

# The ACCOMPLISH study.

No registrations found.

<b>Ethical review</b>	Not applicable
<b>Status</b>	Recruiting
<b>Health condition type</b>	-
<b>Study type</b>	Interventional

## Summary

### ID

NL-OMON20759

### Source

NTR

### Brief title

ACCOMPLISH

### Health condition

Hand hygiene;  
infection control;  
healthcare associated infection; cost-effectiveness;  
ICU;  
surgical ward;  
public health

## Sponsors and support

**Primary sponsor:** Erasmus University Medical Center, Rotterdam, The Netherlands.

**Source(s) of monetary or material Support:** ZonMw.

## Intervention

## Outcome measures

### Primary outcome

Observed hand hygiene compliance.

## Secondary outcome

Prevalence of healthcare associated infections (the prevalence rate is operationalized as the number of HAI per 100 patients).

## Study description

### Background summary

This study aims to evaluate the (cost)effectiveness of a multi-component implementation strategy aimed at the promotion of HH in Dutch health care. The implementation strategy ACCOMPLISH (Actively Creating COMPLIance Saving Health) targets both individual and environmental determinants of HH. Specifically it aims at increasing self-efficacy by formulating action plans (implementation intentions), improving knowledge of HH guidelines, improving hand alcohol rub accessibility, improving social norms and awareness of own and group hand hygiene behaviour (HHB). All elements of the ACCOMPLISH package have been designed to be embedded as much as possible into pre-existing structures within Dutch hospitals (i.e. staff meetings, national surveillance). Special attention has been paid to target the determinants of HHB specific to physicians and nurses.

The ACCOMPLISH package is evidence and theory based, by following a planned stepwise behavioural research approach to intervention development. It focuses on individual level factors, increasing personal and normative feedback, and is embedded in self-regulation theory, which suggests that behaviour (change) is a dynamic process, in which specific, achievable goals need to be set, discrepancies between desired goals and goal progress needs to be fed back to an individual, and finally (social) reinforcement is an important element to promote behavioural sustainability and ongoing goal pursuit. Among others, the intervention addresses these elements by means of increasing planning, performance feedback, increasing knowledge of HH guidelines on an individual level and on environmental factors creating an increased availability of hand alcohol and increasing the visibility of hand hygiene guideline support. These factors were identified as major determinants of non-compliance in our previous study.

The ACCOMPLISH package will be tested in a 2 arm cluster RCT in 16 hospitals in the Netherlands. In each hospital 1 intensive care unit (ICU) and 1 surgical ward will be included in the study. The primary outcome measure will be the observed compliance rate, measured at baseline, 1 month, 6 months and 12 months post intervention. As a secondary outcome measure the prevalence of HAI will be measured using the PREZIES module of the national surveillance system. 3 prevalence measurements will be collected prior to the intervention, and 3 post intervention, to enable time series analysis. Process indicators identifying barriers

and facilitators of the intervention at all levels (from intervention to organisation) will be collected pre and post intervention. Other process indicators identifying possible infection prevention activities outside the intervention package will be collected during the entire intervention.

We will perform an ex-post economic evaluation of the ACCOMPLISH package to improve compliance compared to a control group from a health care perspective. The economic evaluation will be performed in accordance with the Dutch guidelines, in a case control study, matching by at least sex, age and diagnosis on admittance. To measure the economic effect of improved HH cost-effectiveness is assessed by calculating the incremental cost-effectiveness ratio, defined here as the costs for the intervention divided by the difference in prevalence of HAI between the intervention and control group.

This project will produce scientific knowledge on determinants of successful implementation of interventions with sustainable effects, targeted at nurses and physicians respectively and on the balance between costs and health benefits of these interventions. It will result in an advice for clinical practice on conditions that have to be met for successful implementation of these interventions and stimulate development of professional norms and guidelines on HH interventions. The results will be disseminated to hospitals societies (NFU, NVZ) which advise the national inspectorate, a process which can lead to new guidelines put in place for all hospitals to follow.

## **Study objective**

Public health authorities have recognized lack of hand hygiene (HH) as one of the important causes of preventable mortality and morbidity at population level. Both at national (UK, USA, Dutch VMS) and international levels (WHO) poor HH has been identified as a threat to public health. HH compliance rates are universally low, leading to unacceptably high rates of healthcare associated infections (HAI), and resulting in unnecessary excess mortality and morbidity in the population and increased health care costs due to increased length of hospital stay and more complex care required. In a recent study conducted in 24 Dutch hospitals, we found that the HH guidelines are adhered to correctly in only 19,5% of the observed opportunities. To address this problem and achieve large and sustainable effects, comprehensive plans targeting different problems and barriers to change with strategies at different levels are needed.

This study aims to evaluate the (cost)effectiveness of a multi-component implementation strategy aimed at the promotion of HH in Dutch health care. The implementation strategy ACCOMPLISH (Actively Creating COMPLIance Saving Health) targets both individual and environmental determinants of HH. Specifically it aims at increasing self-efficacy by formulating action plans (implementation intentions), improving knowledge of HH guidelines,

improving hand alcohol rub accessibility, improving social norms and awareness of own and group hand hygiene behaviour (HHB). All elements of the ACCOMPLISH package have been designed to be embedded as much as possible into pre-existing structures within Dutch hospitals (i.e. staff meetings, national surveillance). Special attention has been paid to target the determinants of HHB specific to physicians and nurses.

## **Study design**

Time point measurements:

1. At baseline prior to implementation of intervention: prevalence of HAI, hand hygiene compliance & questionnaire;
2. After 1 month: compliance & questionnaire;
3. After 6 months: compliance & questionnaire;
4. After 12 months: prevalence of HAI, compliance & questionnaire;
5. After 13 months: compliance & questionnaire;
6. After 18 month: compliance & questionnaire.

## **Intervention**

This study aims to evaluate the (cost)effectiveness of a multi-component implementation strategy aimed at the promotion of HH in Dutch health care. The implementation strategy ACCOMPLISH (Actively Creating COMPLIance Saving Health) targets both individual and environmental determinants of HH. Specifically it aims at increasing self-efficacy by formulating action plans (implementation intentions), improving knowledge of HH guidelines, improving hand alcohol rub accessibility, improving social norms and awareness of own and group hand hygiene behaviour (HHB). All elements of the ACCOMPLISH package have been designed to be embedded as much as possible into pre-existing structures within Dutch hospitals (i.e. staff meetings, national surveillance). Special attention has been paid to target the determinants of HHB specific to physicians and nurses.

## **Contacts**

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## Eligibility criteria

### Inclusion criteria

1. All hospitals with an adult ICU are eligible for participation;
2. Physicians and nurses working in these wards will be the focus of study;
3. Prevalance of HAI: The study population consists of all patients admitted to the participating units (surgical ward and Intensive Care unit) on the days prevalence data is collected.

### Exclusion criteria

Hospitals without an adult ICU.

## Study design

### Design

Study type:	Interventional
Intervention model:	Parallel
Allocation:	Randomized controlled trial
Masking:	Open (masking not used)
Control:	Active

### Recruitment

NL	
Recruitment status:	Recruiting
Start date (anticipated):	14-08-2012

Enrollment: 16  
Type: Anticipated

## Ethics review

Not applicable  
Application type: Not applicable

## 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	NL2342
NTR-old	NTR2448
Other	ZonMw : 50-50115-96-632
ISRCTN	ISRCTN wordt niet meer aangevraagd.

## Study results

### Summary results

N/A