

# House of Commons Committee of Public Accounts

# Improving patient care by reducing the risk of hospital acquired infection: a progress report

Twenty-fourth Report of Session 2004–05

Report, together with formal minutes, oral and written evidence

Ordered by The House of Commons to be printed 6 April 2005

#### The Committee of Public Accounts

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Ms Ruth Kelly MP (Labour, Bolton West)

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## **Summary**

The best available estimates suggest that each year in England there are at least 300,000 cases of hospital acquired infection, causing around 5,000 deaths and costing the NHS as much as £1 billion. In 2000, our predecessor Committee drew attention to the serious impact on patients of the NHS's lack of grip on the extent and cost of hospital acquired infection, such that it was difficult to see how the Department and NHS trusts could target activity and resources to best effect. They concluded that a root and branch shift towards prevention was needed at all levels of the NHS, requiring commitment from everyone involved and a philosophy that prevention is everybody's business, not just the specialists.

The Department told the Committee that it accepted that the incidence of hospital acquired infection could be reduced significantly with associated cost savings and that a wide range of action was already in hand to achieve this. Indeed they stated that tangible measurable progress was already being delivered. Given such a categorical assurance the Committee expects the Government to meet it.

On the basis of a follow-up Report by the Comptroller and Auditor General,¹ the Committee examined the progress made by the Department of Health and NHS trusts in reducing the risks of hospital acquired infection. We found that progress in implementing many of our predecessor's recommendations had been patchy, and that there was a distinct lack of urgency on several key issues such as ward cleanliness and compliance with good hand hygiene; and limited progress in improving isolation facilities or reducing bed occupancy rates. Progress in preventing and reducing the number of such infections continues to be constrained by a lack of robust data, limited progress in implementing a national mandatory surveillance programme and a lack of evidence of the impact of different intervention strategies.

Rather than introduce mandatory national surveillance of all hospital acquired infections, as recommended by our predecessors, the Department focussed on mandatory laboratory reporting of methicillin resistant Staphylococcus aureus (MRSA) bloodstream infections from April 2001. This surveillance, which covers less than 6% of infections, shows that the total number of reported Staphylococcus aureus bloodstream infections has increased by 5% over the last three years, and that the proportion of these infections that is MRSA, at 40%, is amongst the worst levels in Europe.

Following our predecessor Committee's 2000 Report, the Department issued guidance and initiatives which emphasised the priority to be given to infection control, but at trust level conflicts with other key targets and priorities have continued to stand in the way of improving prevention and control. Since publication of the Comptroller and Auditor General's 2004 follow-up report, however, Health Ministers have made it a top priority for NHS hospitals to improve cleanliness, and to lower both healthcare acquired infection and MRSA rates. In particular, they have introduced a target for all NHS trusts to reduce MRSA bloodstream infection rates by 50% by 2008; and established a "Towards Cleaner

Hospitals and Lower Infection Rates Programme Board", chaired by the Chief Nursing Officer, with representatives from key stakeholders to drive through the much needed improvements.

Whilst these initiatives may also impact on infections other than MRSA, they do not target the broader issue of multi-drug resistant infections which have a wide range of risk factors and which require specific interventions other than improved cleanliness. It is also not yet clear how the 80% or so infections not covered by the Department's current mandatory surveillance programme will be measured and consequently managed.

## Conclusions and recommendations

- 1. The Department hopes to reduce MRSA rates by employing the same approach used in achieving targets for waiting times in accident and emergency, cancer treatment, and surgery, where the Department have driven through improvements using a combination of financial incentives, close performance management and support. The work being undertaken by the Department and Health Protection Agency to standardise data collection and ensure consistency of reporting is crucial to the development of a robust comparable database which will ensure consistency in recording and reporting. The Department will also need to clarify from the outset what support will be available to trusts, and whether and if so what incentives will be available to help deliver improvements.
- 2. The Department's decision in 2001 to adopt a more limited approach to mandatory national surveillance than our predecessors had recommended means that they still lack a grip on the extent and impact of hospital acquired infections other than MRSA bacteraemia. This lack of robust comparable data, meaningful to clinical staff is limiting the NHS's ability to tackle the problem effectively. The Department needs to work with the Health Protection Agency to expand national mandatory surveillance, based on a robust risk assessment with input from clinical staff. Its National Programme for IT needs to include the hardware and software needed to support the collection of national surveillance data, including effective links between pathology, microbiology, prescribing and patient administration systems.
- 3. The national prevalence figure which estimates that at any one time 9% of patients have a hospital acquired infection is at least 10 years old. In December 2004 the Department commissioned the Hospital Infection Society to conduct a new prevalence survey to obtain up to date information. The Department should agree a timetable for this work which will produce results within the coming year.
- 4. The NHS do not know how many patients have died as a result of a hospital acquired infection, and the much quoted figure of 5000 deaths is based on 1980s American data. Evidence from the reviews of death certificates which mention MRSA as a contributory factor show a 15 fold increase since 1992. The Department needs to expedite its proposal for hospital acquired infections to be identified on death certificates, and its proposed audit of deaths attributable to all the main types of hospital acquired infection and report back to the Committee by the end of 2006.
- 5. Compliance with good infection control practice such as hand hygiene is still patchy. Most NHS trusts have run hand hygiene initiatives in the last three years, including making alcohol hand rub much more widely available. Yet sustained compliance, among doctors in particular, is still poor. The National Patient Safety Agency's (NPSA) cleanyourhands campaign, which is being rolled out to the NHS from September 2004, is aimed at improving compliance. The Department needs to work with the NPSA to develop a better understanding of the reasons why compliance is not sustained and how it might best be tackled.

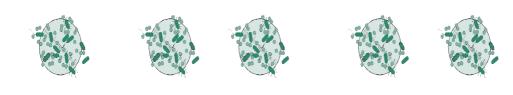
- 6. The Department has still not implemented the National Audit Office's 2000 recommendation to publish a national infection control manual, despite four years of research and consultation. As a result there are still no consistent, evidence based, nationally accessible infection control guidelines, nor an effective means of disseminating examples of good practice. The Department, together with the NHS University and the National Electronic Library for Health, should establish a repository for national evidence based guidelines and good practice examples on issues such as antibiotic prescribing, screening of patients, isolation of infected patients, aseptic techniques, uniforms, and bed management practices.
- 7. Each trust has now designated a new Director of Infection Prevention and Control, but all are staff with existing roles and responsibilities, predominantly infection control doctors. Despite a small improvement in the ratio of infection control nurses to beds there remains a mismatch between what is expected of infection control teams and the resources available to them. The Department, working with trusts and strategic health authorities, should conduct a survey of the new Directors of Infection Prevention and Control to determine whether they have the authority and resources to fulfil their designated role, and whether there are any constraints on implementation.
- 8. New initiatives such as the Secretary of State's "Towards Cleaner hospitals and lower rates of infection" programme, the new Matrons Charter for cleaner hospitals and the model cleaning contract are welcome developments in the fight to improve hospital hygiene. NHS trusts' implementation of these initiatives should be evaluated by an annual survey to see that they are actually improving cleanliness on the wards. Trusts should also provide clear and accessible guidance for patients on the standards of ward cleanliness that they are entitled to expect, and obtain feedback from patients on the standards achieved in practice. The Department should determine whether hygiene assessments and cleaning methods used by the food and hospitality industries could improve consistency and reduce subjectivity of cleanliness assessments.
- 9. The design of hospitals can help minimise hospital acquired infection, particularly by ensuring the provision of sufficient single rooms with appropriate ventilation for use as isolation facilities. Infection control teams should be part of the planning team for refurbishments or new buildings. Strategic health authorities should monitor whether infection control requirements and guidance issued by NHS Estates are being complied with, and whether contractors are being held to account for any shortfalls.
- 10. There is evidence that wider factors such as bed management policies and the need to meet waiting times targets can compromise infection prevention and control. Seven out of ten trusts are still operating with bed occupancy levels higher than the 82% that the Department told our predecessors it hoped to achieve by 2003–04. Trusts need to reduce bed occupancy levels and to adopt more effective bed management practices which avoid patients moving too frequently.
- 11. In 2001 the Department assured our predecessors that the need for isolation facilities was being addressed, yet only a quarter of the 56% of trusts that had undertaken a risk assessment to determine the number and quality of isolation

- facilities had obtained the required facilities. Strategic health authorities should ensure that all NHS Trusts have carried out a risk assessment of their isolation facilities, in line with Health and Safety legislation, and work with them to determine a timetable and resourcing strategy to address identified shortfalls in requirements.
- 12. The Comptroller and Auditor General's Report noted that 12% of infection control teams reported that their recommendation to close a ward or hospital to admissions for the purpose of infection control had been refused or discouraged by their Chief Executive. NHS trusts should inform their strategic health authorities when a recommendation to close a ward is refused. Strategic health authorities should ensure that these incidents are recorded and should work with trusts to identify ways of minimising the impact of such closures.

# 1 The extent and impact of hospital acquired infection

1. Hospital acquired infections are infections that are neither present nor incubating when a patient enters hospital. Their effects vary from discomfort for the patient to prolonged or permanent disability and even death. Not all such infections are preventable since the very old, the very young, those undergoing invasive procedures and those with suppressed immune systems are particularly susceptible (Figure 1).<sup>2</sup>

Figure 1: The top five ways that hospital infections can be acquired and their estimated prevalence levels



blood infections (6% of all hospital acquired infection ) after surgery (11%)

urinary tract infections (23%) chest infections (23%) skin infections (10%)

#### Seven key points about hospital acquired infections

- There are at least 300,000 hospital acquired infections a year, with around 9% of patients at any one time having one;
- urinary tract infections are the most common type of hospital acquired infection and bloodstream infections have the highest associated mortality;
- the old and young and those with weakened immune systems due to illnesses are most at risk of catching one;
- the two strongest risk factors are the degree of underlying illness and the use of medical devices;
- there has been an increase in the number and frequency of infections resistant to common antibiotics for example the bacteria staphylococcus aureus is responsible for around half of all blood infections and in 2003 around 40% of these were resistant to the antibiotic methicillin (MRSA), compared with just over 2% in 1992.
- the cost to the NHS is around £1 billion a year as patients with one or more infections can incur costs that are on average 2.8 times greater than uninfected patients, mainly because such patients remain in hospital on average 11 extra days; and
- not all hospital acquired infection is preventable but the 2000 Report noted that infection control teams believed that they could be reduced by up to 15%, avoiding costs of some £150 million.

Source: National Audit Office, Health Protection Agency and London School of Hygiene and Tropical Medicine

2. Our predecessors reported on this subject in Session 1999-2000, concluding that the NHS did not have a grip on the extent of hospital acquired infection and the costs involved.

<sup>42</sup>nd Report from the Committee of Public Accounts, The management and control of hospital acquired infection in Acute NHS Trusts in England (HC 306, Session 1999–2000) paras 1–2; Ev 34

Without such data it was difficult to see how the Department of Health (the Department), health authorities and NHS trusts could target activity and resources to best effect. The Committee emphasised that a root and branch shift towards prevention was needed at all levels of the NHS if hospital acquired infection was to be kept under control and that this would require commitment from everyone and a philosophy that prevention was everyone's business not just the specialists'. Leadership and accountability, together with education, training and effective performance monitoring was also crucial to improving the management and control of infection.<sup>3</sup>

- 3. More than four years later, the Department still does not have a grip on the extent of hospital acquired infection, with the exception of the mandatory reporting of methicillin resistant *Staphylococcus aureus* (*MRSA*) bloodstream infections which was introduced in 2001–02. Indeed what evidence there is suggests that things have got worse, particularly with reference to MRSA. Between 2001–02 and 2003–04 there has been a 5% increase in the number of *Staphylococcus aureus* bloodstream infections (from 17.933 to 19,311) and the number that are methicillin resistant have increased from 7,250 to 7,647.<sup>4</sup> There is also no new information on the impact of hospital acquired infection, either in terms of financial costs to the NHS, or the human costs to patients and their families, particularly where a patient dies as a result of contracting the infection.<sup>5</sup>
- 4. There has been only limited improvement in information on the extent and impact of hospital acquired infection since the figures used in the Comptroller and Auditor General's 2000 Report, particularly as these figures are based on research that is now several years old. The Department acknowledged this concern, but drew attention to the extensions to mandatory surveillance which it introduced during 2004, with the first year's data available in 2005. More recent initiatives are attempting to update the national picture (Figure 2).
- 5. In 2000 the Department told the then Committee that it had taken action to improve surveillance, including researching the links between antimicrobial resistance and prescribing, measuring infections that occur after patients have been discharged from hospital, and doubling their investment in the Nosocomial Infection National Surveillance Scheme (NINSS). Whilst recognising the Department's plans to expand the scheme, our predecessors recommended that NINNS should be made mandatory. In the Treasury Minute response the Department accepted these recommendations and indeed told the Committee that a new NHS Healthcare Associated Infection Surveillance Group (HAISSG) had been set up in September 2000 to provide the Department with urgent recommendations on infection surveillance aimed at delivering mandatory reporting of hospital acquired infection by all acute trusts from April 2001. HAISSG was also expected to take forward the work on post-discharge surveillance.

