will be analyzed in a separate document.

## Results test Kempenhaeghe

We tested the application online with two people. We tested them both at the same time due to time constraints. Both people were nurses who worked in epileptic centre Kempenhaeghe. We started the test by sending them the link to the website and asking them to share their screen so that we could see what they were doing. Once they were on the website we gave them free reign to go through the application, basically like it would be in real life if you were to use the application.

### Feedback during the test

At the beginning of the test they said that the buttons weren't clear that they could be pressed. This was due to colour and to them it looked a bit grayed out. They suggested using brighter colours for the whole app as well. From the homepage they immediately went to the surveys page via use of the bottom bar. They also really liked that the blocks in the main menu were navigating to the same pages as the bottom bar, so that they could choose what they liked better.

They said that the profile in the top right corner wasn't super clear that it was about your own personal data until they clicked on it. During the filling out of the survey they were interested in the reason why we chose to have smileys represent if you agree or disagree with a statement. They said that they also used smileys in the hospital to indicate pain for the patients and to indicate the quality in the hospital, so they liked the smileys in the surveys. With the 4 page survey they also said that they like that there were only 3 questions on one page, so that they didn't have to scroll a lot.

After filling out the first survey and having the second survey opened they said that they as a user want to know why they are filling out the surveys. They wanted to know what they are working towards, what their main goals of filling out the surveys is. They also said that they wanted updates with what happens with their data and how the results of the surveys are being implemented. This would motivate them more to keep filling out the surveys.

### Observations

What we noticed during the test is that they went back to the main page every time they wanted to go to a different page. When they went to the reward page we noticed that they didn't click on the flowers. They quickly looked at it and went back to the home page. When they went to fill out the surveys they were confused that they progress was already at a certain percentage, so they didn't know if they could click on it. After we said that they could it became clearer to them. After the filling out of the survey and unlocking the plant they did click on the sunflower and saw the fact, but they quickly closed the pop-up and went back to the surveys page.

### Survey answers

They filled out both the surveys. Below you can see the question and their responses to it. With some survey questions they gave a bit of feedback on the question itself as well. These questions will be in Dutch, because some feedback they gave was based on how the question was formulated.

### Smiley questionair

Het werk dat ik doe is erg belangrijk voor me

Right most smiley. Which is a 5.

Mijn werk is voor mij persoonlijk zinvol

Right most smiley. Which is a 5.

Het werk dat ik doe is zinvol voor mij

Right most smiley. Which is a 5.

Ik heb vertrouwen in mijn vermogen om mijn werk te doen

Right most smiley. Which is a 5.

Ik ben zelfverzekerd over mijn capaciteiten om mijn werk uit te voeren

Right most smiley. Which is a 5.

Ik beheers de vaardigheden die nodig zijn voor mijn werk

Right most smiley. Which is a 5.

Ik heb een aanzienlijke autonomie in het bepalen hoe ik mijn werk doe

Second from the right smiley. Which is a 4.

Ik kan zelfstandig beslissen hoe ik mijn werk doe

Second from the right smiley. Which is a 4.

Ik heb aanzienlijke mogelijkheden voor onafhankelijkheid en vrijheid in hoe ik mijn werk doe

Second from the right smiley. Which is a 4.

Mijn invloed op wat er in mijn afdeling gebeurt is groot

Second from the right smiley. Which is a 4.

Ik heb veel controle over wat er in mijn afdeling gebeurt

Second from the right smiley. Which is a 4.

Ik heb veel invloed op wat er in mijn afdeling gebeurt

Second from the right smiley. Which is a 4.

They found the last 3 questions difficult, since they said that they had a lot of influence, but not a lot of control.

### Number questionair

1. Ik denk dat ik dit systeem vaak zou willen gebruiken.

They answered a 3.

They found this question difficult to answer, since they didn't know how it would work in the long term and how often they would use it.

2. Ik vind het systeem onnodig ingewikkeld.

They answered a 1.

They were confused on how to answer the question. They said that how the question was asked was difficult to read with the likert scale. After we explained it a bit clearer they understood the question.

3. Ik vind het systeem gemakkelijk te gebruiken.

They answered a 5.

4. Ik denk dat ik de hulp van een expert nodig heb om dit systeem te kunnen gebruiken.

They answered a 1.

5. Ik vind de verschillende functies van dit systeem goed geïntegreerd.

They answered a 3.

