Care-On | W.F. Goevaerts

Adherence to a Lifestyle Monitoring System in Patients with Heart Disease

Background

Lifestyle is strongly related to the occurence, clinical course and overall treatment outcomes of common cardiovascular diseases. Quality of life is often not improved after major cardiac interventions and persistent unhealthy lifestyle factors have adverse effects on the clinical course. However, these lifestyle factors are currently not objectively and subjectively monitored and there for not optimally used to the advantage of patients in daily clinical practice.

Aim

To create an evaluate a system that integrates innovative methods for continuous monitoring of lifestyle factors (e.g. daily physical activity levels, dietary habits, mental stress and sleep quality).

Lifestyle Monitoring System

- **Lifestyle dashboard (Figure 1)**
  Gives patients feedback on lifestyle data and adherence to the lifestyle monitoring system.
- **Integrated chatbot (Figure 2)**
  Prompts patients to self-report on dietary habits, mental stress and sleeping habits.
- **Activity tracker integration (Figure 3)**
  Philips Health Band tracks daily physical activity.
- **Quarterly assessment**
  More extensive lifestyle questionnaires to complete lifestyle dataset.
- **Goal setting module**
  Option to set and monitor monthly goals.

Study protocol

Study design: Prospective observational trial.
Study population: Patients referred for CABG (with or without other additional cardiac surgery) and RFCA.
Main study parameters/enpoints: Adherence (i.e. the % of participants still using the lifestyle monitoring system at 1-year follow-up).
Study duration: 1-year per patient.

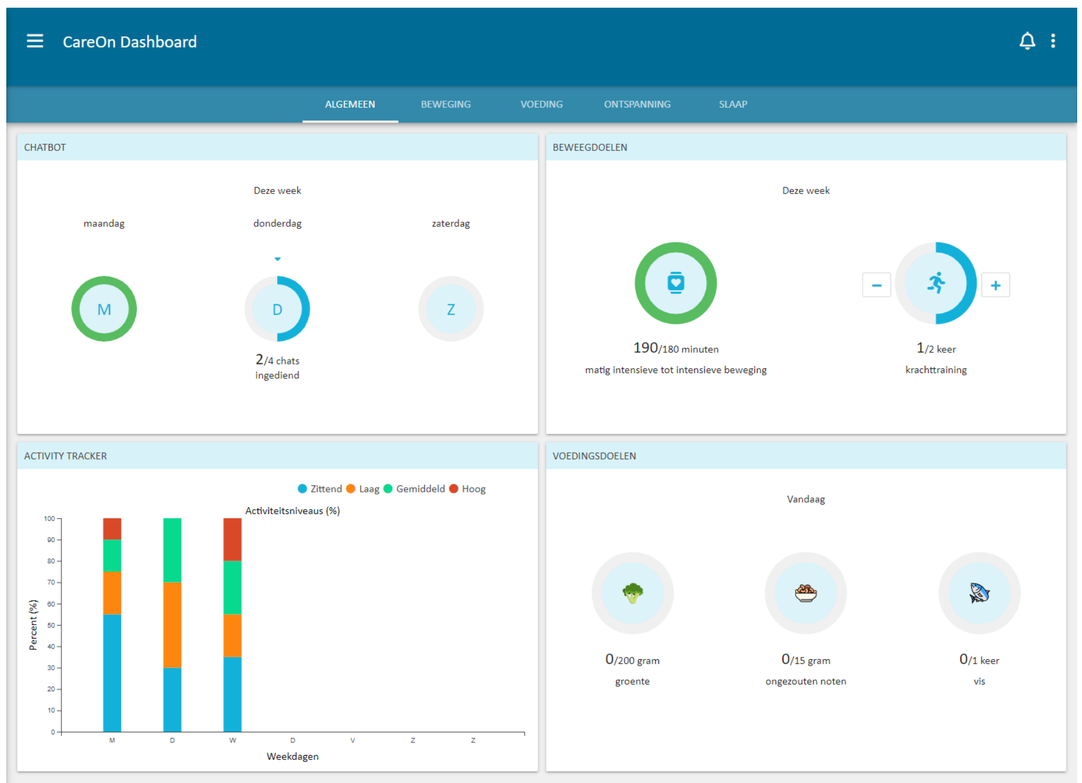

Figure 1 – Care-On dashboard (under construction)

Figure 2 – Chatbot impression

Figure 3 – Philips Health Band