<sup>42&</sup>lt;sup>nd</sup> Report from the Committee of Public Accounts, *The management and control of hospital acquired infection in Acute NHS Trusts in England* (HC 306, Session 1999–2000) paras 1–3

<sup>4</sup> C&AG's Report, paras 3.7-3.8, 3.13; Qq 1-2, 44, 95; Ev 24, 26-30

<sup>5</sup> C&AG's Report, paras 15, 3.20-3.25

<sup>6</sup> ibid, para 3.3 and Figure 5; Qq 44, 173, 181; Ev 38

<sup>42&</sup>lt;sup>nd</sup> Report from the Committee of Public Accounts, *The management and control of hospital acquired infection in Acute NHS Trusts in England* (HC 306, Session 1999–2000) para 4(ii)

<sup>8</sup> Treasury Minute on the 42<sup>nd</sup> Report from the Committee of Public Accounts 1999–2000, Cm 5021

6. There has been little progress on many of these actions. Instead of making NINSS mandatory the Department decided to adopt a new national approach to surveillance starting with the mandatory laboratory based reporting of MRSA bloodstream infections in April 2001. Since then a limited number of other streams of surveillance, mainly laboratory reporting, have been introduced, but there has been no progress on mandatory surveillance of surgical site infections (other than orthopaedics), on urinary tract infections or on post-discharge surveillance (Figure 1). The HAISSG was disbanded in September 2002, and responsibility for developing surveillance transferred to the Health Protection Agency. The Department said that the Group was only meant to be a short term arrangement to make recommendations which they have since been implementing, and that they are now planning to put together another group with a different area of expertise. The properties of the

Figure 2: Data available on the extent and impact of hospital acquired infection, and Departmental plans to improve this information

Figure given to Committee	Data source and explanation	Proposals to improve the evidence base
At any one time, <b>9%</b> of hospital patients have an infection caught in hospital. This figure shows the <i>prevalence</i> of hospital acquired infection (Figure 1 also refers).	Derived from the Second prevalence study by Emmerson et al, published in 1996(i), based on data from 157 hospitals studied over a 15 month period between May 1993 and July 1994 which provided a mean hospital acquired prevalence rate of 9% (range 2–29% depending on the type of infection).	In December 2004 the Health Protection Agency, on behalf of the Department, asked the Hospital Infection Society to undertake a third prevalence study. The timeframe for the study has yet to be agreed.
Over <b>300,000</b> in-patients acquire one or more infections each year in England. This figure shows the <i>incidence</i> of hospital acquired infection – the number of new cases that occur in a given time period.	Derived from the Socio-economic burden study of hospital acquired infection (ii). The report, which was published in 2000, indicated that in 1994–95 at least 321,000 patients acquired one or more hospital acquired infection. This figure is likely to be an underestimate as the study only covered 70% of adult non-day cases and excluded day cases, children, neonates and infections that presented post-discharge.	Mandatory surveillance of MRSA introduced in April 2001. Glycopeptide resistant enterococci (September 2003); serious untoward incidents associated with infection (September 2003); Clostridium Difficile associated disease (January 2004) and Orthopaedic surgical site infection surveillance (April 2004) infection. Together this surveillance covers only 6–10% of hospital acquired infections.
Around <b>5,000</b> deaths in the UK per year may be directly attributable to the presence of a hospital acquired infection, and in a further <b>15,000</b> deaths, hospital acquired infection may be a substantial contributor.	The SENIC study (Haley et al, 1985) <sup>(iii)</sup> estimated that in the early 1980s hospital acquired infection was amongst the top ten causes of death in America. There are no equivalent data available in the United Kingdom, but in 1995, a crude comparison by a Department of Health and Public Health Laboratory Service Working Group arrived at the 5,000 and 15,000 estimates.	A joint proposal from the Office of National Statistics and Health Protection Agency for a national audit of deaths from healthcare associated infections, was announced in the Chief Medical Officer's strategy Winning Ways in December 2003. An initial report concentrating on MRSA should be available by mid 2005 and a more detailed report, identifying avoidable factors and lessons learned by 2006.
Hospital acquired infection in England may be costing the NHS as much as <b>£1</b> billion per year.	The £1 billion figure was derived from the Socio-economic burden study(ii). On average patients with a hospital acquired infection cost three times as much as an uninfected patients, equivalent to an additional £3,000 per case; their hospital stay that was 2.5 times that of an uninfected patient, equivalent to 11 extra days in hospital. The £1 billion figure is accepted as the most comprehensive estimate of costs currently available. However, the figure is likely to be an underestimate as it is based on only 70% of adult non-day cases.	The National Audit Office Report (HC 876, Session 2003– 04) identified that cost information has not improved nor are they aware of any plans to update this figure. They found that 11% of trusts had performed some type of economic evaluation, which demonstrated the significant burden of infection. Like a number of international studies they also found that the mean attributable costs of the infections were greater than corresponding interventions.

Between <b>50 and 70%</b> of surgical wound infections occur post-discharge	Figure is derived from a review of international literature by Holtz et al, 1992 (iv).	National Audit Office Report (HC 876, Session 2003–04) identified that there has been limited progress in improving this information.
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Source: National Audit Office

- (i) Emmerson A.M., Enstone J.E., Griffin M., Kelsey M.C., Smyth E.T.M. (1996), *The second national prevalence survey of infection in hospitals overview of the results*, Journal of Hospital Infection 32: 175–190.
- (ii) Plowman R, et al (2000), *The socio-economic burden of hospital acquired infection*. London: Public Health Laboratory Service.
- (iii) Haley et al (1985), The efficacy of infection surveillance and central programs in preventing nosocomial infections in US Hospitals (SENIC), American Journal of Epidemiology 121: 182–205.
- (iv) Holtz TH, Wenzel RP (1992) Post-discharge surveillance for nosocominal wound infections: A brief commentary, American Journal of Infection Control 20 (40) 206–213.
- 7. A major constraint to effective surveillance is the infection control teams' lack of information technology (IT). The Department expects that the IT support necessary to undertake the new streams of surveillance will be built into the NHS National Programme for IT, although in which phase of the project is not clear.<sup>11</sup>
- 8. Similarly the introduction of electronic prescribing through the NHS National Programme for IT is expected to improve the collection of data on antibiotic prescribing. As 20–30% of antibiotics are prescribed unnecessarily, leading to the growth of antibiotic resistance, the collection of data is essential so that improvements in prescribing, now being demonstrated in primary care, can be achieved in the hospitals.<sup>12</sup>
- 9. Hospital acquired infections not only complicate illness, cause anxiety and discomfort for patient but they can lead to disability and even death. In 2000 our predecessors noted that the estimate of 5,000 deaths could have been on the low side, but the reality was that the Department did not know.<sup>13</sup> There appears to have been no progress in improving information on this issue except for a couple of research projects funded by the Office for National Statistics and the Health Protection Agency, which examined death certificates to identify those in which MRSA was mentioned as a contributory factor. The results suggested that the number of deaths which mentioned MRSA increased from 51 in 1993 to 800 in 2002, a 15 fold increase. The research also showed that there were 50 hospitals with 5 or more deaths where MRSA was a contributory factor in 2002, and that hospitals with less than 5 deaths could not be identified individually.<sup>14</sup>
- 10. We asked why, when present, MRSA and other hospital acquired infections were not always included on a death certificate. The Department explained that MRSA would be included only if the certifying doctor considered it be the underlying cause of death, and that many patients had other serious and potentially fatal underlying medical conditions

<sup>11</sup> C&AG's Report, paras 2.26-2.28; Qq 135-136

<sup>12</sup> Qq 14, 154-155

<sup>13 42&</sup>lt;sup>nd</sup> Report from the Committee of Public Accounts, *The management and control of hospital acquired infection in Acute NHS Trusts in England* (HC 306, Session 1999–2000), para 10

<sup>14</sup> C&AG's Report, paras 3.22-3.33; Ev 24-25 paras 8-9, 31-32, 37

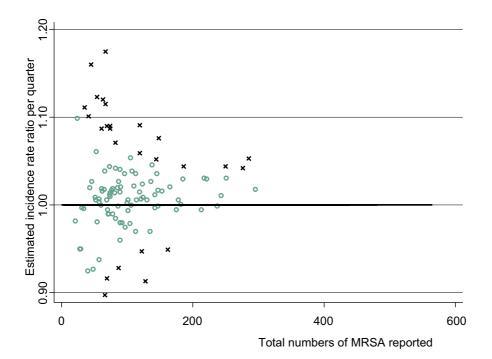
which were likely to be given as the cause of death. It is a matter for individual professional judgement whether the doctor lists MRSA infection as a contributory cause. This situation is also complicated by the fact that the International Classification of Diseases codes specify the clinical types of infection such as septicaemia, abscess and pneumonia, but there is no individual code for MRSA, or whether the infection was hospital acquired. The Office for National Statistics has worked with the World Health Organisation (WHO) to develop new codes for antibiotic resistance. WHO has recommended that these should be used internationally from 2006. The prospective introduction of electronic certification will link it to information on patient records and to the consent of the family member registering the death.<sup>15</sup>

11. In recognition of the absence of information on deaths, the Chief Medical Officer announced plans to establish a national audit of deaths from healthcare associated infections in his December 2003 report *Winning Ways*. More than nine months later, however, the details of the timetable and methodology had still not been announced. The Department told us that developing the audit was now a priority, but was taking time because of the need to consult with experts to devise methodologies, and ethical considerations which needed to be taken into account before launching the audit.<sup>16</sup>

# 2 Improving knowledge of and compliance with good infection control practices

12. To target activities to improve practice, clinicians and other staff need robust comparable information on infection rates, costs and patient outcomes. Many trusts are not conducting such surveillance other than for mandatory MRSA bloodstream infections, however, and some of the infections reported may include infections that were not acquired in the hospital. The reports are also for the whole hospital, and do not differentiate between specialities and wards, so clinical staff do not relate to it. As a result, in many trusts MRSA rates are perceived by both trust management and clinicians as a problem for the infection control team to manage.

Figure 3: Trends in mandatory MRSA bloodstream infection reporting in general acute NHS trusts – April 2001 to March 2004  $^{17}$ 



Source: Supplementary Memorandum Annex B based on data provided by Health Protection Agency Communicable Disease Surveillance Centre – Mandatory bacteraemia bloodstream surveillance (Ev 26–30)

#### Note:

The crosses represent trusts for which there is evidence to suggest that their incidence of MRSA bloodstream infections is, on average, either increasing (above the horizontal line) or decreasing (below the horizontal line). The circles represent trusts for which the trend is not statistically significant as the numbers of MRSA bloodstream infections are too small.

- 13. The figures on MRSA bloodstream infections suggest that infection rates have got worse for many hospitals (**Figure 3**), and that England has amongst the worst rates of MRSA in Europe.<sup>18</sup> The Department acknowledged this situation, but considered that reducing or controlling infections had become more difficult in the last few years. Treatment in hospital was increasingly focussed on the more significantly ill patients and required the use of more invasive techniques, such as line insertions, which increased the risk of infection. Compliance with infection control guidance was still a problem, particularly for busier hospitals dealing with a higher volume of patients.<sup>19</sup>
- 14. In 2000 our predecessor Committee found that compliance with guidance on hand-washing was poor. Some four years later there has been some evidence of improvement, particularly following local hand hygiene initiatives, but compliance is not always sustained, and amongst doctors in particular still poor. The Department attributed this situation partly due to the lack of availability of alcohol hand gel, but said that as a result of the National Patient Safety (NPSA) cleanyourhands campaign, it would by April 2005 be available at the foot of every bed or carried by staff in pocket size dispensers. The Department accepted that the gel could have been made available sooner.<sup>20</sup>
- 15. Other products highlighted as being effective in preventing hospital acquired infection include silver alloy catheters. The Department had announced a rapid review process for such products in *Winning Ways* in December 2003, but a timetable had yet to be announced, suggesting a lack of urgency which we found hard to understand.<sup>21</sup>
- 16. Reducing hospital acquired infection requires more than improving hand hygiene and the introduction of new products. The standard of cleanliness in hospitals remains a concern, with infection control teams, orthopaedic and vascular clinicians and patients reporting that cleanliness could be improved. Contracting out of cleaning appears to have made it more difficult for ward managers and matrons to control. The Department proposes to develop a range of model contracts, but acknowledged that cleaners also needed to be seen as part of the ward team, and for everyone to understand their responsibility for maintaining cleanliness and hygiene. It intended to create a matrons charter which among other things would clarify matrons responsibilities for environmental hygiene. It had written to all trusts to obtain assurance that they are meeting currently published standards on cleaning and infection control. The Department also acknowledged that patients have a part to play, that it was very important that the NHS should tell patients what they are entitled to expect and to listen to patients views on standards of cleanliness.<sup>22</sup>
- 17. The proportion of *Staphylococcus aureus* infections that are methicillin resistant is much higher in England than in most other European countries. England has about 70 times the MRSA proportion in Denmark and 40 times the proportion in the Netherlands and Sweden. The Department explained that the cause of MRSA is not dirty or unhygienic hands or wards alone, although they are contributory factors. Denmark has a higher

<sup>18</sup> C&AG's Report, paras 4.3-4.4, 3.7-3.11; Ev 24, 26-30; Qq 1-2

<sup>19</sup> Qq 1-2

<sup>20</sup> Qq 10-11, 46-51, 56-63, 103

<sup>21</sup> C&AG's Report, paras 4.35 -4.37 and case study K

<sup>22</sup> ibid, paras 4.12-4.19; Qq 10-12, 15-18, 24-27, 33-37, 141-144, 178

proportion of isolation rooms, uses separate nursing staff to treat infected patients, and as in other countries with low rates, new patients are screened for infections. These countries also apply strict isolation guidelines together with stringent antibiotic prescribing.<sup>23</sup>

18. Our predecessors recommended in their 2000 Report that increased investment in isolation facilities was required. Whilst 56% of trusts had undertaken a risk assessment to determine the number and quality of isolation facilities in the last three years, only a quarter had obtained the required facilities. These were generally as a result of a new construction project.<sup>24</sup>

19. Different hospitals have different policies for screening patients that come into hospital, and screening for infections is not automatic in all NHS trusts, but can depend on the type of surgery being carried out such as orthopaedic or cardiac surgery. The Department said that obtaining a consensus from frontline healthcare professionals had proved to be more complicated and time consuming than originally envisaged, and that the infectious disease branch of the National Electronic Library for Health was now taking this work forward. A national manual would form part of a "one stop shop" electronic resource for infection control staff.<sup>25</sup>

20. The Department referred to specific examples of good practice in reducing infection rates through improving the management of hospital acquired infection. For example:

