

Sustainable showering system

As part of the Trusts policy for the control of legionella bacteria in water systems, the maintenance department carried out regular cleaning/disinfection of shower heads and hoses. This cleaning process was contracted out on a quarterly basis.

Northern Devon Healthcare
NHS Trust

Waste, energy & carbon



What was the issue being addressed?

Infection prevention teams are facing an increasing number of challenges as they try to address the issue of waterborne bacterial infection especially those that have become antibiotic resistant. The trust's existing quarterly cleaning process was costly, time consuming and cumbersome as well resulting in a landfill waste. The Trust sought out alternatives that would be lower in cost, waste, water and labour, and could contribute to the maintenance department's cost improvement programme.

What action was taken to overcome the issue?

The trust partnered with a company called Medi-Shower, who were developing a new anti-microbial, water saving shower head.

This was designed specifically for use in the healthcare sector and comprised an anti-microbial embedded shower head and hose, with a colour coded removable spray insert for infection control. The spray insert is positioned within the face of the shower head controlling the spray pattern. It is replaced quarterly and is colour coded for each quarter. An insert identification chart shows which coloured insert should be in the head for each quarter. This provides a very clear visual aid to ensure that the right head is in use. The inserts are recyclable and used ones can be sent back to Medi-Shower for recycling into other products.

The trust and company worked together over a 12 month development period to gain assurance that this new system was viable. In January 2015, Northern Devon Healthcare NHS Trust, with the backing of its Infection Control Department, purchased and installed 179 Medi-Shower units.

What was the impact?

Installation of the new units has enabled the trust to fulfil its hygiene/infection control requirements while also:

- Providing a new shower head that is quicker and easier to clean with very positive feedback from nursing staff
- A clear coding system to enable staff to understand when cleaning/replacement should take place
- 716 insert units have been sent for recycling and use in other items such as anti-microbial pens
- Using the new system will save the Trust up to £35k over five years based on just the 179 units they are currently using.

Lessons learned / success factors?

Some initial problems with the shower hoses kinking and restricting water flow, were overcome with development of a new prototype which was trialled and proved successful. All shower hoses are now longer in length and fitted with swivel connectors which nursing staff are very happy with.

The new shower head inserts are of a bayonet type fitting and can be removed and installed with minimal training. The simple colour coding shows if any have been missed or a wrong insert fitted.

The system also enables control of water pressure and gives the option of up to a 50% reduction in water/energy use.

“The Medi-Shower Heads and Hoses have been installed for over 12 months now and have proved to be successful. They are now performing as expected and have been an important investment for the Trust.”

C J Saunders Maintenance and Contracts Manager



The Medi-shower unit with coloured inserts

Scaling up

Other Trusts could benefit from the anti-bacterial system these showers provide, lower maintenance costs, a reduced risk of infection, potential savings on water and energy and an easy to clean/retro-fit system. There is also zero waste over the five year product lifetime.

Although offering modest financial savings if scaled up nationally and combined with water and heating costs this could be significant.

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