# Closing the preventive care chain for overweight children: evaluation of the implementation of an integrated, locally aligned approach, enforcing primary care.

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Get insight in the implementation and effectiveness of the integrated preventive care chain for overweight children in 's-Hertogenbosch. With the results we can optimize the support for overweight children and their parents.

Ethical review	Approved WMO
Status	Recruitment stopped
Health condition type	Other condition
Study type	Observational non invasive

# Summary

### ID

NL-OMON44622

**Source** ToetsingOnline

**Brief title** Evaluation of the preventive care chain for overweight in children

### Condition

- Other condition
- Lifestyle issues

**Synonym** obesity, overweight

### Health condition

#### overgewicht

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#### **Research involving**

Human

### **Sponsors and support**

**Primary sponsor:** Universiteit van Tilburg **Source(s) of monetary or material Support:** ZonMw,GGD Hart voor Brabant,Jeroen Bosch Ziekenhuis,Jeroen Bosch Ziekenhuis;GGD Hart voor Brabant;Universiteit van Tilburg

### Intervention

Keyword: children, integrated care, overweight, youth health care

#### **Outcome measures**

#### **Primary outcome**

Implementation study:

The integrated preventive care chain in 's-Hertogenbosch has two important aspects: The central role of the youth health care nurse as coach, coordinator and linking pin, and the local alignment/cooperation between schools, GP's, YHC and other (health)professionals.

- Degree of implementation of the preventive care chain (role of YHC nurses)

- Determinants of implementation of the preventive care chain (role of YHC

nurses)

- Experience with the preventive care chain of professionals, parents and children who are involved

- Reach and flow in the preventive care chain

Effect study:

- Health-related quality of life of the child, measured with the PedsQL

(parent-proxy report).

#### Secondary outcome

Effect study:

- BMI-SD: based on age and gender specific curves, measured by youth health care nurse during regular contacts (documented in digital, regular YHC child file).

- Physical activity, nutrition (digital questionnaire)
- Psychosocial problems of the child (SDQ, digital questionnaire)
- Empowerment of parent (EMPO, digital questionnaire)

Other outcomes: motivation of parent, welfare of parents, health-related

parenting style, parents subjective rating of childs degree of overweight.

Overweight related quality of life (only for children with obesity (IWQol,

parent-proxy report). Attainment of personal goals, valuation of YHC support

and local organization/cooperation of support for overweight in general.

# **Study description**

#### **Background summary**

In 2016, 11% of the children in 's-Hertogenbosch were overweight. Overweight children in the Netherlands not always receive optimal, coordinated care.

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Improving integrated care for overweight is a priority in many Dutch municipalities. An integrated preventive care chain for children 4-12 years has been developed in 's-Hertogenbosch and this innovative approach is implemented in three neighborhoods: Noord, Maaspoort en Zuidoost. The approach is focused on self management of the family and is based on principles of stepped and matched care. There is close local collaboration between schools and all kinds of (health)professionals. Youth health care professionals function as coordinator and linking pin in the local network. With this approach we expect to reach more children and parents. By matching care with needs of parents and children and through the optimal use of strong local networks, we expect to achieve durable effects on quality of life of overweight children and self management of their families.

### Study objective

Get insight in the implementation and effectiveness of the integrated preventive care chain for overweight children in 's-Hertogenbosch. With the results we can optimize the support for overweight children and their parents.

### Study design

The (PhD) research project runs from 2017 to 2020 and consists of an implementation and effectiveness study.

In the implementation study we evaluate the degree of implementation of the integrated preventive care chain (use of principles, tools as described) in the three neighborhoods in 's-Hertogenbosch as well as determinants of implementation (facilitating and/or impeding factors). In addition, we describe experiences of professionals and parents, as well as the flow of children (numbers reached, drop outs) in the new approach.

Based on documents about the preventive care chain in \*s-Hertogenbosch and in consultation with professionals, we draw up a checklist to measure the extent to which youth health care professionals work according to the principles of the new approach. We make use of the MIDI-model (measuring instrument for determinants of Innovations) (Fleuren 2012) to determine potential determinants for implementation, such as characteristics of youth health care nurses, characteristics of participants and characteristics of the local network. To determine these characteristics and to discuss experiences of professionals with the new approach, semi-structured interviews are held with all youth health care nurses ( $\pm$  12), all youth health care physicians ( $\pm$  6), a number of general practitioners ( $\pm$  6) working in the three neighborhoods. Interviews are also held with 10-15 parents (if possible with children) to discuss their experiences with the support they received for their overweight child(ren).