- Great Ormond Street Hospital actively screens all admissions for MRSA. Compliance is monitored through an automated computerised system, and feedback is given to wards when admission screening is missed. The hospital isolates all children with antimicrobial resistant organisms, which is possible with the high proportion of single cubicles (60%). The hospital promotes good hand hygiene practice and has alcohol hand rubs by each clinical hand wash basin. It is starting an empowerment programme whereby children and parents will be encouraged to ask staff to wash their hands.<sup>26</sup>
- Broomfield Hospital found that by applying good infection control practices, it
  increased the number of patients that were treated, so that for example the number of
  arthroplasties performed increased by 17% from its previous level. They have also built
  in infection control in the way the patients move through the hospital.<sup>27</sup>
- Harrogate Hospital puts down its success in reducing MRSA rates to a combination of maintaining cleanliness, strong emphasis on key antibiotic prescribing and continuous monitoring.<sup>28</sup>
- 21. The Department summed it up by stating that it knew what should be done, based on evidence, but that what can be done was a different matter because of some constraints, in particular the need to change behaviour and staff culture. It was still unclear how other

<sup>23</sup> Qq 51-54, 88-93, 154-156

<sup>24</sup> C&AG's Report, para 2.37; Qq 54, 79

<sup>25</sup> C&AG's Report, para 4.28; Q 165; Ev 36

<sup>26</sup> Q 181; Ev 38

<sup>27</sup> C&AG's Report - case study D, p 21; Qq 106-109

<sup>28</sup> Q 154

countries had achieved better results but planned that the NHS should learn from the best at home and abroad. We failed to understand why they had not done so earlier, especially as European Antimicrobial Resistance Surveillance System (EARSS) data had been available since 2002.<sup>29</sup>

# 3 Improving infection control systems and management processes

22. Infection control has been given a higher priority in many trusts, with trusts making improvements to their infection control management arrangements and increasing their trust boards' involvement, largely as a result of the infection controls assurance standard, the key elements of which have now been incorporated into the new national *Standards for Better Health*. Infection control team staffing levels have increased, although wide variations remain and a fifth of teams still have no clerical support. More teams have infection control budgets, but again the amounts vary and a quarter of teams claim that their budgets have decreased. Increased demands on infection control teams, with more surveillance and external inspections, have meant a continuing mismatch between expectations placed on the team and the resources allocated to them.<sup>30</sup>

23. In 2000 the Department acknowledged that attempts to prevent infections could be adversely affected by trust bed management policies, and that the drive to achieve higher bed occupancy was not always consistent with good isolation, hygiene and cleaning practices. Developments such as placing beds too close together and patients moving around the hospital more frequently could increase the risk of infection, as could staff shortages, together with reliance on agency nurses. The Department considered that high staff turnover rather than the fact that staff may be temporary was the thing that made the task of infection control harder.<sup>31</sup>

24. The Department told our predecessors in 2000 that by 2003–04 they expected to reduce bed occupancy to 82%, significantly improving bed availability and the management of elective and emergency patients. Yet in 2003–04, 71% of trusts were still operating at occupancy levels of more than 82%.<sup>32</sup> 50% of senior trust managers reported that waiting times for inpatient treatment had conflicted with infection control management. The introduction of day surgeries was originally expected to reduce the need for beds, but has not done so, and the development of separate treatment centres was expected to help by separating elective patients in the future.<sup>33</sup>

25. The need for improved clinical leadership led to the introduction of the new "modern matrons" who were to be accountable for a group of wards and would be "easily identifiable, visible, accessible and authoritative figures". A poll of 100 matrons in September 2003 identified preventing infection and improving hospital cleanliness as the most challenging of their responsibilities. Matrons had a large workload with many other priorities, and that there was a lack of clarity on their role as regards infection control. By 2004 there were some 500 modern matrons working in the NHS.<sup>34</sup>

<sup>30</sup> C&AG's Report, para 9, 2.2 -2.6, 2.11-2.14; Ev 36

<sup>31</sup> C&AG's Report, para 2.38; Qq 20-23

<sup>32 42&</sup>lt;sup>nd</sup> Report from the Committee of Public Accounts, *The management and control of hospital acquired infection in Acute NHS Trusts in England* (HC 306, Session 1999–2000) para 35 –36; C&AG's Report, paras 2.32–2.36

<sup>33</sup> Qq 80-81, 179

<sup>34</sup> C&AG's Report, para 2.16–2.17; Qq 37– 38, 178

26. In 12% of cases infection control teams have had their recommendation to close a ward for infection control reasons refused or discouraged by their Chief Executive. The Department highlighted the new post of Director of Infection, Prevention and Control, which all trusts are required to designate, who would now have the authority to influence such decisions and would be expected to advise the Chief Executive on whether a ward should be closed because of an infection problem. He or she would also be expected to inform the strategic health authority and include the details in an annual report.<sup>35</sup>

27. The Department accepted in 2000 that infection control teams should be consulted more widely on wider trust activities, such as new construction projects and the letting of cleaning contracts, yet in many trusts infection control teams are still not being consulted. The design of a hospital can help minimise infection problems, including patient flows, ventilation, accessibility of hygiene basins, and numbers and gaps between beds in wards. The Department have now made this consultation a requirement in the new Director of Infection, Prevention and Control's job description.<sup>36</sup>

28. It is difficult to test robustly whether new hospitals are cleaner or have lower infection rates than older hospitals, partly because of the relatively small number of new hospitals and because many schemes are phased over a number of years. There is however good evidence of a significant relationship between the age and quality of the physical hospital environment and MRSA. Other things being equal trusts with older poorer quality buildings have higher rates of MRSA. Reducing the age and improving the quality of hospital building is also likely to have a proportionately larger effect on all hospital acquired infections, many of which are airborne, rather than MRSA which is overwhelmingly spread through direct contact.<sup>37</sup>

29. It is the responsibility of trusts to ensure that contract specification, including those for PFI projects, comply with all the NHS standards for the design, construction and performance of facilities, as contained in comprehensive guidance produced by NHS Estates. The most recent policy on infection control is set out in Infection Control in the Built Environment (NHS Estates 2002). Individual Health Technical Memoranda (HTMs) contain detailed requirements such as the specification of clinical wash hand basins and the special type of taps and handles required. Bidders are now required to respond to the Trust's output specifications in a standard format. This states specifically that: "proposals of how decontamination and control of infection are to be achieved should be provided". To ensure compliance with the specifications Trusts are required to review and sign-off the clinical functionality of proposals before any contract is entered into.<sup>38</sup>

30. Despite a significant number of Departmental initiatives launched following our predecessors' 2000 hearing, culminating in "Winning Ways" in December 2003, implementation and compliance have been patchy. At the same time as the Comptroller and Auditor General's follow-up report was published in July 2004, the Secretary of State announced "Towards cleaner hospitals and lower infection rates" with an emphasis on actions needed to cut levels of infection and improve hygiene. Since then a number of

<sup>35</sup> C&AG's Report, paras 2.20-2.21; Qq 40-42, 131-133

<sup>36</sup> C&AG's Report, para 4.34 and Figure 13; Qq 16, 69-71, 149

<sup>37</sup> Q 180; Ev 37

<sup>38</sup> Q 109; Ev 35

other developments suggest that actions are now being implemented on a number of fronts (**Figure 4**). The key impetus to this is the establishment of a Towards Cleaner Hospitals and Lower Rates of Infection Programme Board, and the involvement of the Prime Minister's Delivery Unit.<sup>39</sup>

Figure 4: Recent actions and initiatives to improve prevention and control of hospital acquired infection

Action/Initiative	Details including timetable for delivery
September 2004: Established Towards Cleaner Hospitals and Lower Rates of Infection Programme Board	<ul> <li>Chaired by the Chief Nursing Officer, the Board is expected to:</li> <li>act as a strategic focal point for the Secretary of State and Ministers and perform an assurance role against the commitments in Winning Ways and Towards Cleaner Hospitals;</li> <li>drive the delivery of change in the NHS to improve and provides strategic direction and ensure consistency in the delivery of the Department's work on cleanliness, lower healthcare acquired infection and lower MRSA rates in NHS hospitals.</li> </ul>
September 2004 : National roll out of National Patient Safety Agency's cleanyourhands campaign	Alcohol hand rubs to be placed next to all beds in acute hospitals from April 2005. In announcing the campaign Lord Warner noted that evidence shows that rates of infection can be reduced by 50% by providing disinfectant hand rubs and raising awareness.  Research project to evaluate compliance and sustainability.
November 2004: Announced new national performance target that MRSA bloodstream infection rates to be halved by 2008	Secretary of State announced a new initiative to dramatically reduce MRSA bloodstream infections by 50% by 2008 using the published rates for 2003–04 as the baseline. The Modernisation Agency is to provide advice and support, including expertise to develop "Care Bundles" of evidence based interventions.
December 2004: Published Revised Guidance on new Model Cleaning Contract to help improve standards	Comprising a best practice guide on evaluating and awarding contracts so that quality is considered as well as price; revised national specifications for cleanliness which set clear minimum standards; recommended minimum cleaning frequencies; and a revised healthcare facilities cleaning manual to reflect changes in cleaning technologies and practice.
October 2004: Launched "A Matron's Charter; An action plan for cleaner hospitals". Also appointment of new Chief Nursing Officer	Chief Nursing Officer Christine Beesley appointed, and part of her role is to drive through improvements in cleanliness and hygiene in every hospital.  The new Matron's charter sets out ten broad principles for delivering cleaner hospitals, aimed at all staff in the NHS, whatever their role. The intention is that it will also be shared with patients and visitors and that they will be involved in plans for improvement and in providing feedback.
October 2004: Held first national conferences for NHS Directors of Infection Prevention and Control	Used conference to brief the directors on their new powers to ensure local action: challenge hygiene practice and prescribing decisions; increase training; enforce rigorous procedures for hand hygiene; and ensure the sterility of invasive equipment such as catheters.
December 2004: Announced first results of the Rapid Review panel in battle on MRSA	Rapid review panel set up by the Health Protection Agency at request of Department. The panel does not conduct evaluations of products but reviews information and evidence provided in order to make recommendations to the Department. Products can then be fast-tracked into the future work plans of the NHS Purchasing and Supplies Agency and the National Institute for Clinical Excellence.
January 2005: Hosted Conference "MRSA- Learning from the Best at Home and Abroad"	Hosted by the Chief Nursing Officer – the objective was to help share best practice on reducing MRSA, including improving surveillance, clinical protocols, aseptic techniques etc. Also issued ten actions for improvement under the three headings people, knowledge and practice.

Source: Department of Health

## Formal minutes

#### Wednesday 6 April 2005

Members present:

Mr Edward Leigh, in the Chair

Mr Richard Allan Mr Ian Davidson Mrs Angela Browning Mr Alan Williams

The Committee deliberated.

Draft Report (Improving patient care by reducing the risk of hospital acquired infection: a progress report), proposed by the Chairman, brought up and read.

*Ordered*, That the draft Report be read a second time, paragraph by paragraph.

Paragraphs 1 to 30 read and agreed to.

Conclusions and recommendations read, amended and agreed to.

Summary read and agreed to.

*Resolved*, That the Report be the Twenty-fourth Report of the Committee to the House.

*Ordered*, That the Chairman do make the Report to the House.

*Ordered*, That the provisions of Standing Order No. 134 (Select Committees (Reports)) be applied to the Report.

[Adjourned.

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### Oral evidence

#### Taken before the Committee of Public Accounts

#### on Wednesday 8 September 2004

Members present:

Mr Edward Leigh, in the Chair

Mr Richard Allan Mr Brian Jenkins Mr Richard Bacon Jim Sheridan Mr Gerry Steinberg Jon Cruddas Mr David Curry Jon Trickett Mr Alan Williams Mr Ian Davidson

Sir John Bourn KCB, Comptroller and Auditor General, National Audit Office, further examined. Mr Rob Molan, Second Treasury Officer of Accounts, further examined.

#### REPORT BY THE COMPTROLLER AND AUDITOR GENERAL:

Improving patient care by reducing the risk of hospital acquired infection: A progress report (HC 876)

Witnesses: Sir Nigel Crisp KCB, Permanent Secretary/NHS Chief Executive; Professor Sir Liam Donaldson, Chief Medical Officer, and Professor Brian Duerden, Inspector of Microbiology, Department of Health, examined.

Chairman: Good afternoon. Welcome to the Committee of Public Accounts, where today we are looking at the Report Improving patient care by reducing the risk of hospital acquired infection. We welcome back to the Committee Sir Nigel Crisp, who is a permanent secretary at the Department of Health, his colleague Professor Sir Liam Donaldson, Chief Medical Officer, and a new witness in our Committee, Professor Brian Duerden, Inspector of Microbiology. You are all very welcome. I think my colleague would like to welcome somebody to the Committee.

Mr Bacon: Yes, thank you. May I welcome also Mr David Lawrence, who is the principal of Astern College in Norfolk and who is visiting Parliament as part of a job shadowing scheme organised by the Association of Colleges.

Q1 Chairman: Thank you very much. Sir Nigel, if I may start with you, you or your predecessor, it makes no difference, gave various categorical assurances to us when we last considered this matter in 2000 that significant reductions in infection rates, you believe, should be possible; and you held out the prospect of tangible progress by 2003. Do you recall those assurances?

Sir Nigel Crisp: It was not me. However, I do read in this Report what the Treasury minute said at that time which was "tangible progress in implementing the steps needed to reduce infection", though I do not think there was an actual commitment to saying that the numbers would come down in this period, and indeed that is what we have done, starting with introducing the world's first mandatory surveillance of MRSA in 2001,

going through tightening accountability, and most recently last week in introducing the hand washing campaign. So there is a lot starting to happen in terms of making the changes. If you look at the figures, because the whole point of this is to reduce the figures, which are on page 25 on table 6 I think it is, what we have there is showing that when we introduced those mandatory figures, and I think this is quite an important point in this table. As soon as we introduced them our numbers went up which is what you would expect, but actually the shape of the graph is starting to change. It is not going down but on the bit that concerns all of us most I think, the MRSA infections, it is worth noting when you translate these through into numbers of patients that the difference in three years is only 400 patients. So it is starting to level.

**Q2** Chairman: But as we see from figure 6, page 25, contrary to the assurances we received in 2000, the evidence—and we can come back to this point but we mainly had evidence on MRSA because the evidence on other infections is somewhat limited is that things have got worse. We can talk about the graph not rising as fast as it was before but things are now worse than they were when these assurances were given to this Committee?

