

Self-Management And Telemedicine in patients with COPD and Chronic Heart Failure.

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COPD is a common chronic pulmonary disease in (vulnerable) elderly people, that in 25% coexists with chronic heart failure. Both COPD and chronic heart failure have a high burden of disease with intermittent disease deteriorations (exacerbations)...

Ethische beoordeling	Niet van toepassing
Status	Werving gestopt
Type aandoening	-
Onderzoekstype	Interventie onderzoek

Samenvatting

ID

NL-OMON25219

Bron

Nationaal Trial Register

Verkorte titel

MATCH

Aandoening

COPD

Heart Failure

Ondersteuning

Primaire sponsor: Pioneers in Healthcare Innovation Fund 2016

Overige ondersteuning: Pioneers in Healthcare Innovation Fund 2016

Onderzoeksproduct en/of interventie

Uitkomstmaten

Primaire uitkomstmaten

- Adherence to different components of the eHealth self-management intervention: completing digital daily symptom diaries, following-up of advised actions, and using inhaled medication
- Satisfaction with received care (questionnaire)
- The perceived added value by patients of the different components of the telemedicine self-management intervention (questionnaire)
- Monthly motivation of patients to use the telemedicine self-management intervention (questionnaire)
- Interviews with patients and case managers to identify positive aspects, negative aspects and points for improvement from users' experiences of the eHealth self-management intervention

Toelichting onderzoek

Achtergrond van het onderzoek

COPD is a common chronic pulmonary disease in (vulnerable) elderly people, that in 25% coexists with chronic heart failure (CHF). Both COPD and CHF have a high burden of disease with intermittent disease deteriorations (exacerbations) that may lead to hospital admissions. Self-management interventions for patients with COPD (and comorbidities) are proven effective on different health outcomes. A randomised controlled trial (COPE-III study) for example showed significant beneficial effects of a self-management intervention with patient-tailored action plans for patients with COPD and comorbidities (including CHF amongst others) on COPD exacerbation duration and respiratory related hospitalisations. Electronic health (eHealth) might play an important role in adherence to interventions for the self-management of COPD and CHF symptoms by facilitating and supporting home-based care. During this pilot study, we developed an eHealth self-management intervention for patients with COPD and CHF. It included a daily symptom diary that incorporated symptoms according to COPD, CHF and common comorbidities. The diary was linked to an automated decision support system that launched advised actions if necessary (eg start course prednisolone/call the casemanager). This was based on action plans that were proven effective in the COPE-III study. It also included testing of the laboratory test NTproBNP in case of doubts whether increased dyspnoea was caused by COPD or heart failure. An add-on sensorized (Respiro®) inhaler was used to analyze inhaled medication adherence and inhalation technique. An embodied conversational agent (avatar) gave reminders/feedback on patients' diary completion, action plan use and inhaled medication adherence and technique. After participating in self-management training sessions, eleven patients used the intervention for approximately four months. Adherence to daily symptom diary completion, follow-up of advised actions, inhaled medication adherence was assessed. Also inhalation technique was analyzed. Further, questionnaires were used to analyse satisfaction of received care and motivation of the patient to use the intervention. Afterwards interviews with participants were performed to analyse perceived barriers and facilitators of the eHealth self-management intervention.

Doel van het onderzoek

COPD is a common chronic pulmonary disease in (vulnerable) elderly people, that in 25% coexists with chronic heart failure. Both COPD and chronic heart failure have a high burden of disease with intermittent disease deteriorations (exacerbations) that may lead to hospital admissions.

Self-management interventions for patients with COPD (and comorbidities) are proven effective on different health outcomes. The COPE-III study for example showed significant beneficial effects of a self-management intervention with patient-tailored action plans for patients with COPD and comorbidities (including heart failure amongst others) on COPD exacerbation duration and respiratory related hospitalisations. The aim of this pilot study is to analyse the satisfaction with and adherence to a telemedicine self-management intervention for patients with COPD and heart failure. This self-management intervention is based on the COPE-III study. Implementation of a self-management intervention in a home-based telemedicine platform with an embodied conversational agent for better communication and personal feedback might improve the applicability of self-management interventions (e.g. for patients with reduced mobility) and could make it more patient-tailored. It might lead to earlier recognition of worsening of symptoms and quicker initiation of treatment because real time monitoring and prompt feedback is possible

Onderzoeksopzet

In September/October 2018, patients participated in three self-management training sessions. After the first session, patients started to use the eHealth self-management application for a period of approximately four months

Onderzoeksproduct en/of interventie

An eHealth self-management intervention for patients with COPD and Heart Failure

Contactpersonen

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Deelname eisen

Belangrijkste voorwaarden om deel te mogen nemen (Inclusiecriteria)

1) a clinical diagnosis of COPD defined according to the GOLD criteria; 2) a clinical diagnosis of CHF defined according to the current (2016) ESC guidelines; 3) ≥ 2 COPD and/or CHF exacerbations, defined as deterioration of symptoms for which treatment with oral corticosteroids and/or antibiotics (for COPD) or diuretics (for CHF) were necessary in the two years preceding study entry, and/or ≥ 1 hospitalization for COPD and/or CHF in the two years preceding study entry; 4) age ≥ 40 years; 5) ≥ 1 week after exacerbation of COPD and/or CHF; 6) ≥ 1 week after hospitalization; 7) ≥ 4 weeks post-rehabilitation; 8) able to understand and read the Dutch language; and 9) able to use a tablet.

Belangrijkste redenen om niet deel te kunnen nemen (Exclusiecriteria)

1) End stage of a disease; 2) other serious lung disease (eg alfa1-antitrypsin deficiency; interstitial lung diseases); 3) expected cardiovascular intervention within three months; 4) currently enrolled in randomized controlled trials or trials with study medication; 5) waiting for a heart or lung transplantation; 6) renal dialysis; 7) diabetes mellitus type I; 8) Hospital Anxiety and Depression Scale (HADS)-score of ≥ 11 for anxiety and/or depression domain symptom scores.

Onderzoeksopzet

Opzet

Type: Interventie onderzoek
Onderzoeksmodel: Anders

Toewijzing:	N.v.t. / één studie arm
Blinding:	Open / niet geblindeerd
Controle:	N.v.t. / onbekend

Deelname

Nederland	
Status:	Werving gestopt
(Verwachte) startdatum:	01-09-2018
Aantal proefpersonen:	20
Type:	Werkelijke startdatum

Voornemen beschikbaar stellen Individuele Patiënten Data (IPD)

Wordt de data na het onderzoek gedeeld: Nog niet bepaald

Ethische beoordeling

Niet van toepassing	
Soort:	Niet van toepassing

Registraties

Opgevolgd door onderstaande (mogelijk meer actuele) registratie

Geen registraties gevonden.

Andere (mogelijk minder actuele) registraties in dit register

Geen registraties gevonden.

In overige registers

Register	ID
NTR-new	NL6480
NTR-old	NTR6667
Ander register	METC Twente : P17-17

Resultaten