# Cost-effectiveness of care for patients with type two diabetes: an evaluation of an innovative shared diabetes care model

Submission date 26/02/2007	<b>Recruitment status</b> No longer recruiting	[X] Prospectively registered	
		[_] Protocol	
<b>Registration date</b>	<b>Overall study status</b> Completed	[] Statistical analysis plan	
26/02/2007		[X] Results	
Last Edited	<b>Condition category</b> Nutritional, Metabolic, Endocrine	Individual participant data	
30/06/2014			

#### Plain English summary of protocol

Not provided at time of registration

# **Contact information**

**Type(s)** Scientific

**Contact name** Dr A van der Heijden

#### **Contact details**

Emgo-Instituut Van der Boechorststraat 7 Amsterdam Netherlands 1081 BT +31 (0)20 444 8409 A.vanderHeijden@vumc.nl

# Additional identifiers

EudraCT/CTIS number

IRAS number

ClinicalTrials.gov number

Secondary identifying numbers N/A

# Study information

Scientific Title

#### **Study objectives**

The intervention will primarily affect the level of patient control with regard to glycemia, lipid levels and blood pressure. We will expect a substantial decline in the occurrence and severity of complications and mortality and an improved quality of life. The innovative shared diabetes care is expected to be more cost-effective than the usual diabetes care.

**Ethics approval required** Old ethics approval format

**Ethics approval(s)** Not provided at time of registration

**Study design** A quasi-experimental pre-test-post-test control group design

**Primary study design** Interventional

**Secondary study design** Non randomised controlled trial

**Study setting(s)** Not specified

**Study type(s)** Quality of life

Participant information sheet

#### Health condition(s) or problem(s) studied

Diabetes Mellitus type two (DM type II)

#### Interventions

An innovative shared diabetes care model ('ketenzorgmodel') will be implemented in general practices in Amstelland. The 'ketenzorgmodel' will be implemented with a central organisation of the diabetes care with a central database, a central coordinating role for diabetes nurses (changed professional roles), and an active recall system. The annual diabetes check is offered to patients by the central organisation, in combination with patient education, by a diabetes nurse and a consultation with a dietician. In addition, structured education will be offered to general practitioners and their assistants, and a diabetes nurse will support diabetes care in general practice.

Diabetes patients in the control group will receive the current usual diabetes care. The control group will consist of patients of GP's who are affiliated to the Netherlands Institute for Health Services Research (NIVEL) Continuous Morbidity Registration Centres (CMR sentinel stations

[CMR-Peilstations]). NIVELs 'CMR-Peilstations' consitute a representative group of 60 Dutch GPs in 45 practices throughout the Netherlands.

#### Intervention Type

Other

#### Phase

Not Specified

#### Primary outcome measure

1. The risk of developing coronary heart disease (using the United Kingdom Prospective Diabetes Study [UKPDS] risk engine at baseline, two years before and year one and two after baseline)

- 2. All direct and indirect costs (cost diary)
- 3. Costs per life year gained

#### Secondary outcome measures

- 1. Absolute levels of fasting glucose
- 2. HbA1c level
- 3. Blood pressure
- 4. Cholesterol

5. Percentages adequately controlled patients (in accordance with the Dutch College of Family Physicians [NHG] standards)

- 6. Diabetes specific and generic quality of life
- 7. Patient satisfaction
- 8. Quality of life
- 9. Quality of care as experienced by the patient:
- a. percentage of patients that received all three-monthly check-ups
- b. a complete annual check-up
- c. were hospitalised
- 10. Total mortality measured by life expectancy

11. Total morbidity measured by morbidity-free life expectancy and the Net Present Value (NPV) of the number of life years gained

12. Quality Adjusted Life Years (QALYs) gained for the intervention scenario compared to the current practice scenario

- 13.The NPV of total intervention costs
- 14. The NPV of total costs of care for diabetes and its complications
- 15. Incremental costs per QALY gained

#### Overall study start date

01/03/2007

#### **Completion date**

01/01/2010

# Eligibility

#### Key inclusion criteria

1. Patients with type two diabetes

- 2. Age 40 to 75 years
- 3. Written informed consent

4. Capable to fill in questionnaires

5. Understanding of Dutch language

Participant type(s) Patient

**Age group** Adult

**Sex** Not Specified

**Target number of participants** Not provided at time of registration

#### Key exclusion criteria

Patients will be excluded for participation in this study if no beneficial effects can be expected in favour of the patient, according to the opinion of the General Practitioner (GP).

Date of first enrolment 01/03/2007

Date of final enrolment 01/01/2010

### Locations

**Countries of recruitment** Netherlands

**Study participating centre Emgo-Instituut** Amsterdam Netherlands 1081 BT

## Sponsor information

**Organisation** VU University Medical Centre (The Netherlands)

**Sponsor details** EMGO-Institute Van der Boechorststraat 7 Amsterdam Netherlands 1081 BT +31 (0)20 444 8180 emgo@vumc.nl

**Sponsor type** Hospital/treatment centre

Website http://www.vumc.nl/english/

ROR https://ror.org/00q6h8f30

# Funder(s)

**Funder type** Research organisation

#### **Funder Name** The Netherlands Organisation for Health Research and Development (ZonMw) (The Netherlands)

# **Results and Publications**

**Publication and dissemination plan** Not provided at time of registration

Intention to publish date

Individual participant data (IPD) sharing plan

**IPD sharing plan summary** Not provided at time of registration

#### Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Results article	results	25/06/2014		Yes	No