Sir Nigel Crisp: I do not doubt that but I think the assurances were that we would put in place the mechanism to make the changes to improve our control of infection arrangements to ensure that we get the better position to tackle this. The other point that does need to be said, and one of my colleagues will say it better than me, is that the task has got more difficult in the last four years. Patients

are iller, we are doing more things and putting more lines into people's bodies so there is more risk of infection, so the fact that this is starting to go the right way, the rate of increase is slowing down, is important but I do not want to inject any sense of complacency about this. This is absolutely an essential priority and of the 400 additional patients we are talking about, every one is important and for every one it is a great tragedy that they have been infected in this way. So there is a great deal more to do but what we have is a much better equipped system now to start doing this and to move in the right direction.

Q3 Chairman: If we look at Appendix 2 we can see that you or your predecessor gave a solemn undertaking to this Committee that you would carry out all the recommendations of this Committee. Are you telling us now that all these recommendations are being carried out?

Sir Nigel Crisp: I think the position is what is described here which is a commentary that is not as simple as that. Many have being carried out, some have not, and there are reasons given.

Q4 Chairman: But why not? Why did your predecessor give these undertakings if they were clearly not deliverable?

Sir Nigel Crisp: Well, I thought the particular one that you were asking about which is the one saying that we would expect to see tangible results in terms of improvements in the system for managing and controlling hospital infections, which is the third

Q5 Chairman: Yes. Can I put it this way? When as a result of this Committee's hearing, we make various recommendations, as we shall, and when the Treasury minute comes back accepting all these recommendations, which I am sure it will, can you give us a solemn undertaking, because after all people's lives are at risk here, that all our recommendations will be carried out in full if the Treasury accepts that they should be acted upon? Sir Nigel Crisp: The only qualification I make to that is twofold: there will be I have no doubt some further discussion around whether those are practical or not, but also in one or two of these cases in these recommendations you can see the circumstances have changed, the reasons why they have not been-

Q6 Chairman: Make that clear. Do not just give reassurances to the Treasury minute. If you cannot deliver something it is much better to say so now. Sir Nigel Crisp: I accept that.

Q7 Chairman: Would you please look at paragraphs 3.22-3.23? Can you explain to us why you still do not know how many deaths are due to hospital acquired infections, although the Office of National Statistics apparently indicates that deaths due to MRSA may have increased fifteenfold? Why do you still lack this basic information?

Sir Nigel Crisp: This is to do with how we record information about deaths, and can I ask the Chief Medical Officer to answer this?

Professor Sir Liam Donaldson: Getting an accurate picture is very dependent on doctors including the diagnosis of infection or MRSA in the case of this particular infection on the death certificate at the appropriate time, and often that is a matter of clinical judgment and opinion as to whether, in a complex situation where somebody might be seriously ill with a number of diseases and then acquired MRSA, the MRSA did contribute to the death or it was simply present but did not play a part in causing the patient's death. That is the case for very many causes of death. They are dependent on a clinical opinion at the time that death is certified. The way in which we have decided to strengthen this is that in the report I produced for the government in December of last year, Winning Ways, I recommended that we should have a detailed audit of all deaths of this cause. The plans are being put in place to do that—

**Q8** Chairman: That was published in 2003 December?

Professor Sir Liam Donaldson: Yes.

**O9** Chairman: Why did you wait until then to publish this report?

Professor Sir Liam Donaldson: Because I think, as far as a general indication of mortality from MRSA is concerned, death certification gives a reasonable proxy as it does for many other causes of death, but if we want to establish the full extent of the cause so as to look at the underlying causes, then a detailed audit of every death is a much better way of doing it, but we do not do that with the exception of deaths in the infant mortality field, and some deaths associated with surgery. It is a big undertaking to organise an audit of every death, and it is a feature of the priority that we now attach to this problem that we are instituting an audit for that.

Q10 Chairman: Sir Nigel, if you look at paragraph 4.16, you will see that surveys show that the public is generally unimpressed with ward cleanliness. Why, four years after the considerable publicity surrounding our last report, do you seem to have so little success in instilling an absolute culture in hospitals of cleanliness and washing hands? And, anecdotally, the day after this Report was published when there was huge interest in the national press, I was a patient in the Chelsea and Westminster. I noticed that the toilets downstairs were filthy; there was no soap available; when I went back the next day to have a blood test the same situation was there. When I talked to the nurse on duty, she came from Dublin and she said there was quite a different culture in Ireland. There it is instilled in you as a nurse that cleanliness is the first priority. This is not rocket science. Many of the things we deal with in this Committee are very complicated. Why can you not instill in your staff this culture of absolute cleanliness?

Sir Nigel Crisp: Firstly, as that paragraph says there is a belief that there is a relationship and there is some overlap between the issues of cleanliness and the issues of hospital acquired infection. They are not quite the same but there is clearly an overlap between the two.

Q11 Chairman: I do not think we need a report to tell us that. I think Florence Nightingale worked it out in the Crimean War, did she not?

Sir Nigel Crisp: They are not quite the same thing, is the point I am making. What we need to do on hospital acquired infection is not the same as we need to do on cleanliness. On cleanliness we have put in a lot of additional resource and a lot of additional effort over the last three years I think in particular in order to improve standards, and we have seen standards improve. The example you show there shows that that has not gone far enough and that is partly why, in the summer, we brought together the two issues of the hospital acquired infection and cleanliness report, because they are so closely linked, in order to make sure that we put much more priority on to both of the two issues, and those followed from that, as you know, including the Clean Your Hands campaign, which is an overlap between the two.

Q12 Chairman: Do you remember appearing on the Today programme after the NAO Report was published<sup>1</sup> and do you remember what *The Sun* called you the next day? Were you hurt by their attack on you, when you seemed to pass responsibility for cleanliness to patients themselves? I think words like "arrogant", "smug" and "complacent" were used which I am sure in your case is very unfair because I know you are a devoted public servant, but you can see that the wrong impression may have been made by that report?

Sir Nigel Crisp: That may be but what I was saying in that programme but obviously did not get it across was that it is very important that we listen to patients. People misinterpreted that as saying that it is down to patients to make it clean but if you listen to what I actually say it is let's tell patients what to expect, and the reason is the point you have just made which is that our surveys show an improved record of cleanliness, so people moving up the chain and the traffic lights are improving. But let's actually hear what patients have to say, and that is what I was saying. But that was not a solution to the problem; that was an important point, listen to the patients.

Q13 Chairman: I am glad I have given you an opportunity to reply to *The Sun*. I think permanent secretaries should always be given an opportunity to do that.

Sir Nigel Crisp: You are very kind.

Q14 Chairman: Sir Liam, why do you still lack basic information on the level of antibiotic prescribing, and this is dealt with in paragraph

Professor Sir Liam Donaldson: We have not been as good in hospital practice as in general practice at gathering detailed data on prescribing patterns and that has been a weakness in the past. Over the last year there has been a lot of changes made to plans for hospital information, including the introduction as part of the new information technology programme for the NHS of electronic prescribing, so we are very confident that over the period of the next year we are going to have much better data available on prescribing not just antibiotics but other drugs in hospital.

Q15 Jon Cruddas: Can I firstly turn in the recommendations on page 7, recommendation T, says "NHS trusts should require consultation with infection control teams to be a mandatory step in contract tendering procedures for new build projects and for cleaning laundry and catering services". What is your response to that proposition?

Sir Nigel Crisp: We agree with it and what we have said is that we are drawing up a new model contract to be developed with professional bodies and leaders which will include that.

Q16 Jon Cruddas: So at the moment there is not a generic or model contract for laundry?

Sir Nigel Crisp: No, there is not a single model contract for how you let the services so we are drawing up a new one, and that will reinforce the message that infection control teams and matrons should be involved in drawing up cleaning contracts.

Q17 Jon Cruddas: What is the timescale on that, because that signals that there is a possible correlation between incidences and, let's say, variety in the sort of contractual performance of the contract.

Sir Nigel Crisp: We have not got a date for that but this will be certainly within the next year. What is important in contracting out is you have a good contract, and what this is doing is strengthening the relationship we have with those private firms and being very specific that the infection control team should be involved, which is good practice anyway, and we expect that to be what will happen.

Q18 Jon Cruddas: And that will be a voluntary model contract?

Sir Nigel Crisp: We would expect that contract to be used or if there is a very good reason why it is not being used that reason to be understood. But it will be developed in the NHS, so this is developed by the people who are going to implement it.

<sup>&</sup>lt;sup>1</sup> Today programme, 14 July 2004.

Q19 Jon Cruddas: The objective being across the estate effectively a new regime, hopefully, which will be tighter in terms of procedures of inspection teams with prospective contractors?

Sir Nigel Crisp: Exactly. We do already have some model arrangements but this will pick that up, exactly.

**Q20 Jon Cruddas:** Following on from that in terms of staffing issues, page 22, point 2.38 points to issues around staff shortages and the role of agency staff especially in London, stating that evidence suggests that both impact on good infection control practices. Is that your own analysis of comparative instances across acute trusts?

Sir Nigel Crisp: As I think you show elsewhere in this document, there are some things which make the task of infection control harder because they are going to make it harder, and having a high turnover of staff may well be one of those things of different staff at different times but you can still manage that. You can still make sure that in those circumstances you put in arrangements that manage that effectively, but something like that, as this makes clear, will make it more difficult if you have high turnover of staff.

Q21 Jon Cruddas: But evidence suggests the preponderance of agency labour might have a correlation with incidence as well as issues around staff shortages?

Sir Nigel Crisp: If you take the sentence "reliance on temporary agency staff", I am making the point that I think this is as much about staff turnover and different staff at different times, than necessarily employment status. You can have people employed by a few organisations who are doing a thoroughly good job within the context of a hospital.

Q22 Jon Cruddas: You can, and you have not got any evidence within the Department of different forms of employment status, shall we say, correlating with different incidences of infections? Sir Nigel Crisp: I would have to look at what note 26 says on this to say where that evidence comes from because there is some evidence referred to there.

Q23 Jon Cruddas: But on your earlier point as well, when you said about the form of contractual relationship not being significant either way, as it were, there are stories of good or negative effects? Sir Nigel Crisp: I do not know whether or not it is overall significant or not, but the point is that I do not think you can use contracting out labour as an excuse for bad cleanliness or bad infection. That is really the point I am going to make, and it will be harder if you have a high turnover of staff whether they are employed or agency. This is just, if you like, common sense. And if you are in a situation like London where you will have, because the labour market is structured as it is, a higher level of agency staff, then you have to manage that differently than if you have got a stable staff who have been in hospital perhaps in the north where

people have been working together for a long time and standards are established. You have to keep reinforcing standards. So it does make it more difficult.

Q24 Jon Cruddas: I accept that. My departure point was to inquire whether you were going to move towards, or if there did exist, some sort of model contractual framework, if you like, which has a much closer role for inspection teams in terms of bearing down on contractors and in terms of the incidence within MRSA and the like?

Sir Nigel Crisp: And today, as it happens, there is a matrons' conference led by the Chief Nursing Officer looking at the development of a matrons' charter and it would not surprise me if there would not be some comment there that the cleaner should also be part of the ward team, whatever their contractual status, giving some continuity and making the standards right, but we will see what the matrons themselves have to say. So there is interest in that: there is focus on that-

**Q25 Jon Cruddas:** And there is work in progress? Sir Nigel Crisp: Yes.

Q26 Jon Cruddas: Can I ask a question about the patients' choice agenda in this? When this becomes fully operational presumably patients, individuals constituents, citizens, will have a series of data about various options in front of them in terms of choosing hospitals. Is that the proposition?

Sir Nigel Crisp: Yes. The proposition would be that patients should have as much information as they want but within that we already publish the MRSA rates for acute hospitals and have done for three years. Now, I suspect what patients will do is they will look at some evidence and some will want to get more information and so on, and I suspect this will be quite an important point for a lot of patients to know what the likelihood or the rate is of MRSA. It will be natural. So I suspect it will be more than core information but we have not at this moment got a precise specification of what information we can give the patient.

Q27 Jon Cruddas: That was my next question, actually, in terms of forms by which the trusts should display their statistics or inform people within their communities or whatever, or the role of patients' forums and the like. All of this is about disseminating information, presumably?

Sir Nigel Crisp: I have no doubt at all that we should make sure that MRSA rates and recent cleaning reports are displayed by trusts prominently where people can see them. I am sure that is right. But the exact format we use for that I think we need to ask people in the NHS about, and also patients. It was part of the point I was making in that Radio 4 interview: let's make sure patients have the information, and to make sure we can tell the patients.

Professor Sir Liam Donaldson: I just have a brief comment. On page 27 there is a graph showing variation in the incidence of wound infections by

hospital and by type of operation. That may not be the format ultimately that the information is provided in but certainly that is the sort of information that we would like patients to have, and there is clearly a big variation for most of the operations according to where you are treated, and that is the very thing that patients need to help them to take a decision and make a choice.

Q28 Jon Cruddas: Finally from me, by 2005 there will be targets for acute trusts to reduce MRSA. Do you have a national target in mind given that you have all the capital building problems, and the evidence suggests there is a correlation between new build in terms of design and so on, in terms of incidence—you have all these procedures in play in terms of work in progress. Where are we going to be in a couple of years?

Sir Nigel Crisp: We have not got a number yet. At the moment all we have said is it has to produce the first target but I have no doubt we will be wanting to put some numerical values in there.

Q29 Jim Sheridan: On the patients' charter I can well understand the facility for patients to complain after they have left hospital about unclean facilities or unclean practices, but would you understand there would be some reluctance of patients complaining at the time they are in hospital, because after all they are dependent on the staff to get these people back to fitness again?

Sir Nigel Crisp: I agree with that and that is why we have also made some suggestions—only suggestions at this stage—that things called patients' forums should have a role in this, but these patient forums are independent so the question is whether they are willing to take up that responsibility.

Q30 Jim Sheridan: What is a patient forum? Sir Nigel Crisp: Every trust has a group of patients who have a responsibility to make sure that the patient view is understood within the hospital.

Q31 Jim Sheridan: And are these patient forums volunteers or appointed or what?

Sir Nigel Crisp: They are volunteers and they then go through an appointment process. These are new bodies, they only came out in December so they are only just starting their work, but they are drawn from volunteers locally, not appointed by the hospital or by the Secretary of State but appointed independently.

