

# Reminder implementation for safety in child care

<b>Submission date</b> 10/06/2015	<b>Recruitment status</b> No longer recruiting	<input type="checkbox"/> Prospectively registered <input type="checkbox"/> Protocol
<b>Registration date</b> 23/06/2015	<b>Overall study status</b> Completed	<input type="checkbox"/> Statistical analysis plan <input checked="" type="checkbox"/> Results
<b>Last Edited</b> 17/12/2020	<b>Condition category</b> Circulatory System	<input type="checkbox"/> Individual participant data

## Plain English summary of protocol

Plain English summary under review

## Contact information

### Type(s)

Scientific

### Contact name

Dr Anna Ehrenberg

### ORCID ID

<http://orcid.org/0000-0002-3964-196X>

### Contact details

School of Education, Health and Social Studies, Dalarna University

Falun

Sweden

79188

+4623778472

aeh@du.se

## Additional identifiers

EudraCT/CTIS number

IRAS number

ClinicalTrials.gov number

Secondary identifying numbers

Nil known

# Study information

## Scientific Title

Reminder implementation for safety in child care - a cluster randomized controlled trial in paediatric care

## Acronym

RISCC

## Study objectives

The overall objective of this project is to evaluate the effects of implementing a clinical practice guideline for peripheral venous catheters in the format of reminders, integrated in the electronic patient record. Specifically we hypothesise:

1. That a cluster randomized intervention using electronic reminders in paediatric care will reduce complications related to peripheral venous catheters in hospitalised children
2. That the electronic reminders will improve registered nurses adherence to the clinical guidelines for peripheral venous catheters.

In addition, the study aims to describe the relationship between registered nurses perceptions of work context and the outcomes of the intervention.

## Ethics approval required

Old ethics approval format

## Ethics approval(s)

Regional Ethics Review Board in Uppsala, Sweden, 06/04/2009 and 01/12/2010, refs: 2008/107 and 2008/360

## Study design

A single centre cluster randomized controlled study

## Primary study design

Interventional

## Secondary study design

Cluster randomised trial

## Study setting(s)

Hospital

## Study type(s)

Other

## Participant information sheet

Not available in web format, please use contact details to request a participant information sheet

## Health condition(s) or problem(s) studied

The study focus is on complications related to peripheral venous catheters that are used for administration of medications and fluids in patients.

## **Interventions**

1. Intervention arm: Reminders based on recommendations from clinical practice guidelines for peripheral venous catheters, integrated in the electronic patient record.
2. Control arm: Clinical practice guidelines available on the Intranet, following normal procedure for dissemination of guidelines.

## **Intervention Type**

Other

## **Primary outcome measure**

Recorded occurrence of peripheral venous catheter-related complications at removal.

## **Secondary outcome measures**

Registered nurses self-reported adherence to the clinical practice guideline recommendations for managing peripheral venous catheters.

## **Overall study start date**

01/09/2008

## **Completion date**

30/09/2011

# **Eligibility**

## **Key inclusion criteria**

12 paediatric hospital wards, including neonatal and paediatric patients, with the same electronic patient record system.

1. Hospitalised Children, age 0 - 18 years, with peripheral venous catheters:
  - 1.1. Inserted and documented in a template for peripheral venous catheters at baseline and after the intervention.
  - 1.2. Only one peripheral venous catheter per patient was included.
- Registered nurses at the 12 paediatric wards:
  - 1.3. Who had worked at one of the 12 wards at the time for data-collection.

## **Participant type(s)**

Patient

## **Age group**

Child

## **Lower age limit**

0 Years

## **Upper age limit**

18 Years

## **Sex**

Both

**Target number of participants**

The sample included 12 wards at a paediatric hospital. A sample size of 1213 peripheral venous catheters (patients), about 100 per unit, was calculated, that is 2426 peripheral venous catheters per cluster, both at baseline and at follow-up.

**Total final enrolment**

1562

**Key exclusion criteria**

Peripheral venous catheters were excluded that:

1. Lacked complete recording of reasons for removal.

Registered nurses were excluded who during the data-collection periods:

1. Had only administrative duties
2. Were on parental leave
3. Sick leave,
4. Doing full time studies

**Date of first enrolment**

01/10/2009

**Date of final enrolment**

30/09/2011

**Locations****Countries of recruitment**

Sweden

**Study participating centre**

Astrid Lindgrens Children's Hospital, Karolinska University Hospital  
Sweden

-

**Sponsor information****Organisation**

School of Education, Health and Social Studies

**Sponsor details**

Dalarna University  
Falun  
Sweden

79188  
+4623778472  
aeh@du.se

**Sponsor type**  
University/education

**Website**  
<http://www.du.se>

**ROR**  
<https://ror.org/000hdh770>

## **Funder(s)**

**Funder type**  
University/education

**Funder Name**  
Health Care Sciences Postgraduate School, Karolinska Institutet

**Funder Name**  
Högskolan Dalarna

**Alternative Name(s)**  
Dalarna University, DU

**Funding Body Type**  
Government organisation

**Funding Body Subtype**  
Local government

**Location**  
Sweden

## **Results and Publications**

### **Publication and dissemination plan**

The intention is to submit the paper to Implementation Science for publication. The paper will include the results on the effects of implementing a clinical practice guideline for peripheral

venous catheters in the format of reminders integrated in the electronic patient record, on complications related to peripheral venous catheters in hospitalised children, and registered nurses adherence to the guidelines. The submission is planned during 2015.

## **Intention to publish date**

## **Individual participant data (IPD) sharing plan**

### **IPD sharing plan summary**

Not expected to be made available

### **Study outputs**

<b>Output type</b>	<b>Details</b>	<b>Date created</b>	<b>Date added</b>	<b>Peer reviewed?</b>	<b>Patient-facing?</b>
<a href="#">Results article</a>	results	27/01/2016	17/12/2020	Yes	No