Cross-infection collapse?

Bruce Nell looks at the HTM01-05 guidance, its implications for those in dental practice and how the Department of Health intends to enforce it

With the publication of the Department of Health’s Decontamination Health Technical Memorandum (HTM 01-05) earlier this year, the Government has signalled its determination to affect a change in practice within the dental profession. Within its introduction, it states the desire to ‘deliver the standard of decontamination that our patients have a right to expect’ through ‘a programme of continuously improving decontamination performance at a local level’.

The way in which the authorities will ensure dental practices are adhering to the guidelines is through the Care Quality Commission (CQC). Over the next two years all healthcare providers (including NHS and private dentists) will have to be registered with the CQC and the ‘provision of a safe, clean environment and appropriate decontamination of dental equipment’ will be a requirement. Demonstrating compliance will involve a self-audit of a practice’s procedures, with supporting evidence to show decontamination management is in effect.

The focus of the guidance is to impel a progression from the current ‘essential’ quality requirements for every practice to have instruments which are sterilised after the decontamination (reprocessing) cycle, to a state of ‘best practice’ comprising of three areas, summarised as:

- Separate decontamination facilities
- Use of a validated automated washer-disinfector
- Controlled storage of reprocessed instruments.

Many practitioners may well feel a degree of affront at the suggestion that their procedures for decontamination are not up to standard or, at worst, hazardous to the health of patients and staff. However, the ‘we’ve had no problems’ retort, coupled with the side effects of a repetitive process could lead to problems, as its not just contempt that is bred by familiarity when dealing with infection control.

The HTM 01-05 makes reference to a survey conducted in 2004 of the decontamination in general practices in Scotland, and it makes for some interesting reading. For instance, 42 per cent of surgeries did not have a dedicated area for decontamination, with the space also being used for activities such as food and beverage preparation or housing the compression unit; 52 per cent did not have a dedicated sink for cleaning contaminated instruments.

Consider for a moment the potential ramifications to the health of staff and patients of having a compression unit in with contaminated instruments. At least the Department of Health recognises that there needs to be time to institute the shift towards best practice of the separation of instrument reprocessing from other (clinical or otherwise) practices. It’s understood that sterilisation may well be taking place within surgical areas. At least if it’s using a bench-top machine, transplanting it to the separate facilities (once the necessary refurbishments have taken place) won’t be a difficult task.
The second aspect of achieving best practice is the storage of instruments. In the 2004 survey, 96 per cent of surgeries used manual washing as either the sole method, or part of the cleaning process. 45 per cent of surgeries had a designated sink purely for re-processing instruments, which means that more than half of the surgeries were using the same sink for other purposes, such as hand washing. Can anyone confidently say they can guarantee the same is not happening in their practice?

HTM 01-05 states that ‘practices should plan for the introduction of a washer-disinfector’ primarily because hand washing cannot be guaranteed of maintaining controlled conditions (one two per cent of surgeries in the 2004 survey were using a detergent specifically formulated for the manual washing of surgical instruments; some were using kitchen cleaning agents). Using a washer-disinfector is the preferred method for cleaning dental instruments because it provides the best option for control and reproducibility of cleaning; the process can be validated which is an important aspect of establishing compliance.

In response to the HTM 01-05 companies are manufacturing washer-disinfectors specifically designed to meet the requirement for maintaining records of correct functioning of the machine. By incorporating an in-built microprocessor, which controls and records the pressure and temperature used during the cycle, an independent monitor with printer then creates a printed copy as evidence so that a record showing compliance is created; Since this needs to be completed every day, having an automated system really is a time-efficient solution. Practices will have to maintain such records for at least two years.

The washer-disinfector also has to be easily dismantled to allow each part to be adequately cleaned. By having a water reservoir that is completely detachable from the machine means a practice can easily ensure they remain confident in minimising cross contamination from bacterial or chemical agents within water supplies.

The third aspect of achieving best practice is the storage of instruments. The HTM 01-05 recommends that: “the storage of instruments does not exceed 21 days for instruments sterilised in a non-vacuum (type A) steriliser, or 10 days if sterilised in a vacuum (type B or S).”

The 2004 survey found there were flaws in the methods used to clean, sterilise and store re-processed instruments, with the necessary record keeping frequently incomplete.

An important element of achieving compliance will be to have an assessment of the changes needed within the practice to meet ‘best practice’ requirements. It’s an opportunity for managers to re-evaluate current procedures and to establish a clear framework within which the Infection Control Policy will take a critical role in ensuring the CQC’s requirements are met. Being able to demonstrate records are being kept in regards to decontamination equipment will be a significant element within that so any system that has been designed to facilitate will be of valuable service.

To demonstrate best practice; ‘a cleaning process should be carried out using a validated automatic washer-disinfector’. A dental practice needs a machine that can reliably and consistently produce the same high standard in cleaning and disinfection which is required to minimise the risk of cross contamination.

Undoubtedly a great deal has been done to raise the standards of decontamination in dental practices since 2004. A similar survey of practices in England conducted in 2008/9 will return its findings in the near future and its results will be of great interest.

About the author
Bruce Nell worked on Equipment and Surgery Design for Wrights Millners in South Africa. Trained in Dental Ergonomics at RGDC in the USA before going on to lecture extensively in South African Universities on Sterilisation and Advancements in Dental Equipment. Bruce is now the Sales Director of Yoyo Dental Supplies. He also lectures at local PCT Dental Forums on HTM 01-05. Led Design and Considerations.