O32 Jim Sheridan: And is there a brief clearly laid out for them on the criteria they have to meet? What is required of them?

Sir Nigel Crisp: Yes, there is, but the brief is also a bit about what they decide are the important issues for their service because you will well understand the patients' forum in a mental health institution will be different from an acute one, and from one in primary care.

Professor Sir Liam Donaldson: Adding to that briefly, I think the point you make about the patient being afraid to complain is a very well made point but we have been working very hard on the culture of the local NHS over the last five years with the introduction of clinical governance where quality and safety are centre stage, and we would certainly deplore a situation where a patient raising a concern about their care was not regarded as a very positive step, so in all our work with staff we have been ensuring that they actively welcome and act on any concerns raised by patients. I think the two very important points are to give the people the information in advance so that they can compare hospitals and services and, secondly, on the cleanliness side having a direct line to housekeeping from a bedside phone so you can summon someone along to clear up a dirty area, just as in some hotels they have that facility.

The Committee suspended from 4.00 pm to 4.08 pm for a division in the House.

Q33 Jim Sheridan: Just picking up the point Mr Cruddas was making about the contracting out of services, you mentioned that cleaners were very much encouraged to be part of the ward team, but given that cleaning and catering is usually contracted out to the lowest bidder, it is very often the case that those employed as cleaners, caterers, etc, are employed on a very quick turnaround, and there is very little, if any, training given to these people. I know you say they should be a ward member but are they valued as a ward member, because at the end of the day they have to be paid, and if these services have been contracted out to the lowest bidder then we are only getting what we reap.

Sir Nigel Crisp: I understand the point entirely. In some hospitals, where they manage this well, contracted out staff will be treated as part of the staff of the hospital and part of the induction programme and part of the training and part of the ward team, and it is worth noting that maybe we need to talk about cleaning the wards separately from cleaning some of the other areas in the hospital because actually the issues are not the same for offices, corridors and out patients and so on. But what I think will happen today at the matrons' conference is that they will come forward with some proposals about how we do that in future and how we make sure that that good practice which happens in many places is transferred elsewhere.

Q34 Jim Sheridan: Is that best practice shared through all the local health points? Are there shared experiences and information and best practices? What evidence do we have of that?

Sir Nigel Crisp: We do at the moment but what the publication put out in July was saying is that we can do a lot more about that and can make sure that it is bought to the attention not just if you like

of the people who are responsible for the cleaning of the hospital but to the attention of the pool of hospitals as well.

Q35 Jim Sheridan: But who co-ordinates that information? Who is responsible for making sure that a hospital in London shares an experience with a hospital in Newcastle?

Sir Nigel Crisp: Right now at the moment it is run through NHS Estates. What we are just doing though is asking the Chief Nursing Officer to take responsibility overall for making sure that this is implemented. In other words, we move it from a more technical background into putting it at the forefront with nurses, because we believe that is a very important place in terms of giving nurses more authority and more oversight into what is happening.

Q36 Jim Sheridan: Moving on, would you not accept that there is a direct correlation between low pay, low morale and MRSA in the local hospitals? Sir Nigel Crisp: I do not think I have seen any evidence that tells me that is the case; that is a straightforward answer. I would be interested to see that. I think low morale is often associated with low standards and I would expect it to be just on a common sense basis, and one of the things we have to do about morale is to make sure people are valued, and I think part of this is making sure we do make sure that people who do some very basic things in hospital, as the Chairman says some of the things we want to take for granted, that these people are properly valued as part of the team, and that is not just about pay.

Q37 Jim Sheridan: On the famous Today programme you did say that we had a matrons' charter?

Sir Nigel Crisp: I said we would create a matrons' charter, and that is what the conference is about

Q38 Jim Sheridan: Public perception in hospital was, or used to be, that you had a matron who made sure the ward was clean and made sure that people were doing what they were supposed to be doing, and that has long since gone and I think that is where the trust has gone from the general public. There is a perception amongst the general public that hospitals are not clean.

Sir Nigel Crisp: I am sure that is right. This is slightly different between England and Scotland and in England, and I do not know about Scotland. We introduced modern matrons again about three years ago, and there are something like 500. This is not individual matrons for the whole hospitals; this is matrons who are nurses who have responsibility for an area of a hospital which includes responsibility for the environment in that area which is the point you are making. We have introduced more than we said we were going to, or rather NHS hospitals have introduced more than they said they were going to, and what we want to do is to give these people more power to answer

the sort of point you are making, and I do understand and recognise that is what people feel. As your Chairman said, there are undoubtedly examples where the standards are not good enough.

Q39 Jim Sheridan: Can we now just run through for my own satisfaction, if MRSA is found in any particular ward, do we immediately close the ward? Do we partially close it? Who makes that decision? Where is that decision made?

Sir Nigel Crisp: It is made locally and it will be slightly different depending on the circumstances. Professor Duerden: When MRSA is found in a patient, treatment of that patient is importantprevention of spread from that patient to others, and that comes in with good nursing practice; potential for isolating that patient if necessary; and cleaning the environment around the patient, particularly after they have been discharged so you have a clean environment for the next patient coming in. You would only go to the lengths of closing a ward if there was evidence of spread to other patients within that ward causing an outbreak of infection, and then you would have to consider whether the right thing to do in that local situation was to close it, move the patients out, and clean the whole ward before going back to normal practice.

Q40 Jim Sheridan: But who would have the ultimate decision to close the ward? A medical person? A financial person? A chief executive? **Professor Duerden:** The infection control team, led by the infection control doctor who is medical, would advise the chief executive of the trust.

**Q41 Jim Sheridan:** It says here on page 13, "Improvements to infection and control management arrangements have increasing trust board involvement." What does that mean in layman's terms?

Sir Nigel Crisp: I think what that is referring to is that we have said following publication of the report last year that every trust has to have a director of infection control and they have to report to the board.

Q42 Jim Sheridan: So in layman's terms that is— Sir Nigel Crisp: That means a top dog in the trust whose responsibility is for infection control and reports directly to the board, not somewhere in between.

Q43 Jim Sheridan: I often wonder why we do not say that.

Professor Duerden: It would be a professional person, usually either a doctor or a very senior nurse, who has direct responsibility to the trust board, who has both responsibility and authority to take action.

Jim Sheridan: Thank you.

**Q44 Mr Steinberg:** Sir Nigel, I have a lot of respect for you and I think you do a good job in the NHS but, frankly, the answers you have given this

afternoon I am amazed at. I do not see it substantiates what The Sun said about you but, by gum, it is not far off, to be quite honest. If this had been the first report on hospital acquired infection then I could have understood some of the answers you are giving but, frankly, this is the second report, four years after the first report, and the answers you are giving would be the answers that one would have expected four years ago, not four years after the recommendations of Committee. Quite frankly you just do not seem, you and Sir Liam, to have taken this problem very seriously at all otherwise we would not have the Report we have today which, frankly, is a disgrace as far as I am concerned. I think it is one of the worst we ever had based on the fact we did it four years ago and the situation is now worse than it was then. You seem to have argued it is not, but you just have to read the Report to see how many people have died since four years ago and how many people have acquired infection, and it is almost double. Frankly nothing has been done to change that. I want to read you, even if it takes me the next 10 minutes, a quote that I used in a speech on the floor of the house three years ago in a PAC debate after the first Report had been produced by the NAO and ourselves, so this quote I used is three years old. "Doctors campaign against filthy wards. GP takes action after hospital superbug kills his wife"-and I am going to quote extensively from the article because it sums up the tragedy that has occurred, and you have done nothing about it for four years to be quite honest. You can pontificate as much as you like but nothing has been done and twice as many people have died. The article said, "A retired GP has launched a campaign to improve hygiene in hospitals after his wife died from a superbug she picked up on a 'filthy ward' while recovering from a routine operation." The retired GP in question was Dr Roger Arthur. "His wife Patricia, 73, died in St Helier Hospital in Carshalton last month from the superbug MRSA, an infection which kills 5,000 hospital patients a year and is a factor in the deaths of 15,000 or more. Dr Arthur said that the real figure may be much higher. The scale of the problem is highlighted in the fact that at the time of Mrs Arthur's death, St Helier had a dedicated MRSA ward, designed to keep affected patients in isolation—but it was full. She had gone to St Helier for surgery to remove a benign obstruction in her bowel. Her husband said 'the operation was a success and she was discharged after eight or nine days. I noticed she had a bit of a cough but she seemed fine. However, when we got home she seemed to become ill and within 10 hours I could see she was going downhill fast. We went back to the hospital and they did some tests. The doctor came back and told us it was MRSA.' Mrs Arthur died from the infection four days later. Dr Arthur, from New Malden, has little doubt how his wife become infected. He said 'The ward she was on was absolutely filthy. There were sweet papers, fluff, old bits of elastoplast, and the tops of disposable syringes behind the bed when we came in, and still there when we came out. I ran my finger along the windowsill by my wife's bed. There was a thick layer of dust and a vase with dead flowers. There were cleaners around but they seemed to be cleaning the middle of the floor and not bother anywhere else. I was told there was a ward for MRSA patients but that was full, so people with the infection were remaining in normal wards and patients'." other We infecting recommendations against that four years ago, I made this speech three years ago, and nothing has changed.

Sir Nigel Crisp: I am sorry if I have given you the impression that we are not taking this seriously because we do indeed take this extremely seriously and I said to your Chairman at the beginning that every single case of the sort you are talking about is an absolute tragedy. A lot has happened. The fact that we started the first mandatory surveillance in the world the year after 2001; the fact that we have now got a changed accountability so we now have these new directors coming in; we have the handwashing campaign—which is not just an issue in England, the sort of issues-

**Q45** Mr Steinberg: Sir Nigel, we sat here four years ago and said that people were dying or being infected because doctors, nurses and hospital staff were not cleaning their hands. We said it four years ago and I came back from holiday two weeks ago to see on television the amazing thing that nurses were now going to start washing their hands or cleaning their hands because there was going to be some stuff put on the bedside for them—four years later! How can you say you are not complacent if that has taken four years for people just to wash their hands?

Sir Nigel Crisp: But if you go back and look at what we did this week it is based on what has been happening over the last 18 months to two years when we have been piloting that in hospitals because what we know, and what this Report says, is it is not that people are not washing their hands because they do not think it is important—there is a whole series of other reasons, so how do we make sure we get people to wash their hands? This is not just a problem in this country; that is why we piloted it in a limited number of hospitals and we are now running it out across the country. I understand that the argument is why could we not have done that two years earlier rather than starting it two years ago, and I take the point, but this is action that we have taken which is serious

**Q46** Mr Steinberg: I do not want to mention any names because that would be unfair but I had a confrontation with a member from the House of Lords who I have a great deal of respect for and who I like a lot, and he is very influential in the medical service, and he fell out with me when I pursued the fact that one of the causes was that handwashing was not being done properly by his own profession. Now, if he, who is the one of the most prominent surgeons—perhaps I should not say that—in the country, can argue the case, what

do you say to that? What do you say if the profession themselves will not accept that what they are not doing is causing MRSA?

Sir Nigel Crisp: This Report again says that getting people to wash their hands is not as simple a thing as we have just said, for cultural reasons, for habit reasons—for a whole series of different reasons-

Q47 Mr Steinberg: That is not good enough, is it? It is just not good enough as an answer to say that for cultural reasons or for habit reasons or whatever people in the Health Service are not washing their hands? It is such a basic thing, and yet it has taken four years to do something about it. Sir Nigel Crisp: I agree but how do you get everyone to do it because it is not quite as simple as it sounds.

**Professor Sir Liam Donaldson:** Sir Nigel is right, this is a problem worldwide. The World Health Organisation have pointed out that compliance with those basic practices is a problem in many countries of the world. One of the reasons is that if there was a sink by every patient's bedside to which the doctor or nurse could go every time they had contact with the patient life would be a lot simpler, but there is not-

Q48 Mr Steinberg: To put it down to the fact that there is no washbasin beside every bed therefore they cannot wash their hands is, to me, just making excuses.

Professor Sir Liam Donaldson: If I could ask you to let me finish my answer-

Q49 Mr Steinberg: If the answer was worth listening to, I would listen to it. Go on, then. Let's

Professor Sir Liam Donaldson: But sometimes very busy staff could be dealing with 30, 40, 50 different patients in the course of a morning and they are moving quickly, often doing life-saving procedures, so we do have to make life easier for them-

**Q50 Mr Steinberg:** So they save somebody's life on one bed but kill the next one in the next bed because they have not washed their hands?

Professor Sir Liam Donaldson: —so the way we tackle this is to bring in alcohol rubs which can be applied in 20 seconds, they can be at the end of every bedside, or on a doctor or nurse's belt.

Q51 Mr Steinberg: Fantastic, but it has taken four years to do it?

Professor Sir Liam Donaldson: Well, it was not a widely used practice four years ago. It has been researched over time, been shown to be beneficial, and it is not a panacea because the cause of MRSA is not dirty or unhygienic hands alone, although it is an important contributory factor—something like 20% of cases have probably contributed to that—but this is a technique which has now been properly evaluated and can be introduced comprehensively, which it is being.

Mr Steinberg: Just to finish I think that there is a certain amount of arrogance in the way that you treat things and the way you deal with things. You say that there needed to be pilot schemes and God knows what else that has taken four years, but the truth of the matter is I do not think you have been listening to people. This Report clearly shows that where people have listened to what has been said, for example in Denmark, they have got their rates down to something like 0.6 while ours is 42.9 in terms of resistance to MRSA, because they took advice and they carried that advice out. I understand in Scotland, for example, in their Health Service they give antibiotics—for some reason you do not do that—during an operation. Apparently it has been proved in Scotland that this works but in England we do not do it. There is another one, the Pan Celtic collaboration. The English are so arrogant they are not going to take part in this because they want to do it their own way. You just do not listen, you do not take advice, you just go your own way and then four years later you come back and there is no improvement whatsoever-in fact, the figure is worse.

