

A telecare programme for self-management of COPD exacerbations and promotion of an active lifestyle

Monique Tabak,^{1,2} Marjolein Brusse-Keizer,³ Clara van Ommeren,³ Hayke Kotte,⁴ Paul Weltevreden,⁵ Hermie Hermens,^{1,2} Miriam Vollenbroek-Hutten^{1,2}

1. Roessingh Research and Development, Telemedicine group, Enschede, the Netherlands
2. University of Twente, Telemedicine group, Enschede, the Netherlands
3. Medisch Spectrum Twente, Department of Pulmonary Medicine, Enschede, the Netherlands
4. De Perikhof, Physical Therapy, Enschede, the Netherlands
5. FITclinic, Physical Therapy, Enschede, the Netherlands

Objective: The Condition Coach (CoCo) is a technology-supported care programme for self-management of COPD exacerbations and for promotion of an active lifestyle. The objective is to investigate the added value of the telecare programme in terms of clinical changes compared to usual care, and in addition, to evaluate its use and acceptance.

Intervention: CoCo consists of four modules: 1) activity coach for ambulant activity registration and real-time feedback to improve daily activity behaviour, 2) web-based exercise programme set up by the patient's primary care physiotherapist, 3) self-treatment of COPD exacerbations via a triage diary on the webportal that provides advice to start medication when necessary, and 4) teleconsultation via the webportal. The latter is accessible for the patient and the involved primary and secondary care professionals.

Methods: Twenty-nine COPD patients with ≥ 3 exacerbations or 1 hospitalization in the past 2 years are randomly assigned to either the intervention group (CoCo programme for 9 months) or the control group (usual care). Exacerbations, activity level, exercise capacity, symptom levels, health status and quality of life are assessed to evaluate clinical changes. Page hits on the webportal show the use of the programme, and the Unified Theory of Acceptance & Use of Technology explains usage behaviour.

Results: Preliminary findings show that the webportal is highly accessed by the patients (90% of the days) with good usability (median 5.8, 7-point Likert). Remaining data will be collected in the upcoming months.

Conclusions: The CoCo programme has potential as the intervention is highly used and accepted. Final results are expected in July 2013.