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

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

## Plain English summary of protocol

Not provided at time of registration

# Contact information

### Type(s)

Scientific

### Contact name

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### Contact details

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# Additional identifiers

Protocol serial number 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

### Study type(s)

Quality of life

### 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(s)

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

### Key secondary outcome(s))

- 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

### 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

### Healthy volunteers allowed

No

### Age group

Adult

### Sex

**Not Specified** 

### 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)

### **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**

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