**Q52 Chairman:** To complete that question for the sake of the record, the reference to Denmark is in paragraph 4.38 and Appendix 3, page 50, Sir Liam, and what Mr Steinberg was putting to you was that they have been very successful in Holland and Denmark in their "search and destroy" approach which apparently you have not been able to implement so successfully here, if at all?

Professor Sir Liam Donaldson: They start from a lower baseline, they have been at it for 10, 15 years to get to the position they are in-

Q53 Chairman: Which, of course, begs the question?

Professor Sir Liam Donaldson: —and they do so obviously by good hygiene but also a very strong part of their policy is based on having a high proportion of isolation beds in the hospital, isolating people who are infected immediately, swabbing them on admission, creating a cohort of nursing staff especially to look after those patients-

Q54 Mr Steinberg: So why do you not do it?

Professor Sir Liam Donaldson: Because we have been treating a greatly increased number of patients in the NHS and to rein back and deny patients treatment whilst we create more spare capacity is quite a difficult thing to do. It has to be introduced over time. We do not at this stage have hospitals with high levels of single rooms and cubicles, but that is being introduced into the NHS building plan so we will get there with some of these structural changes. We do not yet have what we need compared to the Netherlands, which I have visited recently, and some of the other Scandinavian countries, but we will be able to get there when we do have those facilities available.

Q55 Mr Bacon: Sir Liam, I must say your last answer reminded me of that old British rail slogan "We are getting there" which they scrapped eventually because it was so unsuccessful. Can I ask you to turn to page 21, paragraph 2.4, which refers to the document you mentioned at the beginning, Winning Ways, and says that you announced plans to establish a national audit into deaths from health processes and infections which will investigate a proportion of deaths that occur to identify avoidable factors and lessons to be learned from them although the details of the methodology have vet to be announced. That was in December 2003, and I have a copy of Winning Ways here. You said a moment ago at this hearing in September 2004: "Plans are being put in place". This Report was in July and refers to the fact that details of the methodology have yet to be announced. Now in September you are telling us "plans are being put in place". It may be relatively complicated although it does not seem to me, as the Chairman, said, to be rocket science, but what is it that has taken you from September 2003 to September 2004 to start beginning to put plans in place?

**Professor Sir Liam Donaldson:** Big national surveys of this kind which have never been attempted before—I am not aware of a similar initiative in any other part of the world—do take time to plan. We have to use experts; the methodology has to be set out; there may be ethical questions to be resolved. Obviously we would have liked to have started sooner but the planning has to be undertaken so that when we have the audit, the survey in place, then it is giving us valid, accurate, reliable data rather than misleading or inaccurate data. You added a question at the beginning which you did not give me a chance to respond to-

Q56 Mr Bacon: About British Rail. It was rhetorical. Sorry, but I have not got much time. Sir Nigel, when you visit hospitals, which presumably you do, do you get asked to wash your hands with hospital gel?

Sir Nigel Crisp: If I am on wards.

**Q57 Mr Bacon:** Always or sometimes? Sir Nigel Crisp: It has been increased. I try and visit hospitals every week and it has been increasing-

Q58 Mr Bacon: But it is not standard? Sir Nigel Crisp: But it is not standard.

Q59 Mr Bacon: I went to All Hallows Hospital, a small foundation owned by nuns in my constituency which provides intermediate care, and it was the first time ever I walked into reception and the first thing the Chief Executive said was "Do you mind washing your hands, rubbing alcohol?" and he took me over to the desk and there it was, which had never happened at the brand new Norfolk and Norwich, which has been there for some years so it obviously was not built into the procedures at the Norfolk and Norwich at the start. I have visited the Norfolk and Norwich on countless occasions, and I have yet to be asked to wash my hands. I wrote

this down when you said it, "But how can you do it," and it worries me slightly that in your office and in your position you were asking the question "But how can you do it" in terms of encouraging people to wash their hands more regularly?

Sir Nigel Crisp: Let's be clear. We are trying to make changes and improvements in hospital acquired infection at the same time as trying to do lots of other things, and therefore what we need to do is find ways in which it is easier for the clinical staff to do more invasive procedures, to do more procedures, to reduce waiting time, to continue with the real improvements that are happening with cancer and heart disease, so it is very important that we find ways that make it easier, and we need to test those ways out. It is not just as simple as issuing an edict from the centre about washing hands; it does not work like that. What will be a very interesting test is what happens now next time you are in the Norfolk and Norwich hospital, and you will increasingly see it, and from April you will be expecting this to happen everywhere in the NHS.

Q60 Mr Bacon: Paragraph 4.7 on page 34 talks about this lack of knowledge and guidelines, but sometimes other more important factors such as time pressure, inadequate facilities and lack of access to hand hygiene agents. A bottle of alcohol spirit gel is two or three quid. Is it now no longer a problem—it obviously was when this Report was published in July—that there is a lack of access to alcohol hygiene agents, or has that been resolved? Sir Nigel Crisp: By April it will be resolved.

Q61 Mr Bacon: Why does it take so long? On the internet I found Cleanroomshop.co.uk and product ID HH2 Spirigel alcohol and gel. Why not just buy a job lot off the internet and make sure every hospital has one? Why does it take another six months?

Sir Nigel Crisp: Thank you. Part of the pilot was to look at all the alcohol gels that were available and see which ones were effective, and that has been done.

Q62 Mr Bacon: We know which is the most effective?

Sir Nigel Crisp: We know which are the most effective, because it is not a single product, as I understand it.

**Q63 Mr Bacon:** Why does it take from now till next April to get what you now know to be the most effective agents into place? People fight wars in less time than that.

Sir Nigel Crisp: I think that is a fair question. You will see it happening quicker than that. That is the backstop.

Q64 Mr Bacon: What causes compliance and what causes non compliance?

Sir Nigel Crisp: With the guidance?

Q65 Mr Bacon: Yes, because you came and sat in front of us talking about suspension of clinical staff, and you issued all this guidance and in fact when you appeared before us about this you said you were waiting until the Committee was over in order to renew your guidance in fulfilment of the commitment you had given to the Committee. You then issued that following the PAC hearing. It turned out it was something the Committee was given two years previously, the guidance was only two and a half pages long, and what it was said you really, really, really must not suspend clinical staff unless you have to; you really must not have non disclosure of clauses, unless you feel you really absolutely have to, and my point is that you sit there issuing all this guidance and people do not take a blind bit of notice.

Sir Nigel Crisp: No. If you look at what has happened over the last four years there have been enormous changes in some bits of the performance of the NHS, really serious important changes, with many more lives saved from cancer and heart disease in really substantial numbers, and big reductions in people in pain and suffering on the waiting list—a whole series of things have happened. Not everything has been done at the same time. Now the way we have driven those changes is the way we are now going to drive these changes as well. If you actually look at the sequence—

**Q66 Mr Bacon:** You mean put a rocket behind people?

Sir Nigel Crisp: One of the "rockets", as you want to call it, is there are now targets, and I understand this Committee, amongst others, have said we have maybe got too many. We can refine them down so we only have a small number of targets and we can put a specific target in order to tighten things up.

Q67 Mr Bacon: Plainly it can help to have a target but everyone knows that in any organisation if you have more than 10 targets you have too many and you will probably only achieve five or six. Is it not a case not of having a target but of having a culture that says, "Of course, you clean at every possible opportunity"?

Sir Nigel Crisp: I was going to say that is only one bit of it and that you need to focus people's minds. Quite clearly, if you go round the NHS in the way I do you will have seen where targets have focused people's minds, where we have things like rapid access to thrombolysis after a heart attack that has saved many lives. That has been driven by target, training, a change in culture, and by making sure that people know it works, because actually the Health Service is made up of a lot of independent-minded people who want to know they are doing the best for their patients and see the evidence.

**Q68** Mr Bacon: But something has declined, something has seriously deteriorated to the point when something as obviously basic and common

sense as a very high standard of cleanliness has effectively gone out of the window. There has been a huge deterioration for that to have been able to occur?

Sir Nigel Crisp: We have been through a period in health care where antibiotics have solved an awful lot of problems, and what we are talking about here is a situation beyond that, if you like, where we are now getting viruses and bacteria which are resistant to antibiotics so the problem is rising up again in terms of its importance. Now, that is the sequence of things that I think has happened here, and it is quite right that we have now got to address this issue much more vigorously than we have done but alongside those other aims of giving people better healthcare, getting them out of pain, reducing anxiety and everything else we have spent so much effort on so successfully and not through issuing guidance.

Q69 Mr Bacon: May I ask you to page 42, figure 13, about the degree to which infection control teams are consulted on wider hospital activities, and as one would hope you see right at the top, "Disinfections and sterilisation of equipment." The infection control teams are consulted 85% of the time-which does make you wonder what the others are doing. Am I to take it that from all this list of activities, theatre ventilation, cleaning services, laundry services, bank management, catering services, you would expect that an infection control team would be consulted by hospital managers in relation to each of these issues? It ought to be 100% for all of them because it ought to be so obvious that the infection control team is a key point that needs consultation.

Sir Nigel Crisp: I think that is right, with the possible exception of the last one, but Professor Duerden might just say—

**Professor Duerden:** Chairman, that is right. That comes now within the job description and requirement of the new director of infection prevention and control. It is at the top of the infection control teams.

**Q70 Mr Bacon:** So you have got a posh job with a posh title, doubtless advertised in *The Guardian* at huge cost, but—

**Professor Duerden:** No, these are people whose posts have been what I call upgraded to have a higher priority to do this work and to ensure that they are included in all of these activities.

**Q71 Mr Bacon:** Is it not extraordinary, looking at the fourth one down, "reviewing contracts for cleaning services", that only just over half of managements consult infection control teams about cleaning services? Is that not slightly mind-blowing?

Sir Nigel Crisp: It is surprising. The figure of "sometimes consulted" is obviously higher, but I think it is surprising. Good practice, as I said earlier, is that people will do that. Clearly, this shows that they are not all—

**Q72 Mr Bacon:** This would be an interesting chart to see in two years' time, would it not? Sir Nigel Crisp: I would have thought so, yes. Mr Bacon: Good, well we will look out for it. Thank you very much.

Q73 Mr Davidson: Can I pick up the question of comparing what is happening in Scotland, Wales and Northern Ireland with what is being done in England. Why have different conclusions been reached on how to proceed with this?

Sir Nigel Crisp: Perhaps I can ask Professor Duerden, who has got responsibility for Wales as well.

**Professor Duerden:** I do not have responsibility for Wales, sir, but I have my academic chair in Wales. The NHS is devolved in—

Q74 Mr Davidson: I know all that, but why are they coming to different conclusions, that the situation is so different that it would lead you to a different conclusion?

**Professor Duerden:** The situations are not particularly different, and most of the practices and way of carrying things forward in the four countries are essentially similar. I was in Northern Ireland on Friday discussing this with my colleagues there, and their approach to this is very similar to our own.

Q75 Mr Davidson: So this Celtic league that we have here—do we take it that it is actually reporting mechanisms and that there ought to be no real difference and distinction in terms of the way forward?

**Professor Duerden:** The pan-Celtic approach was particularly in relation to the surveillance of hospital infections, and that is a responsibility for the individual parts of the NHS

Q76 Mr Davidson: I know all that.

Professor Duerden: What is being counted is essentially very similar and will come up with equivalent data.

Q77 Mr Davidson: Do you anticipate that we might see different results from the different routes being followed, so that if we looked at this four years hence should we see pretty similar results coming forward from all four countries?

Professor Duerden: I would expect so. I have no reason to suspect it would be different.

**Q78** Mr Davidson: Fine. Can I ask about the figures for deaths being under-estimated? I appreciate the difficulty that on deaths you do not normally register everything that might have been a contributory factor; but in terms of the scale of the difficulty and the extent to which MRSA or other infections are a genuine contributory factor, as distinct from something that is also there, can you give us a feel for the extent to which the figures that we have here are under-reported?

Professor Sir Liam Donaldson: I cannot. I would be guessing, and I do not like to guess on such a serious matter. We will be able to get a more accurate picture with the audit. Many causes of death are under-reported because, by definition, not everybody has a *post mortem* examination after death, and so on and so forth.

Q79 Mr Davidson: Following on from previous questions about the Danish practices and those in Holland and Scandinavia in general, would it be fair to say that they are more expensive than the practices which have been followed up to now in the United Kingdom?

Professor Sir Liam Donaldson: To be absolutely clear, their levels of hospital infection are not that dissimilar to ours. Their level of MRSA is lower. When I visited Holland and talked to them, I asked them about their infection levels and asked them whether they could get them down lower, and they were sceptical about whether they could make any progress there, in that across the western world anyway we are dealing with very, very sick, frail elderly people, for whom we are doing a lot more; and that is common to all hospital environments. As far as MRSA is concerned, they are creating more capacity to empty beds, to if necessary slow down treatment and so on. They keep people with MRSA in isolation.

**O80 Mr Davidson:** It is more expensive. This is the point. I wanted to come on to the question of the extent to which other targets that you have are running counter to the objective of reducing MRSA and other infections, and in particular this question of the efficiency target of bed usage. It just seems to me that these are clearly in contradiction, unless there is an additional resource available. I am trying to clarify how you manage to balance this out. Sir Nigel made the very fair point earlier on that you are dealing with some other issues as well and that this is not your sole purpose in life. Can you give us some guidance about how you manage to make those sorts of balances, and which becomes the more predominant driver in these circumstances?

Sir Nigel Crisp: Can I pick up the example of the case study in Essex, which shows that if you apply good infection control practices, it increases the number of patients that were treated. The two things are not necessarily in opposition. That is what we have got to try and do, not set these things up in opposition. I agree with you that if occupation rates go up and we do not do anything else, it will make it harder to get infection control right; but the Broomfield Hospital study showscase study D on page 21—that in the year prior to doing this 417 arthroplasties were performed and the following year there was 17% more, and they not only reduced infection. That is what we need to be doing, to align both these things. The other thing that this Committee has discussed before is our treatment centres of separating off elective patients from emergency patients. That also will allow us to get to grips with it. We are finding

things that will allow us to do both of them, both activity levels—reduce waiting times and also infection.