Their reasoning for this answer was that it was still a prototype, so they couldn't judge it at the moment.

6. Ik denk dat er te veel tegenstrijdigheden in dit systeem zitten.

They answered a 1.

7. Ik kan me voorstellen dat de meeste mensen heel snel leren om dit systeem te gebruiken.

They answered a 5.

8. Ik vind het systeem heel lastig om te gebruiken.

They answered a 1.

9. Ik voelde me zelfverzekerd tijdens het gebruik van het systeem.

They answered a 5.

10. Ik moest veel dingen leren voordat ik met het systeem aan de slag kon gaan.

They answered a 1.

### Questions afterwards

What did you think about the application?

The application was easy to use and clear. The buttons where the same as in most applications, making them easy to use and understand. The home button should be standing out a bit from the rest, for example by giving it a different colour. The profile button should have a more distinct icon like a face to make clear that it is a button to go to your information.

Did you notice something about the application?

No, not really.

Did you find something annoying about the application?

If the application is going to be put on a phone, the colours should be more distinctive.

What did you like about the application?

It is very clear and easy to use. There's not too much on each page, and you know where you can click on and go to immediately.

What did you think about the survey page?

If the finished button is final (you cannot change the answers later on), maybe tell the user this so that they know that the answers are final. Add an overview of all the answers.

What did you think about the news page? Does it make sense, or can it better be shown in another way?

What news would you like to share? The best thing to share would be the implementation of the surveys: what changes were made? Maybe also give a tip after the surveys page if someone fills in

the survey negatively (e.g. ask them to talk to their manager about this). That way someone may be able to do something about their negative feelings immediately.

What would you like to see on the news page?

Interpretation of the results of the survey is enough. You shouldn't clutter it with other information.

What did you think about the garden system?

It made one of the people asked think about the typing lessons her daughter is having at the moment. It is a fun system, and she likes the link between the garden system and the rest of the app.

Do you think you would visit the garden often?

No, it would cost too much time.

There is a badge system and a garden system, which one do you prefer?

They like the garden as you create something. However, they're unsure if people would use the application more because of it.

Did you notice the badge system in the results screen?

No, they didn't really notice. One person did recall seeing the badges.

Would the garden or badges stimulate you to finish the surveys?

No, they wouldn't do it faster or more often.

Can you think of ways or things that would stimulate you to finish the surveys?

Maybe a cup of coffee. The best way to make people fill in their surveys is by adding it to their workday. This can be either by adding it to the team meetings, or by adding it to their calendar system (where you have to finish activities and can't move them too much). Make it mandatory.

Do you think this application could help with keeping people working in healthcare?

That depends on how the results are used to implement changes, and if the worker sees the changes and feels heard. Results should be brought back as a reward, a show of appreciation.

Do you have any other comments?

We will talk about maybe participating in this project during our next team meeting.

A/B test

Which versions do you notice the most?

IV bag is funny, but the most logical one is the bar. The circle is okay as well. The heart is a no. The progress bar is the clearest, and they would both like to see that one used in the application.

Is it clear what your progress is in these designs?

They would like to see the percentage next to the circle and the progress bar. One of them wants to see the general progress at the minimum and doesn't mind if the percentage isn't shown. The IV bag goes from full to empty in real life, so that one may be confusing to use as a progress tracker.

Does a progress bar next to the percentage add anything for you, or is just the percentage enough?

It adds something, as you can see the general progress easier by just looking at the bar at a glance. Maybe you could use a fuel pump meter as a variant, that way you don't have to show the

percentage. It's either red or green based on how full it is. But the bar and percentage still has their preference.

Do you miss something in the progress tracker?

No.

Do you have any other ideas for a progress tracker?

Fuel pump meter. Maybe something with plants, but it will get a bit more playful that way and they like the less playful versions more.

Do you have any closing remarks?

No.

## Adjustments test Kempenhaeghe

We adjusted the progress bar to show it's empty zero instead of an already partly filled in survey to avoid confusion about which survey the user can fill in. We also adjusted the results page a bit to better show the news and the badge system in there by adding a title above the news article and the badge system.

## Conclusion test Kempenhaeghe

This was our first online test, and the test went great overall. We didn't know if the users would understand how to put the website into the mobile screen mode, but this went just fine with our explanation beforehand.

