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?

Submission date 24/02/2007	Recruitment status No longer recruiting	[X] Prospectively registered ☐ Protocol
Registration date 21/03/2007	Overall study status Completed	Statistical analysis plan[X] Results
Last Edited 01/02/2011	Condition category Infections and Infestations	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

EudraCT/CTIS number

IRAS number

ClinicalTrials.gov number

Secondary identifying numbers

06/Q0502/91; UKCRN5751

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

Secondary study design

Cohort study

Study setting(s)

Hospital

Study type(s)

Prevention

Participant information sheet

Not available in web format, please use the contact details below to request a patient information sheet

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 measure

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

Secondary outcome measures

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

Overall study start date

02/04/2007

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

Age group

Other

Sex

Both

Target number of participants

3 intensive care units, 14000 patient days, 4000 patients

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

England

United Kingdom

Study participating centre

Room 231 Windeyer Institute of Medical Sciences

London United Kingdom W1T 4JF

Sponsor information

Organisation

National Institute for Health Research (NIHR) (UK)

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Sponsor type

Government

Website

http://www.nihr-ccf.org.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

Publication and dissemination plan

Not provided at time of registration

Intention to publish date

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?
Results article	results	01/04/2011		Yes	No