

University College London Hospitals

NHS Foundation Trust

Smoothing the transition to a change in decontamination practice



Effective decontamination of equipment in the clinical area is vital for providing clean, safe care. This poster will consider the challenges involved in devising, implementing and evaluating a change in the practice of disinfecting equipment and surfaces in the clinical areas of a city-centre teaching hospital.





Identifying the issues

Chlorine-releasing tablets and powders have long been a staple of hospital procedures for cleaning and disinfecting equipment and hard surfaces. Chlorinebased disinfectants such as sodium hypochlorite are some of the most commonly used chemicals for this purpose and are known to be effective against Clostridium difficile spores as well as blood-borne viruses and MRSA.

Chlorine-releasing agents, however, often present challenges in use. Different concentrations may be required for different clinical uses and this can lead to ineffective disinfection if mistakes are made. In addition, from the health and safety perspective, they can cause skin and mucous membrane irritation, lung and breathing difficulties, chemical burns on contact and potential ill health to users. Such hazards mean that care must be taken to avoid incidents whilst using these products. A change was needed. We identified the need to simplify and improve decontamination practice in clinical areas throughout the Trust. We planned to change the method of disinfection of near-patient equipment to improve both efficiency and health and safety for staff.

staff feedback by reducing the amount of gelling agent in the product. The modified product was then re-trialled by staff. On this occasion the feedback was considerably more positive.

Following a successful completion of this initial trial, a second trial in a larger clinical area with a wider variety of clinical acuity and activity took place. The product was received favourably by staff who reported that the main advantage was that it was easy to use. During this phase of the trial, the educational method was tested to ensure that sufficient staff could be trained in the time available which facilitated an instant switch-over. Staff were trained one-to-one in a matter of a few minutes, a process which fitted well with the high levels of clinical activity on the unit and also allowed for individual questions to be answered. Posters were provided in the area so that staff unavailable at the time of training had clear, concise instructions at the point of use.

the monthly Heads of Nursing walkrounds. Since roll-out we have seen an overall improvement in near-patient equipment cleanliness, in particular with commodes. This change in practice is one of a number of infection control interventions that have contributed to an ongoing reduction in infection rates.

The trial period and roll-out of the new disinfection method represent a successful collaboration between a manufacturer and an NHS service provider in initiating and sustaining a significant change in disinfection practice.

> **Disinfection process:** Change required

Tristel's Fuse for Surfaces chlorine dioxide dilutable solution is suitable for the disinfection of large areas such as floors and is easy to use.





The decision was taken to use a product combining chlorine dioxide and detergent which made the process of disinfection simpler and safer. Only one concentration is required for all uses: this reduces the possibility of staff using the product at an ineffective concentration. Although still chlorine-based, the chemical formulation meant that the substance was non-irritant whilst still providing effective disinfection with a short contact time. The product was used in a spray gel form for cleaning of clinical equipment, and a dilutable form suitable for disinfection of larger surfaces e.g. floors. After these successful trials, the Trust decided to roll out the new disinfection method to all wards and departments.

Representatives from the company trained clinical and domestic staff throughout the trust, with the support of the infection control team, over a period of 6 months, enabling the change to happen smoothly and without problems. In each area, training was co-ordinated with clinical staff and an instant switchover method adopted, with the removal of all tablet chlorine-based products on the agreed day. A record of staff names was maintained. Cascade training was promoted in each department once a critical mass of staff had been trained. Follow-up visits were carried out to make sure the roll-out had been successful and staff were using the products correctly.

Review of available products and methods Tristel: Easy to use, effective, one concentration Small trial in one clinical area: Initial evaluation and product modification Second trial: Further evaluation and

Roll-out

discussion at Trust level

Tristel Jet spray gel enables accurate application with no aerosol.

Methods and measurement

Introducing a practice change in a large, complex foundation trust demands careful planning, and the implementation of this change was carried out in several phases. Tristel was initially trialled on a large adult intensive care unit. Feedback from clinical and domestic staff indicated that the product was deemed to be too sticky and therefore didn't move freely enough whilst being used for disinfecting equipment and surfaces. The manufacturers modified the formulation in response to clinical

Evaluating the improvement

Staff have reported satisfaction with the new method of disinfection as it is simpler and quicker. Commode cleaning in particular has been streamlined, as the product is simply sprayed on and wiped off with disposable wipes. This promotes staff compliance with the UCLH trust policy of cleaning commodes with chlorine after every use and frees up valuable clinical time. Improvements in practice have been evaluated by monitoring equipment cleanliness on



Ongoing support and information

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