The two test users like the application overall and thinks it's easy to learn and use. They only suggested some minor changes like giving the home button a different colour from the rest or adding a warning when filling in the survey that once the user has tapped the finish button the answers can no longer be changed. The test users think the garden is a fun addition, but they wouldn't use it themselves and they don't think it would improve the number of surveys filled in. They do prefer it over the badge system, as they find that version less fun than the complete garden. The users preferred the more classic designs of the progress tracker (the bar with the percentage being their favourite).

## Results test Zuyderland

We tested the application online with one person. Fran Peerboom is a nurse at Zuyderland Medisch Centrum. We started the test by sending her the link to the website and asking her to share their screen so that we could see what she was doing. Once she was on the website we gave her free reign to go through the application, basically like it would be in real life if you were to use the application.

### Feedback during the test

During the test Fran said that she didn't understand the garden system. She said that she didn't understand the goal of it and why it was in the app. On the results page she also said that she didn't know immediately what to do with the graphs, but she also said that this was most likely due to not having exact context of it.

## Observations

What we noticed during the test is that she spent some time in the beginning taking in the homepage and just observing it. She also quickly clicked on the hamburger menu and looked through that. After this she filled out a survey and went through to the garden. Here she didn't press on the flowers, so she didn't get to see the fact. After going to the garden she went to the results and looked at the graphs. Afterwards she went to the support page and said that the support is useful, but the app itself is self explanatory. Afterwards she went back to the garden and clicked on a plant.

## Survey answers

She filled out both the surveys. Below you can see the question and her responses to it. These questions will be in Dutch.

### Number questionair

1. Ik denk dat ik dit systeem vaak zou willen gebruiken.

She answered a 5.

2. Ik vind het systeem onnodig ingewikkeld.

She answered a 1.

3. Ik vind het systeem gemakkelijk te gebruiken.

She answered a 4.

4. Ik denk dat ik de hulp van een expert nodig heb om dit systeem te kunnen gebruiken.

She answered a 1.

5. Ik vind de verschillende functies van dit systeem goed geïntegreerd.

She answered a 3.

6. Ik denk dat er te veel tegenstrijdigheden in dit systeem zitten.

She answered a 1.

7. Ik kan me voorstellen dat de meeste mensen heel snel leren om dit systeem te gebruiken.

She answered a 4.

8. Ik vind het systeem heel lastig om te gebruiken.

She answered a 1.

9. Ik voelde me zelfverzekerd tijdens het gebruik van het systeem.

She answered a 5.

10. Ik moest veel dingen leren voordat ik met het systeem aan de slag kon gaan.

She answered a 1.

### Smiley Questionnair

Het werk dat ik doe is erg belangrijk voor me

Right most smiley. Which is a 5.

Mijn werk is voor mij persoonlijk zinvol

Right most smiley. Which is a 5.

Het werk dat ik doe is zinvol voor mij

Right most smiley. Which is a 5.

Ik heb vertrouwen in mijn vermogen om mijn werk te doen

Right most smiley. Which is a 5.

Ik ben zelfverzekerd over mijn capaciteiten om mijn werk uit te voeren

Right most smiley. Which is a 5.

Ik beheers de vaardigheden die nodig zijn voor mijn werk

Right most smiley. Which is a 5.

Ik heb een aanzienlijke autonomie in het bepalen hoe ik mijn werk doe

Second from the right smiley. Which is a 4.

Ik kan zelfstandig beslissen hoe ik mijn werk doe

Second from the right smiley. Which is a 4.

Ik heb aanzienlijke mogelijkheden voor onafhankelijkheid en vrijheid in hoe ik mijn werk doe

Second from the right smiley. Which is a 4.

Mijn invloed op wat er in mijn afdeling gebeurt is groot

Second from the right smiley. Which is a 4.

Ik heb veel controle over wat er in mijn afdeling gebeurt

Second from the right smiley. Which is a 4.

Ik heb veel invloed op wat er in mijn afdeling gebeurt

Second from the right smiley. Which is a 4.

### Questions afterwards

What did you think about the application?

She thinks the application is clear, which she likes. Some colleagues may find the design a bit boring, but that is a personal preference. The application doesn't have too many buttons and features, and the buttons that are in the application are clear. The available research questionnaires aren't super clear, and she doesn't understand the point/usefulness of the garden within the application.

Did you notice something about the application?

