Title: Usability of digital media in patients with COPD: A pilot study

Body: Digital media can serve as the main interface between the patient and the caregiver in home monitoring solutions. The selection of the most appropriate digital medium for the specific target group is critical to ensure compliance with the home monitoring system. This pilot study aims to gather insights from patients with Chronic Obstructive Pulmonary Disease (COPD) on the ease-of-use, efficacy, effectiveness and satisfaction of different types of digital media. Five off-the-shelf digital media devices were tested on 9 patients with COPD at CIRO+ in Horn, The Netherlands. Usability was evaluated by asking patients to use each device to answer questions related to their symptoms and health status. Subsequently, patients completed a paper-based questionnaire, which assessed prior experience with digital media, device dimensions, controllability, response speed, screen readability, ease-of-use, and overall satisfaction. After testing all the devices, patients ranked the devices according to their preference. We identified the laptop as the preferred device due to its good controllability, fast response time and large screen size. The Smartphone was the least favorite device as patients found the device and screen size to be too small, which made it difficult to interact with. The pilot study has provided important insights to guide the selection of the most appropriate type of digital medium for implementation in home monitoring solutions for patients with COPD. As the digital medium is an important interface to the patient, it is essential that patients feel motivated to interact with the digital medium on a regular basis.