

# Does targeted and quantified control of the microbiological environment within the ICU, using staff trained in microfibre cleaning and contamination bioload detection technology, reduce colonisation and healthcare-acquired infection?

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| <b>Submission date</b><br>24/02/2007   | <b>Recruitment status</b><br>No longer recruiting        | <input checked="" type="checkbox"/> Prospectively registered |
| <b>Registration date</b><br>21/03/2007 | <b>Overall study status</b><br>Completed                 | <input type="checkbox"/> Protocol                            |
| <b>Last Edited</b><br>01/02/2011       | <b>Condition category</b><br>Infections and Infestations | <input type="checkbox"/> Statistical analysis plan           |
|  |  | <input checked="" type="checkbox"/> Results                  |
|  |  | <input type="checkbox"/> Individual participant data         |

**Plain English summary of protocol**  
Not provided at time of registration

## Contact information

**Type(s)**  
Scientific

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## Additional identifiers

**Protocol serial number**

## Study information

### Scientific Title

Microfibre cleaning and contamination bioload detection technology versus standard cleaning in a critical care unit to reduce local contamination rates: a prospective randomised controlled trial

### Study objectives

Use of microfibre in a supervised programme of cleaning and decontamination in a critical care unit reduces local contamination rates and new colonisation of patients with Methicillin-resistant *Staphylococcus aureus* (MRSA) and other hospital pathogens in comparison with standard cleaning.

As of 22/10/2009 details of an observational follow-up study have been added to this record. All details of this follow-up study can be found under the relevant field with the title: 'Follow-up study'.

### Follow-up study:

A follow-up observational study was performed in which four different pathways of transmission were assessed in order to inform current Departmental policies for ward cleaning.

### Ethics approval required

Old ethics approval format

### Ethics approval(s)

Joint UCL/UCLH Committee on the Ethics of Human Research approved on the 9th November 2006 (ref: 06/Q0502/91)

### Study design

Prospective randomised controlled cohort study

### Primary study design

Observational

### Study type(s)

Prevention

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

Hospital-acquired infection

### Interventions

A total environmental cleaning system based on microfibre and governed by standard operating procedures designed to achieve microbiological control of the entire near-patient environment.

### Follow-up study:

This follow-up study will study intensively the bacterial reservoirs within a critical care and a general ward. In addition the movement of staff from one contact surface to another will be

audited together with hand hygiene. Direct observation will be used but entirely anonymised. The project will also address spread of nosocomial pathogens in the environment by cleaning materials and airborne transmission.

**Intervention Type**

Other

**Phase**

Not Applicable

**Primary outcome(s)**

Proportion of the pooled results of all environmental swabs taken from bed areas on each day showing a target pathogen, e.g. MRSA

**Key secondary outcome(s)**

The rate of new acquisition by patients of MRSA and other target pathogens

**Completion date**

05/04/2008

**Eligibility****Key inclusion criteria**

All patients admitted to the critical care units of UCLH and Royal Free Hospitals. The critical care units are randomised to microfibre or standard cleaning. There is no patient intervention other than recording any infections developed.

**Participant type(s)**

Patient

**Healthy volunteers allowed**

No

**Age group**

Other

**Sex**

All

**Key exclusion criteria**

Does not meet inclusion criteria

**Date of first enrolment**

02/04/2007

**Date of final enrolment**

05/04/2008

**Locations**

## Countries of recruitment

United Kingdom

England

## Study participating centre

Room 231 Windeyer Institute of Medical Sciences

London

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## Sponsor information

### Organisation

National Institute for Health Research (NIHR) (UK)

### ROR

<https://ror.org/0187kwz08>

## Funder(s)

### Funder type

Government

### Funder Name

National Institute for Health Research (NIHR) (UK) - HCAI Technology Innovation Programme (ref: 0140028)

## Results and Publications

### Individual participant data (IPD) sharing plan

### IPD sharing plan summary

Not provided at time of registration

### Study outputs

| Output type                     | Details | Date created | Date added | Peer reviewed? | Patient-facing? |
|---------------------------------|---------|--------------|------------|----------------|-----------------|
| <a href="#">Results article</a> | results | 01/04/2011   |            | Yes            | No              |