Davos@home: eHealth support of patients with severe asthma during and after AACT (Alpine Altitude Climate Therapy)

Published: 12-02-2021
Last updated: 15-05-2024

The use of the ehealth application PatientCoach combined with home monitoring devices supports sustained long term asthma control after AACT

Ethical review	Not applicable
Status	Pending
Health condition type	-
Study type	Interventional

Summary

ID

NL-OMON27453

Source
NTR

Brief title
Davos@home

Health condition

Severe or uncontrolled asthma

Sponsors and support

Primary sponsor: Vereniging Nederland Davos, Stichting Astma Bestrijding
Source(s) of monetary or material Support: Vereniging Nederland Davos, Stichting Astma Bestrijding

Intervention

Outcome measures

Primary outcome

Time to first exacerbation

Secondary outcome

• Total exacerbation rate • Asthma control • Asthma-related quality of life • Fatigue • Anxiety / depression • Health care utilisation • Work productivity and activity impairment • Technology acceptance

Study description

Background summary

In uncontrolled or severe asthma, alpine altitude climate treatment (AACT) may be used as add-on therapy, according to the Dutch severe asthma guidelines. AACT at the Davos Asthma Centre Davos combines a clinical multidisciplinary treatment programme with environmental trigger avoidance in the alpine climate. The treatment includes optimisation of asthma control, interactive patient self- management education, a personalised exercise program and sessions addressing behavioural aspects of living with a chronic disease and problems such as anxiety, stress and depression. Once the patient returns to his/her home environment, there is a risk of relapse. In a previous project we showed that such a relapse in patients with severe asthma after discharge from AACT can be partially attenuated by eHealth support of self-management with a web-based application called PatientCoach. We improved PatientCoach based on feedback of patients and professionals and made it available as an application for a smartphone. Recent advances in the use of bio-wearables and home-monitoring systems might also improve asthma outcomes and could be integrated into PatientCoach. These potential improvements must be weighed against feasibility of use, since more devices and measurements also require more time. We plan to perform a pragmatic randomized controlled trial in which we will evaluate the clinical effectiveness of the PatientCoach app with home-monitoring devices (intervention) as compared to the PatientCoach app without home-monitoring devices (control) in patients with severe asthma after AACT with a follow-up period of 12 months.

Study objective

The use of the ehealth application PatientCoach combined with home monitoring devices supports sustained long term asthma control after AACT

Study design

Baseline, 3 months, 6 months, 9 months, 12 months.

Intervention

PatientCoach app with home monitoring devices (spirometer, activity meter, FeNO measurement device)

Contacts

Public
Nederlands Astmacentrum Davos
KB Fieten

0814178000
Scientific
Nederlands Astmacentrum Davos
KB Fieten

0814178000

Eligibility criteria

Inclusion criteria

Adults (≥18 years) with uncontrolled or severe asthma, despite using high doses of inhaled corticosteroids combined with long-acting bronchodilators for more than 1 year, who are eligible for ACT. Uncontrolled asthma is defined as having two or more exacerbations per year requiring OCS and / or an ACQ of 1.5 or higher.

Exclusion criteria

Not in possession of a smartphone. Illiterate.

Study design

Design

Study type:	Interventional
Intervention model:	Parallel
Allocation:	Randomized controlled trial
Masking:	Open (masking not used)
Control:	Active

Recruitment

NL

Recruitment status:	Pending
Start date (anticipated):	01-08-2021
Enrollment:	126
Type:	Anticipated

IPD sharing statement

Plan to share IPD: Undecided

Ethics review

Not applicable

Application type:	Not applicable

Study registrations

Followed up by the following (possibly more current) registration

ID: 54107
Bron: ToetsingOnline
Titel:

Other (possibly less up-to-date) registrations in this register

No registrations found.

In other registers

Register	ID
NTR-new	NL9273
CCMO	NL75682.058.20
OMON	NL-OMON54107

Study results