Antibiotic prescribing and Non-prescribing in Nursing home residents with signs and symptoms Ascribed to urinary tract infection

Published: 27-12-2018
Last updated: 12-04-2024

To evaluate whether actively drawing physicians attention to the revised UTI guideline results in more appropriate AB prescribing for NH residents with suspected UTI. This will be achieved in two ways: 1) to incorporate the algorithm of the revised…

Ethical review	Approved WMO
Status	Recruitment stopped
Health condition type	Bacterial infectious disorders
Study type	Interventional

Summary

ID

NL-OMON49015

Source
ToetsingOnline

Brief title
ANNA

Condition

- Bacterial infectious disorders
- Urinary tract signs and symptoms

Synonym
Urinary tract infection. Urinary infection.

Research involving
Human

Sponsors and support

Primary sponsor: Vrije Universiteit Medisch Centrum
Source(s) of monetary or material Support: ZonMW

Intervention

Keyword: Algorithm, Antibiotic prescribing, Nursing homes, Urinary tract infections

Outcome measures

Primary outcome

inappropriate AB prescribing for suspected UTI at index consultation (yes/no)

Secondary outcome

Course of symptoms, alternative diagnosis at index consultation, changes in

treatment < 3 weeks, hospitalization, mortality, (other) complications, total

AB use at NH level.

Study description

Background summary

Recently, a urinary tract infection (UTI) treatment algorithm for frail elderly is developed. The ministry of healthcare, welfare and sport has provided funding for a Delphi study to develop this algorithm, after van Buul et al (2015) showed that UTI accounts for the largest share of total antibiotic (AB) use in NHs and that a third of these AB prescriptions seems not (yet) required. The algorithm is incorporated in the revised guideline on UTI of the Dutch Association of Elderly Care Physicians and Social Geriatricians (Verenso), which will be published in October 2018.

Inappropriate AB use is an important problem both on the patient level (e.g. side-effects and drug interactions) and the societal level (AB resistance). In the Netherlands, recent studies pointed to an increase in AB resistance in nursing homes (NHs) and to a decrease in empirical AB treatment options for UTI (Tholen 2016, Verhoef 2016, Hoogendoorn 2013, Van der Donk 2013). A swift improvement of appropriate AB use is required.Therefore it is important that the revised guideline will be used in practice. However, It is widely known

that the implementation of a guideline takes time.

Study objective

To evaluate whether actively drawing physicians attention to the revised UTI guideline results in more appropriate AB prescribing for NH residents with suspected UTI. This will be achieved in two ways: 1) to incorporate the algorithm of the revised guideline into the electronic patient file and showing the algorithm automatically when a clinician considers a UTI 2) an education for physicians and nursing staff

Study design

A cluster randomized controlled trial (cRCT) with nursing homes as the unit of randomization will be conducted to evaluate whether actively drawing physicians attention to the revised urinary tract infections guideline results in more appropriate AB prescribing. Quantitative (cRCT data) and qualitative approaches (semi structured interviews and focus groups) will be combined to evaluate the use and implementation of the UTI treatment decision tool.

Intervention

Actively drawing physicians attention to the revised UTI guideline by incorporating the algorithm of the revised guideline into the electronic patient file and showing it automatically when a clinician considers a UTI and by educating physicians and nursing staff

Study burden and risks

The burden for the participating patients is minimal. Patients solely have to decide to participate whether or not. The risks for the participating patients is negligible. If our intervention is effective, a reduction in inappropriate AB is expected. This will lead to less exposure to side-effects of antibiotics, drug interactions and antibiotic resistance. Furthermore, knowledge about implementation of a guideline will be acquired.

Contacts

Public
Vrije Universiteit Medisch Centrum

Van der Boechorststraat 7
Amsterdam 1081 BT
NL

Scientific
Vrije Universiteit Medisch Centrum

Van der Boechorststraat 7
Amsterdam 1081 BT
NL

Trial sites

Listed location countries

Netherlands

Eligibility criteria

Age
Adults (18-64 years)
Elderly (65 years and older)

Inclusion criteria

new diagnosis *suspected UTI*

Exclusion criteria

- NH residents who already are taking ABs/have taken ABs in the previous 7days for a different type of infection
- NH residents who do not wish to receive AB in case of a UTI according to their treatment policy

Study design

Design

Study type:	Interventional
Intervention model:	Parallel

Allocation:	Randomized controlled trial
Masking:	Open (masking not used)

Primary purpose: Health services research

Recruitment

NL

Recruitment status:	Recruitment stopped
Start date (anticipated):	11-03-2019
Enrollment:	708
Type:	Actual

Medical products/devices used

Generic name:	Urinary tract infection treatment algorithm for frail elderly
Registration:	Yes - CE intended use

Ethics review

Approved WMO Date:	27-12-2018
Application type:	First submission
Review commission:	METC Amsterdam UMC
Approved WMO Date:	22-01-2019
Application type:	Amendment
Review commission:	METC Amsterdam UMC
Approved WMO Date:	08-03-2019
Application type:	Amendment
Review commission:	METC Amsterdam UMC
Approved WMO Date:	21-05-2019
Application type:	Amendment
Review commission:	METC Amsterdam UMC
Approved WMO Date:	21-01-2020

Application type:	Amendment
Review commission:	METC Amsterdam UMC
Approved WMO Date:	19-02-2020
Application type:	Amendment
Review commission:	METC Amsterdam UMC

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
CCMO	NL66922.029.18