

# Randomized controlled trial in adult women with urinary incontinence comparing treatment delivered through a mobile application versus standard care.

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A treatment program for urinary incontinence (UI) in adult women delivered through a mobile application is not inferior to the standard way of treating patients, in primary care regarding its effects, it is less expensive and more cost-effective.

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

## Samenvatting

### ID

NL-OMON25754

### Bron

Nationaal Trial Register

### Verkorte titel

URinControl

### Aandoening

Urinary incontinence, Stress-incontinence, Urge-incontinence

### Ondersteuning

**Primaire sponsor:** Department of General practice

University Medical Centre Groningen

University of Groningen

**Overige ondersteuning:** ZonMw: The Netherlands Organization for Health Research Development

## Onderzoeksproduct en/of interventie

### Uitkomstmaten

#### Primaire uitkomstmaten

The change in symptoms score, measured with the International consultation on Incontinence Questionnaire on UI Short Form (ICIQ-UI-SF), 4 months after randomization

## Toelichting onderzoek

#### Achtergrond van het onderzoek

**BACKGROUND** Urinary incontinence (UI) is a highly prevalent disorder in women. Despite available treatment options only 30% of women seek help for the problem. The availability of an easy-to-use, evidence based App for the treatment of UI may reduce the necessity of face-to-face contacts and increase continence rates and quality of life. Especially, the possibility to receive frequent reminders would enable patients to perform the necessary training, as forgetting is the most important reason why adherence can be lacking. This will help women with UI to have a better quality of life and it will considerably reduce health care costs.

**OBJECTIVE** To study the effects and cost-effectiveness of a App-based treatment program for women with urinary incontinence (UI) compared to standard care delivered by the general practitioner.

**STUDY DESIGN AND POPULATION:** Randomized controlled trial with non-inferiority design with non-pregnant women aged 18 years or older, who visit their general practitioner (GP) for symptoms of UI are eligible. They will be recruited from general practices in the northern part of the Netherlands.

**INTERVENTION:** The intervention consists of a treatment program on a mobile application for tablet or smartphone without face-to-face contact (App URinControl). The active control treatment is the standard care delivered by the GP

**OUTCOME MEASURES:** The primary outcome is the score on the International consultation on

Incontinence Questionnaire on UI Short Form (ICIQ-UI-SF), which measures symptoms and impact of the UI on daily life. Secondary outcomes are the perception of improvement by the patient, number of UI episodes, condition- specific and generic health related quality of life sexual functioning and costs. Also, a process

evaluation will take place.

## **Doel van het onderzoek**

A treatment program for urinary incontinence (UI) in adult women delivered through a mobile application is not inferior to the standard way of treating patients, in primary care regarding its effects, it is less expensive and more cost-effective.

## **Onderzoeksopzet**

Three assessments will be performed, at baseline, after 4 months and after 12 months.

## **Onderzoeksproduct en/of interventie**

Intervention group: Mobile application (App)

After randomization patients will receive access to the URinControl-App. In the App, basic information is provided in a video fragment. Next, participants will learn how to use their pelvic floor. Then the participants will start with a training program tailored to their type of incontinence.

Women with stress (predominant) UI will start with pelvic floor muscle training (PFMT); women with urgency (predominant) UI will start with bladder training and PFMT will be added later in the program. All exercises will be supported by animations. All information will be available through a bibliography within the app.

During the program patients are asked to fill out the number of incontinence episodes, as well as the intensity with which they performed the exercises. Treatment will be reinforced by regularly sending 'push' notifications to stimulate treatment adherence.

The content of the app is a translation of the recommendations of the guidelines on the treatment of UI of women in primary care. In the letter with instructions which will be advised to contact their general practitioner (GP) if the progress of the treatment is unsatisfactory.

Control group: Standard Care

Patients in the standard care group will be diagnosed and treated according to NHG-guideline on UI (PFMT in case of stress UI, bladder training and PFMT for urgency UI). GP's can instruct patients themselves, or refer them to a practice

nurse or a specialized pelvic physiotherapist. In case of urgency incontinence, they can also choose to prescribe medication.

## Contactpersonen

### Publiek

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### Wetenschappelijk

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## Deelname eisen

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

Subject must meet all of the following criteria:

- Women, 18 years or older;
- Access to mobile Apps (iOS or Android);
- Urinary incontinence (UI), defined as any involuntary loss of urine according to the definition of the international Consultation on Incontinence (ICI), regardless of subtype (stress-,
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urgency- or mixed type UI). Incontinence episodes should be twice a week or more;

- Wish to be treated;
- Written informed consent.

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

Potential participant who meets any of the following criteria will be excluded from study:

- Indwelling urinary catheter;
- Urogenital malignancy;
- Previous urethral surgery for incontinence or prolapse;
- Being treated for UI in the previous year (pharmacologically or non-pharmacologically);
- Terminally or seriously ill;
- Cognitive impairment or psychiatric disorder;
- Urinary tract infection;
- Overflow or continuous UI;
- Pregnancy or recent childbirth (< 6 months ago);
- Inability to complete a questionnaire in Dutch.
- Prolapse POPQ  $\geq$  stage IIb

## **Onderzoeksopzet**

### **Opzet**

Type:	Interventie onderzoek
Onderzoeksmodel:	Parallel
Toewijzing:	Gerandomiseerd
Blinding:	Open / niet geblindeerd

Controle: Actieve controle groep

## Deelname

Nederland  
Status: Werving gestart  
(Verwachte) startdatum: 01-12-2014  
Aantal proefpersonen: 240  
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: 22-01-2015  
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	NL4948
NTR-old	NTR5052
Ander register	- : Protocol ID 837001508

# Resultaten

## Samenvatting resultaten

Loohuis AMM, Wessels NJ, Jellema P, Vermeulen KM, Slieker-Ten Hove MC, van Gemert-Pijnen JEW, Berger MY, Dekker JH, Blanker MH. The impact of a mobile application-based treatment for urinary incontinence in adult women: Design of a mixed-methods randomized controlled trial in a primary care setting. *Neurourol Urodyn*. 2018 Sep;37(7):2167-2176. doi: 10.1002/nau.23507. PMID: 29392749 <https://doi.org/10.1002/nau.23507>

Van der Worp H, Loohuis AMM, Flohil I, Kollen BJ, Wessels NJ, Blanker MH. Recruitment through media and general practitioners resulted in comparable samples in an RCT on incontinence. *Journal of Clinical Epidemiology* (online first: <https://doi.org/10.1016/j.jclinepi.2019.12.001>)