**Q81** Mr Davidson: Coming back to the points that Mr Steinberg made, you were indicating that there are a number of things you need to do. That suggests to me that they have not already been done, which raises the question why they have not already been done, when you have had four years, and some of these lessons presumably were identifiable and identified at the time of the last report.

Sir Nigel Crisp: Some of them were, but taking the treatment centre programme where we are very deliberately taking procedures out of busy hospitals and treating them in a much more streamlined way, that was not how we were thinking of these things four years ago—we were only just starting to think about those things four years ago. My real point is that we need to get both our objectives of more people treated and higher standards of infection control tackled at the same time; they do not have to be opposite to each other.

**Q82 Mr Davidson:** But they frequently are at the moment.

Sir Nigel Crisp: They can be.

**Q83 Mr Davidson:** Give me another example of how they can be.

Sir Nigel Crisp: The point that has already been made, which is that if you are—

**Q84** Mr Davidson: That is cheating because we have already had that one. Give me a different one. Sir Nigel Crisp: A theoretical example is that in a ward where you have a high turnover of patients, where you are moving patients into beds pretty rapidly after other people have left them, in those circumstances it is harder to control infection.

**Q85** Mr Davidson: I want to come back to staffing and staff turnover. I want to clarify to what extent the loss of the culture of cleanliness, which was to some extent time-consuming and could be seen as using time that was effectively wasted, was squeezed out because of the drive towards efficiency and getting people moving quickly and so on. To what extent was that pushed aside because of these other targets? We want to learn whether or not the imposition of new targets often has unintended consequences, and whether there is a mechanism that would have allowed us to have spotted these things at the time, which we could then utilise in the future.

Sir Nigel Crisp: I accept the point. If you go back 10-15 years, there has been a process of trying to make the NHS more efficient and effective, and part of that has reduced costs in housekeeping areas—and whether catering or cleaning, again, has been looked at by this Committee. However, that is quite a long-term process. If that is managed properly and effectively, it does not have to affect the standards.

**Q86 Mr Davidson:** It clearly did. What is not obvious to me is why the mechanisms that should have been there at the time to learn about what was happening as change was being introduced, did not seem to operate. Presumably, there must have been some people who said, "there have to be different ways here in terms of cleanliness, if you speed this up and speed that up"—but why was that listened to or was it listened to and misjudged, or are these entirely new bugs?

Sir Nigel Crisp: There are two slightly different perspectives. The strict general management position is that four or five years ago we did not have a clear set of priorities. We were dealing with some very pressing issues for this Committee and others about waits in A&E and waiting times. We were not on top of these big issues. We are now on top of them, and it does not surprise me that we are seeing the next set of issues coming forward about the NHS quite rightly being about quality and not just this aspect. We are getting the waiting lists down but there is more to do-and I am not complacent about that either—but actually we need to concentrate even more now on quality. That does not mean to say that there were not voices saying that five years ago, but I believe it is important that we started to tackle cancer, coronary heart disease waiting times, because people such as this Committee were telling us that is what we had to do.

**Professor Sir Liam Donaldson:** If you have drives for efficiency, which we did, and you do not have any measures of outcome because you are not prepared to invest in the information to assess outcome, then you are heading for disaster. The second thing, which has not been mentioned so far, is that there was a degree of clinical complacency. Whilst there were antibiotics available with which people felt they could treat these infections, they did not need to worry about it, and they did not anticipate that we would start to run out of therapies. Antibiotic resistance is as old as antibiotics. Penicillin was introduced during the war, and within about a year a high proportion of some of the organisms that it treated were resistant to it.

Q87 Mr Davidson: That is very helpful. I have never been entirely clear in my own mind about the extent to which the deaths and difficulties are as a result of, as it were, the natural evolution of bad things, which it is more difficult for us to deal with, and on the other hand slack practices that allowed existing bad things to get in where they should not have been. Can you give me a feel for that because, obviously, one is more excusable than the other? **Professor Sir Liam Donaldson:** The slacker practice which undoubtedly came about, and is what we are majoring on now, could be compensated for by treatment with antibiotics which used to work in some of these conditions but which no longer do because of the growth of antibiotic resistant organisms. If you put that with the fact that we are now putting tubes and wires and all sorts of other devices into patients, who would have died 15 years

ago, then we are saving more lives because we are opening up therapeutic opportunities for more people. We are paying the penalty of profligate use of antibiotics in the past, which was a feature of practice, but undoubtedly because we have not linked measures of outcome to efficiency drives to reduce starting levels to more cost-efficient levels, we have not been able to assess the negative side of improved efficiency in some of the areas. It came about too when nursing staff levels were reduced because people felt that you could manage with fewer staff, but clearly that was not the right thing

Q88 Chairman: To tie it up with the Report, you were asked by Mr Davidson about comparative data, and there is reference in paragraph 3.7 on page 24. For that we hear that the first European comparative data for MRSA was published in 2002. Would that tie up with what you believe, Sir Liam?

Professor Sir Liam Donaldson: Yes.

**Q89 Chairman**: If that is right, if you refer to annex A on page 4 of the supplementary memorandum vii, you will see that the Secretary of State for Health, Dr Reid, is on his feet in the chamber at the moment, talking about this very subject, said that the whole NHS should learn from the best at home and abroad. If the first comparative data was published in 2002 why have we had to wait for this announcement in 2004 for the fact that we are now going to learn from abroad?

Professor Sir Liam Donaldson: I think because it has not been entirely clear exactly how those other countries have achieved what they have achieved, and often there has been no proper evaluation or research of the exact changes you would need to replicate in order to achieve their levels of resource. Chairman: Other colleagues can come in on that.

Q90 Mr Williams: Looking at annex C, we find that by the measures used there the incidence of MRSA in this country is 71 times as high as in Denmark, and 41 times as high as in the Netherlands and Sweden. Those are not small levels of magnitude, are they?

Professor Sir Liam Donaldson: Well-

Q91 Mr Williams: Are they or are they not? Professor Sir Liam Donaldson: Small levels of difference, no they are not.

**Q92** Mr Williams: I am glad to hear that. I did not want any prevarication of that or we would not get very far! In fact, of 22 countries shown here, only three have a worse level than the UK. That is nothing to be proud of.

Professor Sir Liam Donaldson: Absolutely not, no.

Q93 Mr Williams: So why is it that they have identified and been able to tackle the problem when we seem very belatedly even to have realised the problem existed?

Professor Sir Liam Donaldson: Firstly, I should point out that the levels of hospital infection per se—there are not such great differences between countries. It is when we come to the MRSA. When we are quoting 40%, it is 40% of the staphylococcal infections; it is not 40% of all hospital admissions, just to be absolutely clear. The countries that have been successful are in the minority. Other parts of Europe, the United States, other parts of North America and ourselves, have much higher levels than the Netherlands and the Scandinavian countries. That is the baseline we are starting from.

Q94 Mr Williams: No-one suggests that the figure for general level of admissions is relevant to this. If you look at the figures, 300,000 people a year contract infection while they are in hospital. Of these, blood infections account for only 6%, so that is a small proportion of a large number. Half of those consist of the staph non-resistant type, but nearly half again are MRSA. Putting all those figures together, I work out that each year 3,600 people acquire MRSA as a result of going into one of our NHS hospitals in England alone. That is appalling, is it not?

Professor Sir Liam Donaldson: Can I ask Professor Duerden, who has looked at the figures, to comment on that figure?

Professor Duerden: The figures for MRSA bacteraemia are published and have been published now for the past three years from mandatory surveillance, and they show the number of cases that are actually recorded.

**Q95** Mr Williams: I have told you what the figures are; they are 3,600: the NAO has given us the figures. They have given us the percentages and I have told you what the percentages mean. It is 3,600 a year. I am not asking for an argument about it. Is that or is it not a fact, and, if it is not, how has the NAO got it wrong?

Sir Nigel Crisp: I think we are saying the figure is actually 7,400 rather than 3,500. I do not think the NAO has got it wrong.

Q96 Mr Williams: I suggest you look at the percentages that have been shown in the briefing. **Professor Duerden:** That is because the percentages that have been extrapolated—the 7,400 is from figures produced by the Health Protection Agency only six weeks ago.

Q97 Mr Williams: A suggestion has been put forward that the switch to contracted-out cleaning is a major element in this. Has there been any study of the correlation between the incidence of MRSA and contracting out of cleaning?

Professor Sir Liam Donaldson: All I can say is that I asked recently for a list of the worst 10 hospitals on the cleanliness measures, and the worst 10 on MRSA, and there was no hospital on both lists, so I think this is a complicated subject, and it is being studied further.

**Q98** Mr Williams: With respect, to say it is being examined further—the top 10 that you have taken there—it would be a matter of a couple of hours' work for statisticians to work out whether there is or is not a correlation between the hospitals that have been listed in annex C or annex D.

**Professor Sir Liam Donaldson:** I am suggesting there is no simple correlation because when you look—

**Q99** Mr Williams: We do not know, because you have not done it.

Professor Sir Liam Donaldson: I have looked at—

**Q100 Mr Williams:** The top 10 and bottom 10 or something like that.

**Professor Sir Liam Donaldson:** No, I have looked at the top 10—the worst hospitals for cleanliness and the worst for MRSA, and no hospital appears on both lists; so the relationship between cleanliness and infection is not strong and clear. The relationship between cleanliness and MRSA is clearly there but it is a more complex relationship which requires detailed research.

Sir Nigel Crisp: But we are looking at the detail of that.

**Q101** Mr Williams: Since it is a fairly simple correlation to provide, and since—

Sir Nigel Crisp: The first two hours did not provide it, is I think what Sir Liam was saying.

Q102 Mr Williams: But he only looked at a couple. I am sorry, you looked at a number of hospitals, and it does not satisfy me. I am asking you to provide the correlation of the incidence of contracting out of cleaning with the hospitals listed in annex D, and will you put that in writing to us, please?<sup>2</sup>

Sir Nigel Crisp: That is precisely the information we are looking at.

Q103 Mr Williams: It is four years since we looked at this, and I remember on that occasion asking Sir Alan Langlands what was the one thing that could be done, the most important single thing. At that stage, his answer was, "persuade people to wash their hands". In between then, a large number of PFI hospitals have been contracted. Ignore those that were already in the pipeline before. About how many have been contracted for in the last four years—a ball-park figure; I am not holding you to an absolutely correct figure?

*Sir Nigel Crisp:* The total we are looking at is going to be in excess of 70 at different stages. That is probably what you are looking for, something like that, in terms of hospital building programmes. It is of that order. Some started beforehand and some were at different stages.

**Q104** Mr Williams: The other thing that Sir Alan pointed out in his evidence was that the other big significant change was a structural change in the

nature of our hospitals, with the disappearance of the isolation wards. That was his last evidence to us on this subject. Can you tell us if MRSA and avoidance of MRSA has been an element in any form in the 70 contracts, which must have been billions of pounds?

Sir Nigel Crisp: You mean infection control—has that been built into it?

Q105 Mr Williams: Yes.

Sir Nigel Crisp: Yes, I can tell you it has been.

Q106 Mr Williams: In what way?

Sir Nigel Crisp: I visited Essex, Broomfield Hospital, about a month ago, to look at what they are doing in terms of their specific planning. They have built in infection control at a whole set of different levels, whether at the engineering level or in terms of how they have structured the way the patients move through the hospital, and the wards and so on. They have very deliberately built that in as an issue in that design.

Q107 Mr Williams: In one hospital?

Sir Nigel Crisp: You asked me if it was in any. I happen to know that by personal observation. At UCH—

**Q108** Mr Williams: I would be grateful for that information if you could find one. *Sir Nigel Crisp:* UCH.

**Q109** Mr Williams: Can you also provide information on how many of the 70 had similar factors taken into account when the contracts were placed?

Sir Nigel Crisp: I am sure we can try and do that.<sup>3</sup>

Q110 Mr Williams: Finally, can I ask you this, Professor Duerden. Certainly in the Welsh press on MRSA recently the figure has been bandied about that 30% of the population allegedly are walking around carrying MRSA but not suffering any disadvantageous result from it. Someone at the Assembly, Dr Mike Simmons, has now said—you probably know him, knowing how everyone knows everyone in South Wales—that 30% is a medical myth. Is that correct, and how widespread is the incidence of this in the community generally?

Professor Duerden: As far as MRSA is concerned, we do not know the actual incidence of carriage in the community. What we do know from longstanding studies is that about 30% of the population generally carry Staphylococcus aureus, which is the bacteria in question, in our noses or on our skin. It is not always the same 30%; you may be positive today and in another month's time be negative. That is a figure that has been found over many years. This is a normal inhabitant of the human body; it lives on the skin and in the nose. In hospitals you are more likely to find that the people carrying it have MRSA because that is the staphylococcus that has become so prominent in

<sup>2</sup> Ev 34–35

our hospitals, so there will be a higher proportion. In the community one would expect smaller numbers of MRSA, but I do not know of studies that have been done that show the exact proportion. There will be some.

Q111 Mr Williams: Perhaps you will write to us about this. Many of us are concerned that death certificates are not necessarily giving the correct priority to the importance of MRSA, which in turn therefore leads to lack of priority in terms of avoidance and resources. As an outsider, one cannot understand—and there are individual cases that we will not go into-that when people have had MRSA and died, the doctors always say, "ah, yes, but they died of fluid on the lung/septicaemia". Can you let us know what symptoms someone who has MRSA and no other problems would suffer if they died from it?

Professor Duerden: That would be extremely difficult, I am afraid, because most of the people who acquire MRSA are debilitated by some other injury.

O112 Mr Williams: Yes, I understand that. Professor Duerden: It is secondary to that, and what has gone on many of the death certificates is the underlying disease.

Q113 Mr Williams: Are you saying MRSA will not kill you on its own?

Professor Duerden: If it gets into your blood and causes MRSA septicaemia, blood poisoning with MRSA, yes, that can kill you.

Q114 Mr Williams: In that case, let us have an outline of the symptoms that we will know are related to MRSA, because it will help us in judging cases in our own constituencies; so exclude all other factors and give us an analysis of the death symptoms of someone dying of MRSA.

