NHS TRUSTS across England are under orders from the chief nursing officer Christine Beasley to step up their efforts to control *Clostridium difficile* infection rates.

For Professor Beasley, this is a matter of high priority, and she expects to join experts in the field in a few weeks’ time for a ‘consensus on good practice’ conference in Manchester dedicated to the issue.

She will talk about a number of key areas, including the value of high impact interventions, lessons from outbreaks and interventions, the need to understand the root causes of outbreaks, and using the Department of Health’s *C. difficile* review tool.

She will also no doubt learn from the other speakers, who will address topics such as monitoring and surveillance, involving and engaging patients, recognising and assessing risk, and changing services and practice.

Extra funding

To help in the battle against *C. difficile*, acute trusts are each being offered £300,000 from the DH Capital Challenge Fund to help refurbish their bathrooms and toilets, convert their older wards into single rooms, and ensure that their surgical instruments and other equipment are decontaminated.

The reasons why such high levels of investment are being made are easy to find.

According to figures from the Health Protection Agency (HPA), in England in 2004/05, the number of patients aged 65 years and above with *C. difficile* infection increased by 17 per cent to almost 52,000.

Acknowledging that this increase may be due to improvements in reporting as well as a rise in the number of cases, the HPA comments: ‘Rates of infect-
ion were high in a wide range of hospitals throughout the NHS in England and these results establish clearly the scope for improvement.’

Figures published in February by the Office for National Statistics meanwhile also give cause for concern. They show that the number of death certificates in England and Wales in which *C. difficile* is mentioned increased from 1,214 in 2001 to 3,807 in 2005, while in 2004/05 alone, there was a 69 per cent increase in *C. difficile* associated deaths.

**Reporting cases of infection**

Acute trusts have been obliged to report all cases of *C. difficile* infection in patients over 65 since 2004, whether the infection is thought to have been acquired in the trusts, other hospitals, or in the community.

To reinforce this procedure, Professor Beasley and chief medical officer Sir Liam Donaldson issued in December joint guidance to all NHS trusts, primary care trusts (PCTs) and strategic health authorities. This announced that, from January, *C. difficile* data, previously published annually, would be published quarterly by the HPA. It also pointed out that acute trusts and PCTs should agree local targets for ‘a significant reduction in *C. difficile* infections’.

‘The scale of the reduction is a matter for local agreement based on the current performance of the trust together with measures that the PCTs agree to take to support the work within the hospital,’ the guidance states.

‘Where there is currently a high level of infections (above four cases per 1,000 bed days per annum) it might be reasonable to expect a reduction of at least 25 per cent in year,’ it suggests.

‘In other trusts where the current rate is one case per 1,000 bed days per annum or lower, it might be reasonable to expect the current rate to be maintained.’

**Operating framework**

Control of healthcare acquired infections, including *C. difficile*, is one of four development priorities set out in the NHS operating framework for 2007/08.

The framework document, published in December, states: ‘We expect PCTs and providers to engage with clinicians and agree local targets for a significant reduction in infections. The targets need to be reflected in contracts between PCTs and providers.’

‘*Clostridium difficile* is a particular problem because, unlike other infections, patients become vulnerable to it through the use of antibiotics to treat their underlying illness,’ the framework points out.

‘Coupled with the fact that the number of cases is increasing, this suggests further controls are required,’ it says, noting that ‘rigorous implementation of existing guidance’ is needed to tackle the problem.

According to a survey of directors of infection and prevention control in England, published by the HPA last year, meanwhile, the key obstacle to the effective management of *C. difficile* is a lack of isolation facilities.

It found that only 11 per cent of directors surveyed said they had wards that could be used for this purpose, while almost 40 per cent of trusts did not isolate all cases routinely.

In March this year, the Healthcare Commission called for further improvements in hygiene in acute trusts.

