# Decision Support for Improving Primary Care of Elderly Patients.

Gepubliceerd: 08-08-2012 Laatst bijgewerkt: 18-08-2022

User-driven computerized decision support provided to general practitioners will improve their adherence to clinical rules pertaining to primary care for elderly patients.

Ethische beoordeling	Positief advies
Status	Werving nog niet gestart
Type aandoening	-
Onderzoekstype	Interventie onderzoek

# Samenvatting

#### ID

NL-OMON26187

**Bron** Nationaal Trial Register

Verkorte titel ICOVE-PC

#### Aandoening

Medical and geriatric conditions of elderly patients including: depression, dementia, falls, and diabetes.

### Ondersteuning

**Primaire sponsor:** Academic Medical Center (AMC) **Overige ondersteuning:** ZON-MW, The Netherlands Organization for Health Research and Development

### **Onderzoeksproduct en/of interventie**

#### **Uitkomstmaten**

#### Primaire uitkomstmaten

Adherence to the clinical rules. In particular adherence will be calculated in the following

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ways:<br>

1. We will calculate the pass rates for each rule. The pass rate of a rule is the proportion of times that a rule was followed when it was triggered;<br>

2. We will calculate the pass rate without distinction to specific rules (the proportion of times any rules was followed when it was triggered);<br>

2. We will calculate the number of rules for which there was positive effect (that is, the pass rate of a rule its corresponding intervention group was larger that in its control group). <br><br><br>>

The outcomes in "1" and "2" will be tested using proportion tests. The outcome in "3" will be tested using the binomial test.

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We will also calculate the abovementioned measures per patient.

# **Toelichting onderzoek**

#### Achtergrond van het onderzoek

Problem:

Within the present healthcare organisation, elderly patients with complex problems often receive sub-optimal care. A necessary condition for improving their care is the continuous measuring and improvement of the quality of their care. The set of the ACOVE (Assessing Care Of the Vulnerable Elders) quality indicators (QIs) is emerging as an international standard for comprehensively measuring quality of care for elderly people. In essence, these quality indicators reflect "If-THEN" clinical rules that should be followed by care providers. However, the ACOVE indicators are still used to assess, rather than improve, care delivery.

#### Objective:

The primary objective in the ICOVE-PC (Improving Care of Vulnerable Elders - Primary Care) study is the systematic improvement of primary care for older persons by increasing adherence to a carefully selected set of ACOVE QIs. The selection of these QIs was arrived at by surveys and focus groups with general practitioners.

Approach:

After the selection of the ACOVE QIs we translated them into formal clinical rules for processing by a computer. The formal rules are then employed in a clinical decision support system (CDSS) that pro-actively reminds and alerts GPs to make the decisions consisten with the rules.

Intervention:

The GPs will be randomized into two trial arms. The GPs in the first arm will receive decision support pertaining only to (about) half of the selected clinical rules. The GPs in the second arm will receive decision support only for the other half of the rules. Hence, for each rule one arm will be its intervention arm and the other will be the control arm.

The reminders and alerts are not meant to be intrusive: They appear in a "ToDo" list which will be displayed at the edge of the computer screen of the GP. When GPs comply to a rule they will receive positive feedback. Color-coding will be used to display the status of the rule in terms of adherence.

#### Primary outcome:

Adherence to the selected clinical rules. This will be measured based on the (1) pass rates of the individual rules (2) general pass rates regardless of specific rules and (3) the number of rules with imroved pass rates.

#### Doel van het onderzoek

User-driven computerized decision support provided to general practitioners will improve their adherence to clinical rules pertaining to primary care for elderly patients.

#### Onderzoeksopzet

Measurements are automatically collected by the computer as soon as they become available. We will measure adherence at the end of the study.

#### **Onderzoeksproduct en/of interventie**

A subset of clinical rules originating from the ACOVE-3 (Assessing care of Vulnerable Elders) complete set of rules has been selected based on surveys and focus groups with General Practitioners (GPs). In particular, GPs selected rules for which they said they would appreciate a decision support system to help them to comply with these rules ((by means of alerts and reminders).

The GPs will be randomized into two trial arms. For the GPs in the first arm the intervention consists of providing, when needed, alerts and reminders for only (about) half of the selected clinical rules. The GPs in the second arm will receive alerts and reminders only for the other half of the rules. Hence, for each rule one arm will be its intervention arm and the other will

be the control arm.

The reminders and alerts are not meant to be intrusive: they appear in a "ToDo" list which will be displayed at the edge of the screen. When GPs comply to a rule they will receive positive feedback. Color-coding will be used to display the status of the rule in terms of adherence.

# Contactpersonen

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#### Wetenschappelijk

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# **Deelname eisen**

### Belangrijkste voorwaarden om deel te mogen nemen (Inclusiecriteria)

Patients:

All patients 65 years or older visiting their general practitioner.

Physicians:

All primary care physicians in the practices of GAZO (Gezondheidscentra in Amsterdam Zuid-Oost).

### Belangrijkste redenen om niet deel te kunnen nemen (Exclusiecriteria)

None, as the rules apply to all patients 65 years and older.

# Onderzoeksopzet

### Opzet

Туре:	Interventie onderzoek
Onderzoeksmodel:	Parallel
Toewijzing:	Gerandomiseerd
Blindering:	Open / niet geblindeerd
Controle:	Actieve controle groep

### Deelname

Nederland	
Status:	Werving nog niet gestart
(Verwachte) startdatum:	23-09-2013
Aantal proefpersonen:	3000
Туре:	Verwachte startdatum

## Voornemen beschikbaar stellen Individuele Patiënten Data (IPD)

Wordt de data na het onderzoek gedeeld: Nog niet bepaald

# **Ethische beoordeling**

Positief advies Datum: Soort:

08-08-2012 Eerste indiening

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# 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	NL3416
NTR-old	NTR3566
Ander register	ZonMw : 311020302
ISRCTN	ISRCTN wordt niet meer aangevraagd.

# Resultaten

#### Samenvatting resultaten

[Opondo 2012] Opondo D, Eslami S, Visscher S, de Rooij SE, Verheij R, Korevaar JC, Abu-Hanna A. Inappropriateness of medication prescriptions to elderly patients in the primary care setting: A systematic review. PLoS ONE, 2012.

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[Askari 2012] Askari M, Wierenga PC, Eslami S, Medlock SK, de Rooij SE, Abu-Hanna A. Studies Pertaining to the ACOVE Quality Criteria: A Systematic review. International Journal for Quality in Health Care, 2012 Feb;24(1):80-7.

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[Askari 2011] Askari M, Wierenga PC, Eslami S, Medlock SK, de Rooij SE, Abu-Hanna A. Assessing Quality of Care of Elderly patients using the ACOVE quality indicator set: A Systematic Review. PLoS ONE,2011;6(12):e28631.

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[Medlock 2011a] Medlock S, Eslami S, Askari M, Dongelmans DA, Abu-Hanna A. Improved communication in post-ICU care by improving writing of ICU discharge letters: a longitudinal before-after study. BMJ Quality & Safety, 20(11), 2011, p.967‑973. <br/><br/>br><br/>

[Medlock 2011b] Medlock S, Opondo D, Eslami S, Askari M, Wierenga P, de Rooij SE, Abu-Hanna A. LERM (Logical Elements Rule Method): A method for assessing and formalizing clinical rules for decision support. International Journal of Medical Informatics, 80(4), 2011, p.286‑295.