The Digital Entrance for Primary Care

Translating patients' and caregivers' needs into a new way to interact and connect

The benefits

The needs and wishes of the patients and caregivers were translated into DagKo. The software provides increased accessibility and control for the patients. It is an service that listens carefully to the user and gives options for the best suitable care. This service is not only beneficial for patients. Because of the smart use of data, caregivers will be supported with suitable advice during their triage. Caregivers just have to confirm the suggested modality by the software. This will result in an increase in efficiency for the caregivers, letting them give more attention to patients that need it by spending less time on simple situations.

The validation

During the user-testing, patients experienced the two characteristics of the concept, the option to choose and data-driven advice based on effectiveness and efficiency, as positive. The additional modalities were ranked relatively positively, but due to the futuristic aspects were also harder to grasp. Caregivers also expressed support for the concept of DagKo. The caregiver acknowledged the potential of the gain in efficiency and it was recognized that the service is especially useful for filtering easier complaints. The technical difficulties in the realisation of the concept were mentioned by a data expert and caregivers and recognized during the strategy. In the strategy, it became apparent that the biggest bottleneck of this concept was the centralized data warehouse that needed to be created. Strategic suggestions were made to ease the transition towards the set final concept. One important aspect of this strategy is to validate the concept by the use of a pilot performed at CBS.

Patient opinion about 'care at a distance' modalities

Negative 47%
Positive 53%

GPs that want to intensify e-consults after pandemic

Yes 32%
No 68%

The problem

The current pandemic has drastically changed the primary care field. Suddenly, GP practices had to implement more digital or 'care at a distance' methods to keep interacting with patients. This was reflected by the strong increase in telephone consults and practices that used video calling for the first time. However, the sudden digital experience is not welcomed with open arms by patients and caregivers. 47% of the patient express that they are not positive about 'care at a distance' modalities (Meurs, 2020b), and approximately only a quarter of caregivers want to intensify e-consultation methods after the pandemic (Keuper, 2020). It is quite likely that after this pandemic, both groups want to return to the previous status quo, regardless of the benefits that eHealth and e-consultation can provide.

The project

The goal of this graduation project was to increase the adoption of e-consultation in primary care together with IZER. IZER is a supportive organisation for primary care practices in the region of Rotterdam Rijnmond that aims for improving the quality of care. The graduation project followed the roadmapping process, starting with an analysis consisting of a literature study, qualitative interviews, and observations. During the research, caregivers and patients were thoroughly analysed to search for trends and wishes about (digital) primary care. The major discovered trends were the need for higher efficiency in the process due to the high effort of digitalisation, the demanded shift in control to the patient, the need for accessibility for the patient, the wish for digital to support the process, and the need for good communication. Together with a technology scout, an ideation was performed to look for suitable solutions. In the end, a final concept was chosen and developed into a strategy and a new user-journey.

The solution

The result is DagKo: the Data-driven complaint support for patients in primary care (Data-gedreven Klacht Ondersteuning). DagKo is a software service that supports patients to do their triage independently and guides them towards the best next step concerning their complaint and medical history. The service uses data from previous patients with similar situations to analyse the most efficient and effective methods in a specific situation. Additionally, new consultation options are added to enhance the right care in the right situation. These additions consist of a data-driven virtual doctor, a monitoring program and a quickly accessible doctor service. To strengthen the implementation of the concept, a strategy was made in the form of two roadmaps. Next to this, the user-journey was improved according to the new service.

DagKo - Patient Roadmap
Data-Gedreven Klacht Ondersteuning

2021 — 2023 — 2026 — 2028

1st Horizon
Finding a new eConsult way

- The data will be gathered and analysed, and eventually made into an algorithm.
- The algorithm will decide the most efficient and effective method in that situation.
- The algorithm is still a pilot, meaning that patient research will be done to see the effect.

Let's test the new software

How can I help you?

Version 0.1

2nd Horizon
Welcoming eConsult support

- Launch the complaint to care pathway algorithm at practices in Rotterdam Rijnmond.
- Implementing Thuisarts.nl as regular feature after the triage has been done.
- Adding Zelf Samen Monitoren, the independent monitoring service.

How can I help you?

Version 1.0

The software is optimized with new functions

3rd Horizon
Opening more eConsult paths

- Introducing the RobDok, an robotic doctor that provides datadriven care.
- Bliksem Dokters. A service where you get a consult from a random dokter in 24 hours.

Direct help available for quick care

How can I help you?

Version 2.0

DagKo

Accessible care

in control of the patient

supported by data-driven efficiency.

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18 March 2021
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