

Debriefing

Catharina

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About Catharina

Catharina Hospital in Eindhoven would describe themselves as: “a modern, hospitable top-clinical and educational hospital”. They are known for their specialization for kidney diseases, Cancer Institute and leading centres for heart diseases and obesity.

All types of cancer treatments can be executed at the hospital. As they claim: “With a referral from a general practitioner you can come directly to the institute for a medical examination”. They also provide different treatments in addition to the main treatment and promise to share the medical results as soon as possible. They strive for innovation in new techniques that improve diagnostics, treatment and quality of life.

On their website is more information about their organizational structure, vision and year reports.

Practical problem

Danielle from the Catharina Hospital explained that patients who get diagnosed with esophageal cancer lose control over their own bodies, because they have to adjust their current lifestyle in order to prepare for chemotherapy and future surgery. The hospital provides information on the illness and lifestyle adjustments via leaflets to read at home. Some examples of lifestyle adjustments are custom eating patterns and physical exercises.

An optimal condition can increase survival chances during and after surgery. Unfortunately, it can occur that a patient discovered this fact too late in the process. On the other hand, patients who realise early on that they have to live healthy, yet are insecure about if they can eat specific meals or do certain exercises. That is why we presume that friends/family often remind or suggest the patient about certain eating patterns or exercises based on what the specialist or internet told them.

Except for the specialist nurse, we suppose the patients have no immediate access to many specialists. That is why certain patients answer their questions by acquiring information from different healthcare apps and websites. It may be confusing to know whenever information is being backed up by specialists, which makes self-care slightly harder.

The Catharina Hospital attempted solving this problem with several other projects. However, most of them failed, because of several reasons:

- Several patients had no phone with internet access,
- Specialists had to spend more time administering patient data,
- Healthcare professionals distrust digital help tools from hospitals,
- Patients were required to fill out their entire food pattern by filling out every food item separately.

Project goals

The main goal of this project is to design and prototype a conversational agent that esophageal cancer patients can use to support improving their self-management before surgery. This includes adapting to a healthy eating pattern, helping to get in better physical condition, preparation during chemotherapy and before surgery and positive support.

The patient has to anticipate reading a large information load and pass many procedures. That is why the Catharina Hospital wants to provide a more convenient approach to hand over the information about the illness, adaptive lifestyles and procedures the patient has to

endure. Another goal is to make patients aware of the importance of good self-care in an earlier phase.

Professionals are required to trust the solution provided for the patients. Because both patients and professionals aren't interested in administering large data, an administering minimisation is required.

Stakeholders

These people will help to shape the project and/or (potentially) use the prototype.

- Danielle Adriaans:
 - Works at Catharina Hospital and brought the practical problem into attention.
 - She will be the client of this project.
- Project team (the lovely and one and only):
 - Aranca Akkermans
 - Boryana Stoyanova
 - Esther Boetzkes
 - Loes Wille
 - Koen van der Hulst
- Medical professionals:
 - Nurse Specialist
 - Physical therapist
 - Dietitian
 - Surgeon
 - Neurological specialist
 - Radiologist
 - Oncologist
 - MDL-doctor
 - Anesthesiologist
- Patients:
 - Undergoing the process
 - Recovered
 - Their family members
 - Caretakers

Project planning

Our entire project planning can be found in the digital tool called "Trello". We've created a [board](#) in order to keep track of our progress and product backlog per sprint.