Everything of note has been mentioned at the first question. The point of the garden isn't completely clear and the fact that you have to swipe to the side wasn't clear at the start, because she didn't know that it's a mobile app.

Did you find something annoying about the application?

Not all buttons work at the moment, but other than that nothing.

What did you like about the application?

Clear, not many things that aren't useful and not too many options. Her colleagues that know less about how to use technology could also use it just fine. The big buttons on the home screen could be great for these colleagues. The bottom navbar may not be noticed by them. A back button at the top would be a useful extra addition, to make it easy to go back.

What did you think about the survey page?

It was clear and easy. The smileys are nice. Having short questions is also nice. The smileys say more than just numbers if you want to fill out the survey quickly. The colour combination is also nice to have there. The colours could be a bit brighter with the smileys though.

What did you think about the news page? Does it make sense, or can it better be shown in another way?

It's nice, but she didn't see it in the results. Maybe make it a bit clearer, since the news block is a bit grey in comparison to the badges that are very blue. It's nice that it's at the top of the page though. She thinks the news feature could be a separate page as well, but if we would like users to see the news it may be better to keep the news articles in the results page. If it's just an extra feature, it can be its own page.

What would you like to see on the news page?

She is a very curious person, so she likes to see everything that has to do with the questionnaires and the results. Some colleagues may not find this useful. She advises us to keep the application clean and easy to understand, so we shouldn't add too many different types of news articles (only the ones that have to do with the surveys).

What did you think about the garden system?

She doesn't understand the use of it. Maybe note somewhere what the use of the garden is. Now she thinks that it's fun that there are flowers in the garden, but why? She doesn't think the garden would help with filling out the surveys, maybe because the garden doesn't have anything to do with her profession. The system might work better if it was a patient room, where you collect new items for the room.

She doesn't really like the idea of collecting digital items, but she can't really say why she doesn't like it.

Do you think you would visit the garden often?

No.

There is a badge system and a garden system, which one do you prefer?

The badges are a clearer progress, so that speaks to me more. This also would trigger here more to fill in the surveys.

Did you notice the badge system in the results screen?

Yes.

Would the garden or badges stimulate you to finish the surveys?

No, but the badge system would work better than the garden. It might be stimulating in the beginning to collect something, but if the end rewards is nothing then it's not stimulating.

Can you think of ways or things that would stimulate you to finish the surveys?

She thinks it's useful to use notifications to remind users. In the garden she doesn't know what she's working towards, making it less relevant for her. She would like a goal to work towards, or maybe a prize for completing the surveys.

Do you think this application could help with keeping people working in healthcare?

Depends on what happens to the results. If you regularly keep the users up to date with for instance the news then it could be useful. It's important that the results are communicated to the users in any way. That is even more important than the app itself.



Do you have any other comments?

No, not really. The app is pretty clear. Colleagues might have some difficulties reading the graphs, because they are very small. Maybe in the survey page a reminder that you need to fill in a survey or fill in this survey before a certain date.

A/B test

What do you see?

Making the progress of the questionnaires visual. All of the images are showing the progress in a different way.

What do you think about the icons?

She prefers the more classic designs. She thinks they are a bit more clear than the more playful designs. She thinks both the percentage and the bar/circle are fine and adding a bar or circle to the percentage can help.

Is it clear what your progress is in these designs?

Yes, it's clear. Maybe the heart is a bit clear, because it's not something that she's used to.

Does a progress bar next to the percentage add anything for you, or is just the percentage enough?

The percentage next to the progress tracker does add something, but saying '5 of 10 finished' says more than a percentage of the total surveys finished. She does like the total completion being shown.

Do you miss something in the progress tracker?

Maybe it would be useful to show how many surveys you have filled out. Now with the percentage she doesn't have an idea if she still has to fill out 1 or 25 surveys. Maybe also add how long a survey would take. This could potentially stimulate to fill out more surveys.

Do you have any other ideas for a progress tracker?

No, keep it clean and business like.

Do you have any closing remarks?

No.

## Adjustments test Zuyderland

We removed the news page, so that people wouldn't be confused about it.

## Conclusion test Zuyderland

The app was very clear and easy to use. She thought that it's easy enough to use for her colleagues with less understanding of technology. She didn't think the garden idea would help workers fill in the surveys, but she did think that using notification could help.