To picture the flow of children in the preventive care chain, we document the number of children identified with overweight (at school, or by GP or YHC professionals). We also count how many children receive support by YHC professionals, how many children accomplish care and how many children drop out. Simple registries are kept by the professionals who are involved.

In the effectiveness study, 120 overweight children in \*s-Hertogenbosch are followed and compared with 60 overweight children outside \*s-Hertogenbosch who receive care as usual. Our primary outcome is the development in quality of life of the child. Secondary outcomes are developments in BMI, physical activity, nutrition, psychosocial problems of the child and empowerment of the parents. Parents fill out digital questionnaires at the start, after three months and after approximately one year of YHC involvement. Measurements are aligned with regular contacts with youth health care nurses. After a year we ask parents which professional support for overweight they received (including life style interventions). We also ask them to rate the support they received (both from YHC as in general). Information on BMI and referrals are subtracted from regular YHC files of the child.

#### Study burden and risks

This study can only be conducted with input from (overweight) children and their parents, since they are the target group of the preventive care chain which is under study. Participation in the study is voluntary and has no risks. The burden for parents and professionals in the implementation study is their participation in interviews (30-60 minutes per person).

The burden for parents in the effectiveness study consists of filling out the questionnaires: 30 minutes at baseline (t0), 20 minutes at three months (t1) and 30 minutes after a year (t2). The questionnaires are filled out at home or in a YHC waiting room, before or after a YHC contact.

BMI and referrals are documented by YHC nurses as usual in regular digital child files. YHC nurses have an important role in informing and including children and parents in the study. For children in 's-Hertogenbosch (dependent on parent's permission), the results of the quality of life questionnaire can be used/discussed in the YHC contacts. YHC nurses have additional time for their contribution to the study.

# Contacts

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# **Trial sites**

## Listed location countries

Netherlands

# **Eligibility criteria**

#### Age

Adolescents (12-15 years) Adolescents (16-17 years) Adults (18-64 years) Children (2-11 years) Elderly (65 years and older)

### **Inclusion criteria**

Implementation study:

- Parents (and children) aged 4-12 years old living in \*s-Hertogenbosch in Noord, Zuidoost or Maaspoort

- Youth Health Care professionals, general practitioners, specialized care professionals, sport facilitators, lifestyle coaches, schools and project leaders working in \*s-Hertogenbosch Noord, Zuidoost or Maaspoort.

- Basic level of Dutch
- Parent(s) can also participate in the effect study; Effect study:

- Children identified as being overweight or obese by YHC screening, GP consultation or measurement at school. BMI is calculated and cut-offs are based on age and gender specific BMI curves.

- Child is 4-12 years old

- Basic level of Dutch (child and parents)

- Living in one of the three neighbourhoods in \*s-Hertogenbosch; Noord, Zuidoost or Maaspoort, or one of the control neighbourhouds

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- At least one YHC contact

### **Exclusion criteria**

Implementatie study :

- Professional works shorter than 3 months in one of three pilot neighbourhoods in \*s-Hertogenbosch

- Parent lives shorter than 3 months in one of three pilot neighbourhoods in 's-Hertogenbosch.

- Professional or parent is unable to speak Dutch at a basic level Effect study:

A potential subject who meets any of the following criteria will be excluded from participation in this study:

- Severe physical impairments

- Severe mental problems
- Parent has an inadequate level of the Dutch language to complete questionnaires

# Study design

### Design

Study type:	Observational non invasive
Intervention model:	Other
Allocation:	Non-randomized controlled trial
Masking:	Open (masking not used)
Control:	Active
Primary purpose:	Health services research

### Recruitment

NL	
Recruitment status:	Recruitment stopped
Start date (anticipated):	03-10-2017
Enrollment:	210
Туре:	Actual

# **Ethics review**

Approved WMO Date: 28-08-2017 Application type: Review commission:

First submission METC Brabant (Tilburg)

# **Study registrations**

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

No registrations found.

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

ID: 27471 Source: Nationaal Trial Register Title:

### In other registers

Register	ID
ССМО	NL62012.028.17
OMON	NL-OMON27471