# Langer veilig thuis met de slimme energiemeter in huis

No registrations found.

| Ethical review        | Positive opinion |
|-----------------------|------------------|
| Status                | Recruiting       |
| Health condition type | -                |
| Study type            | Interventional   |

# **Summary**

# ID

NL-OMON23523

**Source** Nationaal Trial Register

Brief title SQUEALED

#### **Health condition**

N/a.

# **Sponsors and support**

Primary sponsor: N/a. Source(s) of monetary or material Support: ZonMw project nr 40-44300-98-125

### Intervention

### **Outcome measures**

#### **Primary outcome**

Health-related quality of life, perceived safety (fear of falling)

#### Secondary outcome

Depression and anxiety, ADL(activities of daily life), perceived usability and functioning of the

1 - Langer veilig thuis met de slimme energiemeter in huis 13-05-2025

# **Study description**

#### **Background summary**

Most older citizens prefer to live independently for as long as possible. However, direct care providers, such as family members, often have safety concerns, especially when people start to be less independent. The aim of our project is to enhance safety and quality of life of older citizens and their main care provider. We propose to do this by monitoring the older citizen using a non-invasive manner; the data collected by the smart energy meter (e.g. energy use of the TV, lights). A message is sent to the main care provider when there seems to be something off in the daily routine of the older citizen. In the first stage of the project, together with older citizens and care providers, we determine when, how often and what kind of message is sent. In the second stage of the project, we implement the monitoring and messaging among older citizens and their care provider. After 12 months we evaluate whether the intervention contributed to the safety and quality of life they experience. The proposed application has the potential to be implemented at low-cost at a large scale, supporting longer, safer, independent living among older citizens.

#### **Study objective**

Smart energy meter data used in a monitoring system to alert users when out-of-the-ordinary activity is detected, may improve health-related quality of life and perceived safety of community-dwelling older persons and their informal care providers.

#### Study design

Baseline, 6 month follow-up (start intervention), 12 month follow-up (end intervention)

#### Intervention

An electronic device (Cloudia) is installed into the smart energy meter to gather energy usage data. From these data the activities of daily living are identified to determine normal daily living patterns and deviant daily living patterns. Based on this information a monitoring system is developed, notifying users when out-of-the-ordinary activity is detected. The system is implemented and evaluated.

# Contacts

#### Public

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# **Eligibility criteria**

## **Inclusion criteria**

Community-dwelling older person, able to provide written informed consent, connected to WiFi and with a smart energy meter installed at home, speak Dutch language

### **Exclusion criteria**

Solar panels installed/ electrical charging station for car, unable to provide informed consent, living together with children or over 2 people

# Study design

### Design

| Study type:         | Interventional          |
|---------------------|-------------------------|
| Intervention model: | Crossover               |
| Allocation:         | Non controlled trial    |
| Masking:            | Open (masking not used) |
| Control:            | Active                  |

### Recruitment

| NL                        |            |
|---------------------------|------------|
| Recruitment status:       | Recruiting |
| Start date (anticipated): | 01-08-2018 |

3 - Langer veilig thuis met de slimme energiemeter in huis 13-05-2025

| Enroll | ment: |  |
|--------|-------|--|
|        |       |  |

100

Type:

Anticipated

# **IPD** sharing statement

Plan to share IPD: No

**Plan description** N/A

# **Ethics review**

Positive opinion Date: Application type:

17-06-2020 First submission

# **Study registrations**

# Followed up by the following (possibly more current) registration

No registrations found.

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

No registrations found.

### In other registers

| Register | ID   |
|----------|--|
| NTR-new  | NL8719   |
| Other    | Medical Ethics Committee ErasmusMC : MEC-2019-0059 |

# **Study results**

### Summary results

N/A