## Results test Catharina, Eviënne

We went to the Catharina Hospital in Eindhoven to test our application with three people. The first person we tested the app with on this day was Eviënne, a head nurse. Because of a transport delay, the test had to be finished in 15 minutes.

### Observations and feedback

What we noticed during the test is that she spent some time in the beginning taking in the homepage and just observing it. Afterwards she went to the smiley survey and filled that one out. From the survey she went to unlock the plant and planted the flower. This resulted in a quick smile on her face. She didn't click on the plants in the garden. She understood the garden as a vegetable garden. She then went to the results and looked through the graphs. She then went to the surveys page and said that she understood what we wanted to do with the app.

### Survey answers

She filled out only the smiley survey. Below you can see the question and her responses to it. These questions will be in Dutch.

#### Smiley Questionnaire

Het werk dat ik doe is erg belangrijk voor me  
Right most smiley. Which is a 5.

Mijn werk is voor mij persoonlijk zinvol  
Right most smiley. Which is a 5.

Het werk dat ik doe is zinvol voor mij  
Right most smiley. Which is a 5.

Ik heb vertrouwen in mijn vermogen om mijn werk te doen  
Right most smiley. Which is a 5.

Ik ben zelfverzekerd over mijn capaciteiten om mijn werk uit te voeren  
Second from right most smiley. Which is a 4.

Ik beheers de vaardigheden die nodig zijn voor mijn werk  
Second from right most smiley. Which is a 4.

Ik heb een aanzienlijke autonomie in het bepalen hoe ik mijn werk doe  
Second from the right smiley. Which is a 4.

Ik kan zelfstandig beslissen hoe ik mijn werk doe  
Middle smiley. Which is a 3.

Ik heb aanzienlijke mogelijkheden voor onafhankelijkheid en vrijheid in hoe ik mijn werk doe  
Middle smiley. Which is a 3.

Mijn invloed op wat er in mijn afdeling gebeurt is groot  
Second from the right smiley. Which is a 4.

Ik heb veel controle over wat er in mijn afdeling gebeurt  
Middle smiley. Which is a 3.

Ik heb veel invloed op wat er in mijn afdeling gebeurt  
Second from the right smiley. Which is a 4.

### Questions afterwards

What did you think about the application?

She thought the app was clear, but at the start she was questioning what the app was about. She noticed the bottom navbar.

Did you notice something about the application?

It's fun that the app has a rewards system, and she thinks the system can be motivating for workers. She does think implementing the app may be hard because it takes a while before the workers see results, and because of this the app may seem less meaningful than it can be.

Did you find something annoying about the application?

No.

What did you like about the application?

She thinks the app is clear, and that you can easily see that you've finished a survey.

What did you think about the survey page?

Sometimes it can be nice to have open questions instead of 1/5 questions. She likes the smileys, that way the surveys are easier to fill in. She likes the smileys more than the numbered 1 to 5 buttons.

What did you think about the news page? Does it make sense, or can it better be shown in another way?

She thinks it's nice to see what is being done with the surveys, but for this to work the app has to be used actively by everyone in a department.

What would you like to see on the news page?

It's motivating to see the surveys being used in implementation. But she's not sure if the workers have the time to read the news articles.

What did you think about the garden system?

It's fine.

Do you think you would visit the garden often?

Maybe it's better to create a reward system that connects to the work of the healthcare workers. Maybe collecting organs with a fun fact could work?

There is a badge system and a garden system, which one do you prefer?

She thinks that collecting badges can give the user the illusion that they are nearly finished with the surveys, even though this may not be the case. This is because of how the widget is designed: only 5 badges are shown. The garden looks bigger, giving the idea that you still have a lot of surveys to fill in.

What did you think of the badge system?

If it was more related to healthcare, then it would be fun to have it as well.

Do you think this application could help with keeping people working in healthcare?

There are a lot of surveys the workers have to fill in already, and it's hard to add another one to the schedule. It has to be filled in by everyone on a regular basis to be useful.

Do you have any other comments?

No.

## Conclusion test Catharina, Eviënne

Eviënne liked how easy the app was to use and understand. She thought filling in a survey was easy and the smileys worked well while filling in the surveys. She thought the app could help with worker retention, but the nurses already have a lot of surveys to fill in, so it has to be clear what the surveys add to the departments and for the workers.

She didn't think the garden system was very useful but could see it work if we'd put more healthcare related items in the system instead of plants. A screen with different organs, each with a fun fact, could work much better. She also pointed out that for this app to work, it has to be used actively by everyone in a department. We should make this a point in our advice document.

