

# Performance feedback on quality of care in hospitals performing thrombectomy for ischemic stroke, a cluster-randomized trial

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We hypothesize that giving feedback to healthcare providers on the performance of their own hospital improves processes of care and leads to better outcomes.

|                             |                       |
|-----------------------------|-----------------------|
| <b>Ethische beoordeling</b> | Positief advies       |
| <b>Status</b>               | Werving gestart       |
| <b>Type aandoening</b>      | -                     |
| <b>Onderzoekstype</b>       | Interventie onderzoek |

## Samenvatting

### ID

NL-OMON28435

### Bron

NTR

### Verkorte titel

PERFEQTOS

### Aandoening

Ischemic stroke

## Ondersteuning

**Primaire sponsor:** Erasmus MC University medical center, Rotterdam

**Overige ondersteuning:** Erasmus University Rotterdam, Smarter Choices for Better Health action line Value Based Healthcare

## Onderzoeksproduct en/of interventie

## **Uitkomstmaten**

### **Primaire uitkomstmaten**

Door-to-groin time.

## **Toelichting onderzoek**

### **Achtergrond van het onderzoek**

**Background:** The treatment effect of endovascular thrombectomy (EVT) for ischemic stroke on functional outcome is highly time-dependent. Therefore, process indicators such as door-to-groin time are considered measurements of quality of stroke care. Although provision of performance feedback to healthcare professionals based on data from quality registries is common practice in many fields of medicine, observational studies of its effect on quality of care have shown mixed results. We propose an interventional study about the effect of performance feedback on quality of care for ischemic stroke.

**Objective:** The overall aim of this study is to assess whether performance feedback to healthcare providers in individual hospitals providing EVT for ischemic stroke, resulting in action plans and targets based on this feedback, improves door-to-groin time and thereby quality of care.

**Setting:** Thirteen hospitals in The Netherlands providing endovascular treatment (EVT) for ischemic stroke, participating in the Dutch Acute Stroke Audit (DASA) from the Dutch Institute of Clinical Auditing (DICA), will participate in this study.

**Study design:** This is a stepped-wedge cluster randomized trial. The study will be initiated with a period of 6 months in which no hospitals receive the intervention. Subsequently, every six months three to four hospitals are randomized to cross over from the control to the intervention group. This process continues until all hospitals are crossed over to receive the feedback intervention.

**Intervention group:** These hospitals will receive performance feedback consisting of three-monthly reports with patient characteristics, structure, process and outcome indicators on patients with ischemic stroke treated with EVT. Hospitals can compare their present performance with their own performance in the past and with other hospitals in The Netherlands. The performance feedback is provided to local Quality Improvement Teams (QIT), including at least a neurologist, interventional (neuro)radiologist, neurology resident, and a stroke nurse. The QIT uses the performance feedback report to define their own target(s) on (a) specific indicator(s) and to develop a performance improvement plan (PIP). The impact of this improvement plan is evaluated in the next three-monthly performance reports.

**Control group:** These hospitals receive no structured performance feedback and are not yet required to have a QIT and PIP.

**Primary outcome:** Door-to-groin time.

**Secondary outcomes:** Door-to-needle time, post-EVT recanalization grade (eTICI), post-EVT neurological deficit (NIHSS after 24 hours), functional outcome measured at 3 months

(modified Rankin Scale (mRS)), adjusted for prognostic factors at baseline.

Statistical analysis: The effect of intervention will be analyzed in multilevel regression models that accommodates the cluster design of the study and adjust for center and patient characteristics as well as time since start of the trial.

### **Doel van het onderzoek**

We hypothesize that giving feedback to healthcare providers on the performance of their own hospital improves processes of care and leads to better outcomes.

### **Onderzoeksopzet**

90 day follow-up

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

Performance feedback consisting of three-monthly reports with patient characteristics, structure, process and outcome indicators.

## **Contactpersonen**

### **Publiek**

Erasmus MC University Medical Center, Department of Neurology, suite Ee 2240, 3015 CE  
Rotterdam, The Netherlands  
Sanne den Hartog

010-7044206

### **Wetenschappelijk**

Erasmus MC University Medical Center, Department of Neurology, suite Ee 2240, 3015 CE  
Rotterdam, The Netherlands  
Sanne den Hartog

010-7044206

## **Deelname eisen**

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

Hospitals performing endovascular thrombectomy for ischemic stroke and participating in DASA.

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

none

## Onderzoeksopzet

### Opzet

|                  |                         |
|------------------|-------------------------|
| Type:            | Interventie onderzoek   |
| Onderzoeksmodel: | Cross-over              |
| Toewijzing:      | Gerandomiseerd          |
| Blinding:        | Open / niet geblindeerd |
| Controle:        | Geneesmiddel            |

### Deelname

|                         |                      |
|-------------------------|----------------------|
| Nederland               |                      |
| Status:                 | Werving gestart      |
| (Verwachte) startdatum: | 01-01-2020           |
| Aantal proefpersonen:   | 13                   |
| Type:                   | Verwachte startdatum |

## Voornemen beschikbaar stellen Individuele Patiënten Data (IPD)

**Wordt de data na het onderzoek gedeeld:** Nog niet bepaald

## Ethische beoordeling

Positief advies

Datum: 03-12-2020  
Soort: Eerste indiening

## 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        | NL9090                          |
| Ander register | METC Erasmus MC : MEC-2019-0738 |

## Resultaten