A survey of 128,000 staff across 326 trusts found that 36 per cent reported that hot water, soap, paper towels and alcohol rubs were not always available when needed, and that 45 per cent said that they were not always available to patients.

‘These figures have changed little since 2005 and show there is room for improvement,’ states the survey report.

The survey also shows that 32 per cent of staff have received no training in infection control and, when asked whether they would be happy to receive care as patients in their own trusts, 25 per cent said no.

Two of the questions that arise from these figures are: How do trusts and PCTs agree targets on *C. difficile* reduction? And how do they engage staff in reduction strategies?

Weston Area Health NHS Trust, which has a *C. difficile* infection rate of 3.79 per 1,000 bed days, has agreed with North Somerset PCT a target of 3.00.

‘There is always more work to be done on cleanliness and we must aim to be the best of the best. The good thing about a target is that it concentrates the minds of everyone.’

‘This is now in our draft service level agreement with the PCT and it wasn’t a long drawn out procedure,’ says director of nursing and operations Rachel Slater. ‘The trust is committed to infection control and we’ve already started a programme of work.’

With Capital Challenge Fund resources, the trust is establishing ten new side rooms at Weston General
Hospital, which are cleaned twice a day with a new chlorine based disinfectant if patients are infected with C. difficile.

A rolling programme of regular high pressure steam cleaning in every ward has also been started, new bed pan cleaners have been bought, old commodes have been replaced, and extra basins have been fitted.

‘We’ve also introduced disposable curtains throughout the trust,’ says Ms Slater. ‘This makes infection control much easier, as they are quick to replace in case of an outbreak.’

Ms Slater admits that the hospital building presents obstacles to infection control but the trust is studying new ways to improve infection control, such as making housekeepers members of the ward teams.

Weston Area Health NHS Trust is also in discussions with the local PCT about managing more people with C. difficile infection in the community.

“We have many nursing homes in this area and, in many ways, it would be easier to manage the residents there, where they have their own rooms, than bring them into hospital,” Ms Slater suggests.

The trust is also keen to raise awareness of C. difficile infection among the public so that, when callers ring the hospital and are put on hold, they will hear a message reminding them that, if they have been feeling sick or have had diarrhoea recently, they should not visit patients in the hospital.

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Infection control policies

The DH code of practice on managing C. difficile requires all trusts to have infection control policies that cover antibiotic prescribing and environmental decontamination.

It says that extended spectrum cephalosporins and fluoroquinolone antibiotics should only be used when indicated by clinical condition or the results of microbial investigation.

‘Their empiric overuse must be avoided to reduce the risk of unnecessary side effects, and to reduce the likelihood of emergence of antibiotic resistant organisms,’ it says.

The code advises trusts that infected patients should be isolated, ‘ideally’ in single rooms, although a hospital coping with an outbreak without enough rooms should create ‘a closed environment’ for affected patients.

This could be a ‘typical 4/5 bed bay’ but, where possible, the unit should have a door that is usually shut, the code advises. Staff movement in and out of the ward should be ‘monitored rigidly’ and patients should not be moved to other parts of the hospital until they are known to be infection free.

Derby Hospitals NHS Foundation Trust has a C. difficile infection rate of 2.00 per 1,000 bed days and it has agreed with the local PCT a reduction target of 25 per cent. The trust target is twice this however, at 50 per cent.

Director of nursing Kay Fawcett explains the need for ambitious targets with reference to meticillin resistant Staphylococcus aureus (MRSA): ‘This is not something that is going to go away. I suspect it will be as big a challenge as MRSA.’

The trust plans to spend its Capital Challenge Fund allocation on buying steam cleaners for every ward and updating bath and shower rooms.

Early last year, when it became clear that cases were increasing, matrons, ward sisters and other clinicians got together and decided to establish an outbreak control committee, led by Ms Fawcett and the director of infection prevention and control.

A 30-bed medical ward has been designated a cohort ward restricted to patients with C. difficile infection and those who have diarrhoea and who are suspected of being so.