## Results test Catharina, Hajar

Our second test at Catharina was with head nurse Hajar. This test took 30 minutes.

### Note

The test person came into the room stressed, because she expected the test to be about something else than we told her the test was going to be about. She was very unhappy about this, and this may have influenced her answers. While this still means we can get some useful data out of this test, she was overly critical during the test. This is something that we have to keep in mind.

### Observations and feedback

What we noticed during the test is that she spent some time reading the onboarding pages, but she said that the text on it wasn't clear. She now knew that she was going to fill out something, but has no idea why. On the homepage she saw that you had to collect flowers, but she didn't understand what it meant. She said that it was all very unclear. She said that she just wanted to fill out a survey and that the homepage was already unclear, so she would close the app at that point. She said that you didn't get what you were asked for. She also didn't understand what the flowers had to do with the app. When she had finished filling out the surveys she said that she might have clicked the button to unlock the plant if it was clearer what it meant.

### Survey answers

She filled out both the surveys. Below you can see the question and her responses to it. These questions will be in Dutch.

### Number questionair

1. Ik denk dat ik dit systeem vaak zou willen gebruiken.

She answered a 2.

2. Ik vind het systeem onnodig ingewikkeld.

She answered a 4.

3. Ik vind het systeem gemakkelijk te gebruiken.

She answered a 3.

4. Ik denk dat ik de hulp van een expert nodig heb om dit systeem te kunnen gebruiken.

She answered a 5.

5. Ik vind de verschillende functies van dit systeem goed geïntegreerd.

She answered a 3.

6. Ik denk dat er te veel tegenstrijdigheden in dit systeem zitten.

She answered a 3.

7. Ik kan me voorstellen dat de meeste mensen heel snel leren om dit systeem te gebruiken.

She answered a 3.

8. Ik vind het systeem heel lastig om te gebruiken.

She answered a 4.

9. Ik voelde me zelfverzekerd tijdens het gebruik van het systeem.

She answered a 3.

10. Ik moest veel dingen leren voordat ik met het systeem aan de slag kon gaan.  
She answered a 3.

### Smiley Questionnaire

Het werk dat ik doe is erg belangrijk voor me  
Right most smiley. Which is a 5.

Mijn werk is voor mij persoonlijk zinvol  
Right most smiley. Which is a 5.

Het werk dat ik doe is zinvol voor mij  
Right most smiley. Which is a 5.

Ik heb vertrouwen in mijn vermogen om mijn werk te doen  
Right most smiley. Which is a 5.

Ik ben zelfverzekerd over mijn capaciteiten om mijn werk uit te voeren  
Second from right most smiley. Which is a 4.

Ik beheers de vaardigheden die nodig zijn voor mijn werk  
Second from right most smiley. Which is a 4.

Ik heb een aanzienlijke autonomie in het bepalen hoe ik mijn werk doe  
Second from the right smiley. Which is a 4.

Ik kan zelfstandig beslissen hoe ik mijn werk doe  
Middle smiley. Which is a 3.

Ik heb aanzienlijke mogelijkheden voor onafhankelijkheid en vrijheid in hoe ik mijn werk doe  
Middle smiley. Which is a 3.

Mijn invloed op wat er in mijn afdeling gebeurt is groot  
Second from the right smiley. Which is a 4.

Ik heb veel controle over wat er in mijn afdeling gebeurt  
Middle smiley. Which is a 3.

Ik heb veel invloed op wat er in mijn afdeling gebeurt  
Middle smiley. Which is a 3.

### Questions afterwards

What did you think about the application?

She thinks the app looks good, and she likes how easy it is to work with because it's a touch interface. However, she does think it's needlessly complicated, as she didn't understand at the start what you're supposed to do with the app. The garden system is also unclear and may work better if it connects better to healthcare. She wants the location of the surveys to be clearer and in-sight, and to have an indication of how long a survey takes to complete. She also thinks it's unclear what the goal of the survey is, and she would like to see the results of the surveys (she missed the results page).

Did you notice something about the application?

She likes the smileys, as it's easy to use for people who are visually minded. The plants don't connect with healthcare workers, it takes away attention and it's needlessly complicated. She wants an app with just an intro and the surveys, nothing more. Explain the garden system clearly. The homepage blocks all need to be clearer.

