# Controlling infection in British nursing homes

*It is time for a national strategy*

The Public Health Laboratory Service recently published the first audit of infection control practice in nursing homes in the United Kingdom.[1] It proposes 16 critical standards relevant to person to person spread of infection. It recommends that inspectors should adopt these standards to assure quality in infection control in nursing homes and link accreditation to compliance. The audit and the standards are both long overdue.

The 1993 Community Care Act resulted in a major shift of patients from NHS long stay hospital beds to private community based nursing homes.[2] There are no surveillance or point prevalence studies in the UK, so the current position with respect to control and prevention of infections in UK nursing homes is unknown, though the medical and nursing resources to prevent and manage infection are thought not to have followed the patients into the community.[3]

In NHS long stay ward residents had access to geriatricians, infection control nurses, and microbiologists. Private nursing homes have no obligation to employ staff trained in care of the elderly, and community infection control nurses are not obliged to visit. The statutory role of community infection control nurses is to visit local authority run residential care homes, where residents are less dependent than those in nursing homes and therefore less susceptible to infection.[3] Moreover, there are too few of them to visit nursing homes, even if asked. The Public Health Medicine Environmental Group, which produced guidelines on infection control for the Department of Health, advises homes to consider insuring against outbreaks of infectious disease and to appoint and train staff responsible for infection control, but this is not obligatory.[4]

Extrapolation from transatlantic studies suggests that an average 36 bed nursing home in the UK might have 50-80 acute infections per year, with five or six residents affected at any one time.[3] We know, however, that nursing homes are responsible for 78% of outbreaks of infective diarrhoea in the UK[5] and may be reservoirs of methicillin resistant *Staphylococcus aureus* (MRSA), with up to 27% of residents being colonised.[6]

The Public Health Laboratory Service audited, fed back, and reaudited infection control practice in 50 nursing homes, using a tool based on guidelines issued to homes by the Public Health Medicine Environmental Group.[4] Certain standards were well met, but still much potential for improvement in key procedures such as handwashing, use of isolation, and clearing up of excreta and other body fluids. There was encouraging improvement after reaudit, but, even so, critical standards relating to the infection control aspects of caring for residents with MRSA, enteric illness, urinary catheters, or wounds were met in only 19%, 5%, 19%, and 40% of homes respectively (see table on the *BMJ*'s website).[1] The final report suggests that future efforts should concentrate on caring for residents with certain infections, such as enteric illness, scabies, and MRSA, and on providing high quality catheter, skin, and wound care to prevent urinary and skin infections.[3] Indeed, many aspects of preventing and managing infection in nursing homes embrace good geriatric medicine.

Geriatricians are concerned about standards of assessment and continuing medical, nursing, and remedial therapy care in nursing homes.[7] An American study of patterns of practice in nursing homes has shown, for example, that cure of pneumonia was associated with the attending physician being trained in geriatric medicine.[8]

What should be done to improve matters? The current report clearly shows that audit can improve performance and that nursing homes are keen to cooperate. The NHS priorities guidance for 1999-2002 includes reduction of hospital acquired infection and antimicrobial resistance. National plans for reducing these have been drawn up,[9 10] from which private nursing homes—now effectively the long stay wards for the NHS—are largely excluded. Surveillance and feedback will be central to achieving such reductions,[11] and one recommendation that could facilitate this in nursing homes is to audit the 16 critical standards as part of inspection and accreditation. Such standards could be a marker of overall quality of care,[3] of interest to both local and health authorities. Geriatricians should play a key part in the monitoring process. Research is also required, such as surveillance studies and trials of interventions to prevent infection, to help develop a national plan similar to that for acute hospitals[9] to control infection in nursing homes and raise standards of clinical care.

Sheldon P Stone *senior lecturer in geriatric medicine*

(s.stone@rfc.ucl.ac.uk)

C C Kibbler *consultant microbiologist*

Royal Free Hospital, London NW3 2PF

C Bowman *associate director*

International Institute on Health and Ageing, University of Bristol, Bristol BS8 1TX

David Stott *professor of geriatric medicine*

Glasgow Royal Infirmary, Glasgow G4 0SF

1 Roberts CR, Mayon-White R, Grant Casey J. Audit of infection control practice in nursing homes 1996-8. London: PHLS, 2000. www.phls.co.uk
2 Department of Health. *Health and personal social services statistics for England 1997*. London: Department of Health, 1998.
3 Stone SP. Soil, seed and climate—developing a strategy for prevention and management of infections in UK nursing homes. *J Hosp Infection* 1999;43(suppl):S29-38.
4 Public Health Medicine Environmental Group. *Guidelines on the control of infection in residential and nursing homes*. London: Department of Health, 1996.
5 Djuretic T, Ryan MJ, Fleming DM, Wall PG. Infectious intestinal disease in elderly people. *Commun Dis Rep CDR Review* 1996;6:R107-12.
6 O'Sullivan NP, Keane CT. The prevalence of methicillin-resistant *Staphylococcus aureus* among the residents of six nursing homes for the elderly. *J Hospital Infection* 2000;45: 322-9.
7 Black D, Bowman C. Community institutional care for frail elderly people: time to structure professional responsibility. *BMJ* 1997;315:441-2.
8 Medina-Walpole AM, McCormick WC. Provider-practice patterns in nursing home-acquired pneumonia. *J Am Geriatr Soc* 1998;46:187-92.
9 Department of Health. The management and control of hospital infection. London: Department of Health, 2000 (HSC2000/002).
10 *UK antimicrobial resistance strategy and action plan*. London: Department of Health, 2000.
11 National Audit Office. *The management and control of hospital acquired infection in acute NHS trusts in England*. London: Stationery Office, 2000. www.nao.gov.uk

bmj.com

*A table giving critical standards for infection control appears on the BMJ's website*

*BMJ* 2001;322:506

*We ask all editorial writers to sign a declaration of competing interests (bmj.com/guides/confli.shtml#aut). We print the interests only when there are some. When none are shown, the authors have ticked the "None declared" box.*