Confirmed and suspected cases are nursed in separate bays, and all clinical staff are required to wear scrubs, while posters on the doors remind everyone in the wards to wash their hands. Leaflets explaining the precautions have also been produced for patients and their families.

Patients cannot be moved from the isolation ward unless they have been free of diarrhoea for 72 hours, and visiting hours have been restricted across all wards to two two-hour periods: one in the afternoon and one in the early evening.

‘This is at the ward sister’s discretion but the new system makes it much easier for thorough cleaning, as well as more restful for patients,’ says Ms Fawcett.

Visitors are asked to wash their hands with soap and water before entering and leaving patient bays, and before eating, and, like in Somerset, not to come if they have been feeling unwell or have recently had
diarrhoea. They are also asked to avoid sitting on patients’ beds and bringing in children who are under 12 years old.

Ms Fawcett thinks that the strategy for reducing the incidence of C. difficile infection and coping with outbreaks has a high degree of support from clinicians across the trust. The establishment of the isolation ward for example has been excellent for staff development, she says.

She is confident of further progress, and claims to discern a new pride in care. ‘We have housekeepers who challenge consultants about not washing their hands and I love to see that,’ she says, while steam cleaners will make it easier to eradicate the C. difficile spores, which live for about 70 days, she says.

‘There is always more work to be done on cleanliness and we must aim to be the best of the best,’ she says. ‘The good thing about a target is that it concentrates the minds of everyone.’

Involving communities
Maidstone and Tunbridge Wells NHS Trust, in Kent, has also agreed a 25 per cent reduction target in C. difficile cases with its local PCT.

It is spending its Capital Challenge Fund allocation on providing more wash basins, hydrogen peroxide vapour decontamination systems, disposable bed pans, new macerators and better signage to hand washing facilities.

The trust’s management of C. difficile is currently being reviewed by the Healthcare Commission following an outbreak last year, when the infection rate was 4.08 per 1,000 bed days.

Then director of nursing and now director of healthcare planning and commissioning Bernard Place, who is also due to speak at the Manchester conference with the CNO in July, says that the target was agreed after discussions with the director of public health at the PCT.

‘What we are keen to do is bring the community into this and reduce the pool of patients with C. diff overall. That means getting GPs and consultants to work to a common antibiotic policy,’ he says. ‘A 25 per cent reduction, when the national trend is rising, will be a considerable challenge but we must combat this.’

Absolute compliance with infection control procedures is a must and part of the challenge is winning acceptance for this across all staff groups and departments, he stresses. ‘It doesn’t matter if you are a consultant or cleaner; patient safety is the issue and hand washing cannot be ignored.’

It is often difficult to isolate patients in old buildings that have too few single rooms and basins, so the importance of infection control measures, and the message that poor hygiene can kill, needs to be reinforced constantly, Mr Place stresses.

‘Mortality from C. diff is running at the same level as deaths on the roads and we need to raise awareness all the time,’ he says. ‘There is no room for a cavalier attitude towards cleanliness.’

At The Royal Bournemouth and Christchurch Hospitals NHS Foundation Trust, which has one of the lowest C. difficile infection rates in the country, at just 0.65 per 1,000 bed days, all junior doctors wear laminated badges that are printed with the trust’s antibiotic policy. They are the same size as their name badges and include recommendations for common infections.

Microbiologist and trust consultant Mick Martin, another speaker at the Manchester conference, says that the guidelines ‘were developed four years ago and have been well accepted’. Staff also have a scoring system to advise them who should be given priority for side rooms.

Across the country
It is evident that the battle to contain C. difficile is being hard fought across the country, and that nursing staff must employ a range of skills and strategies to keep the upper hand

For details of the Manchester conference, entitled A Practical Guide to Reducing Clostridium difficile, on July 11, contact Healthcare Events on 020 8541 1399 or email matt@healthcare-events.co.uk

For other conference details, see page 36

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