Did you find something annoying about the application?

She said that if we want to get the best out of the app, that we have to make it easier. Not everyone has time to figure out where they have to go to fill out a survey.

What did you like about the application?

She liked that it's digital. The smileys in combination with their meaning was also nice.

What did you think about the survey page?

She said that the page looks good and that the smileys were good. Surveys with number can sometimes be difficult to fill out if it's not clear what the numbers mean. She also liked that there were not too many questions, so you can quickly go through the survey.

What did you think about the news page? Does it make sense, or can it better be shown in another way?

She said that it was very good to get feedback from the surveys. She also said that it was important that the surveys are anonymous, because this keeps the freedom and safety of the healthcare worker.

What would you like to see on the news page?

She said that she only wanted to see the implementation of the results in the newspaper and to not to down too much text. If you want to know more about the news, then you can click on it to see more.

What did you think about the garden system?

She liked the reward system, but she found the plants a bit too childlike for healthcare workers. She also suggested as a reward that the first couple of people win a gift voucher. She said that you trick the users with a digital reward.

Do you think you would visit the garden often?

Not personally. She just wants to use the surveys.

There is a badge system and a garden system, which one do you prefer?

The badge idea is a good idea, but she still doesn't think the plants connect well with healthcare workers. She does like it that every plant is connected to a survey, and that the user can see what survey a plant is connected to.

Did you notice the badge system in the results screen?

It's a distraction, it defeats your purpose.

Do you think this application could help with keeping people working in healthcare?

If the application had a good intro that you have at the start and if the surveys and results were easy to find, then she thinks it might help. She said the current version is too distracting. There is no time to fill out the surveys with the current version.

Do you have any other comments?

Not about the application. She says she would like to see the results.

## Conclusion test Catharina, Hajar

Hajar thought the app was bloated and hard to understand. She disliked the plants in the reward system but doesn't rule out the use of a comparable system (if we can connect it better to healthcare theming). At the same time, she said she thinks people may feel tricked if they only get a digital reward, and the plants are a bit childish. She likes how easy the app is to use because of the touch interface, and she did like the survey page as well as the smileys. She said quite a few contrasting things during the test, which makes it difficult to analyse the results of this specific test. We will however still try to add these results to our conclusion.



## Results test Catharina, Reino

Reino is the third and last nurse that we talked to at Catharina. He came in a bit stressed, maybe because of the earlier incident with Hajar.

### Observations and feedback

What we noticed during the test is that she spent some time in the beginning taking in the homepage and just observing it. Afterwards she went to the smiley survey and filled that one out. From the survey she went to unlock the plant and planted the flower. This resulted in a quick smile on her face. She didn't click on the plants in the garden. She understood the garden as a vegetable garden. She then went to the results and looked through the graphs. She then went to the surveys page and said that she understood what we wanted to do with the app.

What we noticed during the test is that he spent some time reading the onboarding pages. From the homepage he quickly went to the surveys page via use of the bottom bar and then to the results page. He said that he didn't understand the flowers, but after looking at it more he said that it was a measure to keep track of how many surveys you have filled out. He then went to the rewards page and he said that it was a bit weird. He didn't know if he would identify himself with flowers and a garden. He would rather have a progress bar to keep track of the surveys.

After looking at the rewards page he went back to the homepage. He noted here that the blocks on the homepage were the same as the bottom bar and said that they were double. Maybe just a piece of text would work. He then went to fill out the smiley survey. He said that the smileys worked fine, also with their colours. Unlock plant wasn't really clear to him and just a congratulations at the end of filling out a survey would be enough for him. He does understand that you might want a reward or something, but he would rather have something he can actually do with, like buying extra items.

He said that the garden wasn't of any additional value. He wouldn't get any happier to get something for filling out the surveys. He also said that it might be nice to see on the homepage how many surveys you have filled out. Maybe you could also have a number at the bottom bar of how many surveys you still need to fill out.

### Survey answers

He filled out both the surveys. Below you can see the question and his responses to it. These questions will be in Dutch.

#### Number questionair

1. Ik denk dat ik dit systeem vaak zou willen gebruiken.

He answered a 3.

2. Ik vind het systeem onnodig ingewikkeld.

He answered a 1.

3. Ik vind het systeem gemakkelijk te gebruiken.

He answered a 3.

