Reduce the inappropriate use of urinary catheters and intravenous (IV) catheters

No registrations found.

Ethical review	Positive opinion
Status	Recruitment stopped
Health condition type	-
Study type	Interventional

Summary

ID

NL-OMON25159

Source
NTR

Brief title
RICAT-study

Health condition

Catheter- related infection, phlebitis, and bacteremia are associated with an increased morbidity, mortality, and thereby substantial costs. Urinary tract infections is accountable for 40% of all nosocomial infections in Western world hospitals, and 71-80% of these patients had a urinary catheter. Although the incidence of catheter-associated bloodstream infection by peripheral intravenous catheters is low (0.5 per 1000 catheter days), it is important because peripheral intravenous catheters are the most frequently used invasive medical devices in hospitalized patients.

Sponsors and support

Primary sponsor: The Netherlands Organisation for Health Research and Development (ZonMw)
Source(s) of monetary or material Support: Citrienfonds

Intervention

Outcome measures

Primary outcome

Percentage of inappropriate use of urinary and intravenous catheter on the days of data collection.

Secondary outcome

Catheter-related infections or other complications, catheter re-insertion rate, length of hospital (and ICU) stay, mortality, and costs of the de-implementation strategy and the main health care costs.

Study description

Background summary

This RICAT-study aims to reduce the use of urinary and intravenous catheters with an inappropriate indication, and as a result reduce the catheter-related complications. In a multicenter, prospective interrupted time series analysis, several interventions to avoid inappropriate use of catheters will be conducted in seven hospitals in the Netherlands. If (cost-)effective it provides a tool for a nationwide approach to reduce catheter-related infections and other complications.

Study objective

Urinary and (peripheral and central) intravenous catheters are widely used in hospitalized patients, although some serious complications can occur with the use of these catheters. Up to 56% of the catheters do not have an appropriate indication. The main objective of our quality improvement project is to reduce the use of catheters without an appropriate indication by 25-50%.

Study design

The clinical data collection will be once per 14 days during eight months in both the pre- and post-intervention period. The presence and indications for the catheter use will be extracted from medical records in combination with observations of the admitted patients. All other data will be collected from (electronic) medical records and nursing records.

Intervention

First we defined a list of appropriate indications for urinary and (peripheral and central) intravenous catheters, which will restrict the use of catheters and urge catheter removal

when the indication is no longer appropriate. Furthermore the intervention consists of a kick-off meeting, including a competitive feedback report of the baseline measurements, and education of healthcare workers and patients.
Additional strategies based on the baseline data and local conditions are optional.

Contacts

Public
Internal Medicine, Infectious diseases - Academic Medical Center

Bart J Laan
Meibergdreef 9

Amsterdam 1105 AZ
The Netherlands
Phone: +31-20-566 6807
Scientific
Internal Medicine, Infectious diseases - Academic Medical Center

Bart J Laan
Meibergdreef 9

Amsterdam 1105 AZ
The Netherlands
Phone: +31-20-566 6807

Eligibility criteria

Inclusion criteria

- Age >18 years old
- Patient admitted to internal medicine or subspecialties (gastroenterology & hepatology, geriatrics, pulmonology and rheumatology), or nonsurgical patient admitted to acute medical units
- Urinary and/or (peripheral and/or central) intravenous catheter

Exclusion criteria

- Patient who had all catheters prior to admission
- Patient admitted for elective short stay

- Terminally ill patient

Study design

Design

Study type:	Interventional
Intervention model:	Factorial
Allocation:	Non controlled trial

Control: N/A , unknown

Recruitment

NL

Recruitment status:	Recruitment stopped
Start date (anticipated):	01-09-2016
Enrollment:	1420
Type:	Actual

IPD sharing statement

Plan to share IPD: Undecided

Ethics review

Positive opinion

Date:	09-08-2016
Application type:	First submission

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
NTR-new	NL5438
NTR-old	NTR6015
Other	the Netherlands Organisation for Health Research and Development (ZonMw) : 8392010022

Study results