4. Ik denk dat ik de hulp van een expert nodig heb om dit systeem te kunnen gebruiken.

He answered a 3.

5. Ik vind de verschillende functies van dit systeem goed geïntegreerd.

He answered a 4.

6. Ik denk dat er te veel tegenstrijdigheden in dit systeem zitten.

He answered a 3.

7. Ik kan me voorstellen dat de meeste mensen heel snel leren om dit systeem te gebruiken.

He answered a 4.

8. Ik vind het systeem heel lastig om te gebruiken.

He answered a 2.

9. Ik voelde me zelfverzekerd tijdens het gebruik van het systeem.

He answered a 4.

10. Ik moest veel dingen leren voordat ik met het systeem aan de slag kon gaan.

He answered a 1.

### Smiley Questionnair

Het werk dat ik doe is erg belangrijk voor me

Second from right most smiley. Which is a 4.

Mijn werk is voor mij persoonlijk zinvol

Second from right most smiley. Which is a 4.

Het werk dat ik doe is zinvol voor mij

Second from right most smiley. Which is a 4.

Ik heb vertrouwen in mijn vermogen om mijn werk te doen

Second from right most smiley. Which is a 4.

Ik ben zelfverzekerd over mijn capaciteiten om mijn werk uit te voeren

Second from right most smiley. Which is a 4.

Ik beheers de vaardigheden die nodig zijn voor mijn werk

Second from right most smiley. Which is a 4.

Ik heb een aanzienlijke autonomie in het bepalen hoe ik mijn werk doe

Middle smiley. Which is a 3.

Ik kan zelfstandig beslissen hoe ik mijn werk doe

Middle smiley. Which is a 3.

Ik heb aanzienlijke mogelijkheden voor onafhankelijkheid en vrijheid in hoe ik mijn werk doe

Middle smiley. Which is a 3.

Mijn invloed op wat er in mijn afdeling gebeurt is groot

Middle smiley. Which is a 3.

Ik heb veel controle over wat er in mijn afdeling gebeurt

Middle smiley. Which is a 3.

Ik heb veel invloed op wat er in mijn afdeling gebeurt

Middle smiley. Which is a 3.

## Questions afterwards

What did you think about the application?

He thinks the app is practically usable and somewhat intuitive. The support should be enough if a user doesn't understand how to use the app.

Did you notice something about the application?

He thinks the rewards system is a bit weird. He likes the fact that you can see how far you are with filling in the surveys.

Did you find something annoying about the application?

It works good as far as filling in surveys is concerned. The three options (weekly, monthly and biannually) give a sense of choice, and it's unclear what the buttons do. He would like to see the filled in surveys counter in a more front position, like in the home screen.

What did you like about the application?

It's easy to use.

What did you think about the survey page?

Smileys make it much more fun to fill in the surveys than numbers do, and it can help with projecting your feeling in the application.

What did you think about the news page? Does it make sense, or can it better be shown in another way?

It depends on what kind of articles will be written. Simple stats and numbers don't work, but what has been done with the surveys would be great to see.

What would you like to see on the news page?

It's good as it is, and it keeps it functional. He advises us to not put anything there that doesn't have to do with the surveys.

What did you think about the garden system?

He doesn't like it. He doesn't like flowers and plants, and he wouldn't like an alternative to the flowers and plants either. He thinks a 'Well done' page at the end of the survey is enough. He likes to see that he has finished a survey, but not in this way.

There is a badge system and a garden system, which one do you prefer?

He doesn't like either and suggests giving physical rewards once a user has finished a certain number of surveys.

Did you notice the badge system in the results screen?

Not originally. He would like an icon that refers back to a survey more than plants.

Do you think this application could help with keeping people working in healthcare?

He said that it depends on what the results would be of the surveys. He said that it was more important that something was actually being done with the data. He also said that healthcare workers can make the problems visible with a survey, but that it has to change in their work environment. There is however the problem of money, time and that kind of stuff.

Do you have any other comments?

No, app technical not.

## Conclusion test Catharina, Reino

He thought the app was clear to use and not too cluttered, and he understood how to fill in the surveys. Just like the other test persons he really liked the smileys. This means that all test persons liked the smileys.

He did however really dislike the reward system, and thought it didn't add much to the app. This is also a trend we've noticed. He suggests looking into physical rewards instead. The three buttons on the home page (Weekly, monthly and biannually) are unclear, and should be scrapped.