Professor Duerden: I am afraid they will be slightly non-specific because septicaemia, whether it is from MRSA or another bacteria, has many of the same symptoms and signs. It is not specific to the one organism. However, I will do what you ask.4

Q115 Mr Jenkins: Sir Nigel, when you are walking down here today, you probably think it looks like a building site. Building sites are very unsafe places and people were killed on building sites—remember the days? There were a lot of accidents up and down the country. However, they changed the culture; they brought Health and Safety at Work in. Now, it is a very safe environment. One man used some chains that were not capable of carrying a load. It did carry the load, but he was caught by the foreman and the foreman sacked him on the spot and said, "get off the job; you could have killed somebody". They have changed their attitude and culture. Thousands of contractors are doing a tremendous job. Yours pales into insignificance compared with their task in changing the industry.

Imagine if in this country every other week a plane fell out of the sky and killed everyone: how many people would be queuing up to fly? It would not be a lot. But in our hospitals we can kill 5,000 a year and it seems to be that there is no problem, it does not matter. We know it will go away because in 2000 the Department said, "we will get a grip on hospital-acquired infection in two or three years' time". Would you like to have another stab? When do you now think you will get a grip on the infection?

Sir Nigel Crisp: Let me respond to your point about the safety culture, which is an extremely good point, and it is much wider this and why we have recently set up the National Patient Safety Agency; making sure that we record near-misses; why we have learned from the airline industry. There is a whole series of things about precisely changing culture, because near misses and things like that are fundamentally important. You will have seen the statistics about the very large numbers that there are in this and every other healthcare system. Hospital-acquired infection is a part of that wider effort to change the whole culture, a culture that Sir Liam has been leading with the Winning Ways report being part of the wider control of infection, which is a wider strategy. It is a simple thing, and I agree with you that it is of fundamental importance.

Q116 Mr Jenkins: It is of such importance that we have this surveillance steering group, and in 2002 you disbanded it; so what are you using now for guidance and giving advice in developing strategies for surveillance?

**Professor Duerden:** The Healthcare Associated Infection Surveillance Steering Group was established to advise the Department on where we should be going. It was always going to be a shortterm group. The systems it recommended are now being put in place in the Health Protection Agency, and that is how we know about MRSA and will know about other infections like Clostridium difficile and enterocolitis. It is being replaced in terms of long-term steering by a group that the HPA is establishing this autumn. The membership has been agreed and the first meeting will be next month. That will carry that work forward, so it is not being stopped.

Q117 Mr Jenkins: You disbanded it in 2002. Now it is 2004. What have you done in the two-year gap? Professor Duerden: The recommendations that it made were put in place, and that is why we have the enhanced surveillance programme. That is why things have been introduced, the things it recommended. Now there is a group to continue the steer.

Q118 Mr Jenkins: When it finished it had a stream of recommendations in place; so what was in place between that being stopped and the new group being set up? Recommendations do not suddenly stop; it is a continuing process, so what was in place?

**Professor Duerden:** The implementation was being done by the HPA in conjunction with the Department of Health to establish the programmes that that group had recommended, and part of that recommendation was to have a replacement for ongoing guidance.

**Q119 Mr Jenkins:** Apart from implementing their recommendations, you are telling me there was nothing in place. The group was disbanded and the new group only established this autumn.

**Professor Duerden:** Yes. The mandatory surveillance that it recommended is now in place. **Professor Sir Liam Donaldson:** The data you have been looking at arise from the surveillance that—

**Q120 Mr Jenkins:** The group that was disbanded in 2002.

**Professor Sir Liam Donaldson:** We needed a group to advise us on how to technically set up the surveillance system. Once it was set up we did not need that particular group, but as we extend it into more specialist areas, then clearly we bring together experts to give us advice.

**Q121** Mr Jenkins: You are bringing together another group.

**Professor Sir Liam Donaldson:** Yes, with a different area of expertise.

**Q122 Mr Jenkins:** I did not understand the gap was there because it had been planned.

Professor Sir Liam Donaldson: Yes.

**Q123 Mr Jenkins:** The incidence of MRSA in district hospitals is increasing. Why?

Sir Nigel Crisp: One of the things that happened more recently is that we appointed an inspector of microbiology who is actually with us, and it would be useful for him to tell us something about the technical reasons for why MRSA may be spreading in terms of the strains and so on. We are looking at why that may be affecting some other countries as well, as it happens, and something that is happening with the disease itself.

Q124 Mr Jenkins: I understand there might be an international comparison and that other countries do have a problem, but of course you are not responsible for Romania, are you? I cannot blame you for the increase in infections in Romania, can I?

Sir Nigel Crisp: No.

**Q125 Mr Jenkins:** You are looking after England. *Sir Nigel Crisp:* The point that I was making is that there are different strains of MRSA in different countries, and part of our problems here, which it would be worth Professor Duerden saying something about, is what strains we have got.

**Professor Duerden:** One of the challenges we have is that two particular strains, 15 and 16 in the jargon, have become established, and they are capable of spreading very readily. Different strains of *Staphylococcus aureus* and MRSA have different

properties. Some can spread much more readily than others, and we have two of these that have spread in our hospitals. Some countries, fortunately for them, have not been as challenged and have managed to keep those strains out. I do know that when they have entered some hospitals in countries with low levels of infection, they have been very difficult to eradicate and have spread in a confined area.

**Q126 Mr Jenkins:** I agree there are different strains and that they will transport across Europe and the world over time, but for the present time, because of your work and because the programme you are developing now, every person entering hospital is swabbed.

**Professor Duerden:** Only if they are entering hospital for particular procedures that are deemed in that hospital to be an appropriate high risk.

**Q127 Mr Jenkins:** So you know how many people are entering hospital carrying—

Sir Nigel Crisp: We do not swab emergency patients.

**Q128** Mr Jenkins: I understand that, I meant elective patients coming in for hip operations, the elderly coming into hospital. We swab them automatically now, do we not?

**Professor Duerden:** Individual hospitals develop their own programmes, depending upon their particular population and the risks they have of MRSA, which does vary around the country.

Q129 Mr Jenkins: I thought we had guidelines and a national standard handed out to different hospitals and companies. If we do not swab people when they come into hospital and if we do not know how many people are infected and crossinfected in hospital, and if we do not swab prior to them leaving so we are not sending it out to the nursing homes, what are the guidelines there to do? Professor Duerden: The guidelines are there for elective orthopaedic surgery and cardiac surgery and neurosurgery, the high risk areas, and for patients coming from high-risk environments such as nursing homes; so they are swabbed, where possible, in advance of admission, if these are elective and known admissions, to try and break this chain.

Q130 Mr Jenkins: The point is that a system should be in place. If there is a situation in a hospital—and many people ask about the financial implications and health implications—where there is an infection in a ward, the chief executive now makes a decision not to shut the ward but to admit patients in that ward and take the risk with somebody else's health and somebody else's life. If they die, what would the relatives say to the NHS and the chief executive, and what power have you got to stop the chief executive doing that? What power have you got to stop him?

Sir Nigel Crisp: What we have now is the Director of Infection Control, who reports to the board, and the board is the employer of the chief executive. The Director of Infection Control is a professional in his field, and if they believe that is what is happening, he has a route to talk to the chief executive's employers.

Q131 Mr Jenkins: In 12% of cases this happened in trusts: chief executives still admitted patients into infected wards and refused to close the wards.

Sir Nigel Crisp: Well, on individual cases—as I say, we are trying to make sure that in individual cases like that, if we have a clash of opinion between the Director of Infection Control—and he is the person we should listen to in this situation—and the chief executive who is acting between the employers and the board, now there is a loop, which we did not have before.

Q132 Mr Jenkins: Can you close that ward?

Professor Sir Liam Donaldson: It may not be necessary in all cases to close a ward, as Professor Duerden said. It may just be a case of isolating the individual patient in a side room. Where it is necessary to close an individual ward—and the clinical advice will now be coming from a senior doctor in the hospital who reports directly to the board and who makes a public annual report so is in a position to blow the whistle if he or she feels that there is managerial override on a matter of safety-

Q133 Mr Jenkins: Can we have that as a condition, that when a management override is put in place, it is open to the public domain with access to information, and people should know that that decision has been made?

Sir Nigel Crisp: Can we look at that, because as Sir Liam said, the Director will provide a public report. I do not know that we will specify, because we simply do not know, what should be in that report, but let us consider whether that is something that should be in the report.

Q134 Mr Allan: Sir Nigel, in the progress report in Annex A on page 4 we already have a statement of what the Secretary of State is going to do, and I want to explore some of those. It starts with an area where we are very critical in our report. It says he will ensure that every hospital publishes and discloses infection rates and trends. Interestingly, he does not say, "will collect accurately the data in order to publish and display those trends". We are very critical in our report of the fact that that collection has not taken place to date. What assurances can you give us that that will happen, not just for MRSA but all the other bugs like E-Coli that affect people? Perhaps Professor Duerden can cover that because you have to start somewhere, and mandatory surveillance is only, to the best of my knowledge, for England and Scotland. This is not a simple matter nor is it something that is done elsewhere. We started with blood-borne MRSA and we are moving into the list that Professor Duerden gave one of your colleagues a moment ago.

Professor Duerden: Wales is mandatory as well. Going on from the MRSA bacteraemia, there is now mandatory collection of surgical site infection in orthopaedics, done very much by the clinicians. It has to be clinician-owned. That is the standard protocol against which everybody is collecting the same data in the same way. We are also now collecting information on Clostridium difficile and antibiotic-associated colitis, which is an important gut infection in hospital practice, and on Vancomycin-resistant enterococci bacteraemia in cancer patients and so on. We are extending the list of mandatory surveillance, and that means it is being collected to defined criteria; so the figures will be comparable.

**Q135 Mr Allan:** One of our other recommendations has to be built in to this huge sum of money you are spending on the national programme for IT. Can you tell us if this is being built in now at the design stage and that we are going to get this kind of information delivered, having spent all the money on the new systems?

Sir Nigel Crisp: The only caveat is the one that Professor Duerden has just given you that this is the build up. I discussed this last week with the National Implementation Team, exactly how we could get that-

Q136 Mr Allan: Is it in the system design now? You are expecting these systems to produce this kind of data. It has to be designed in there, even if the clinicians cannot do it yet; it has got to be there at the time we are contracting for these new systems. Sir Nigel Crisp: Yes. The answer is slightly more technical than that, but, yes, essentially. We want the system to deliver and support this.

Q137 Mr Allan: I am sure we will look at that in due course. The second part of that is that our patients will have a choice of hospitals by the end of 2005 and that this will become potentially a major factor in their decision. I looked at the rates here and took a realistic scenario in (b). We have the rates from different hospitals. Sheffield has a much smaller rate of 0.16 per thousand beds than, say, Nottingham, which is 0.25, a realistic commuter distance. Are you seriously expecting people in Nottingham to say, "I am more likely to get out without MRSA in Sheffield, and therefore I am going to get my treatment done in Sheffield"? What are the knock-on consequences of that?

Sir Nigel Crisp: I started off by saying that you have to listen to patients, and it will be interesting to know what patients will say precisely to that point. I think one of the first things I would do in that situation is ask why. I would want to know whether it was about one particular speciality or what it was. I agree that Sheffield hits all those targets very well, and also is controlling infection very well.

Q138 Mr Allan: But we should not read this that you are expecting people to be shunting up and down the M1 from the end of 2005, picking hospitals.

Sir Nigel Crisp: Some people may choose to do that. We know from our pilot situation that people are actually making choices.

Q139 Mr Allan: They will have an absolute right, so from 2006 they can go to their GP and say, "I need an orthopaedic operation; I have looked at Nottingham and Sheffield is safer, so send me to Sheffield, please."

Sir Nigel Crisp: We have said, "We will provide you with four or five choices." We will say to the primary care trust, "you need to identify four or five distinct, different choices for your patients".

**Q140** Mr Allan: They are the gatekeepers of primary care trusts because—

Sir Nigel Crisp: We said that originally. What I believe we said in the NHS Improvement Plan is that by 2008 that would then open up to what you have just said, which is that somebody can say that. There will be cases where that can happen now—if your mother wants to have a hip operation near you or those kinds of things—you have to make sure those work. But patients will exercise some choice. I would guess that this would be one of the considerations they would want to know about. It will be a range of things, as to what one is going to get.

**Q141 Mr Allan:** Can we go to bedside phones. I can push a button and say I want a cleaner, but it does not mean one is going to come. Are you going to set standards for response times, or are you just going to put something a bit like the cones hotline in, where you can ring up and say there is a problem, but it does not get fixed.

Sir Nigel Crisp: To be fair, we have said that we want matrons and others to look at that and make sure it is feasible. There is no point in having a button if nothing happens. It is only going to happen where that is the right thing to do.

Q142 Mr Allan: It is very prominent here; it is saying this is going to happen: "You have all got a right to phone the cleaning service." It does not say, "you have got a right to have a cleaner come". Sir Nigel Crisp: No, well, absolutely. That would obviously be nonsense. What we have said in here—you are quite right that that would just aggravate things.

**Q143 Mr Allan:** Have you got new resources for cleaning services?

Sir Nigel Crisp: I suspect we will end up spending more on cleaning services, but that will be about local choices, about actually needing to beat our standards—

**Q144 Mr Allan:** As the chief executive you would anticipate as part of the strategy additional resources for cleaning.

Sir Nigel Crisp: Also—and it does not say it in this Report—I have written to all trusts and asked for their assurances that they are meeting our currently published standards on cleaning and indeed on infection control. I suspect that as a result of that some people will be spending some more money in some places.

Q145 Mr Allan: Moving to number 7, the learning from abroad question, experts are to be flown in from other countries with low MRSA and an MRSA summit will be held in the autumn. Forgive my cynicism, but Sir Liam said earlier that Denmark was starting to get to grips with this 10 years ago. Perhaps Professor Duerden can help us here. The medical world is full of research papers done by people, and the Danish Government presumably, 10 years ago, had sufficient research to bring into place procedures that are now having such a beneficial effect compared with ours. We do not need to fly people in for a summit, surely? The information must be there.

Sir Nigel Crisp: I think we have got to keep learning. Sir Liam had also said earlier that he has visited Holland to look at how they are handling it. This is not just a one-off. There is not just one answer to this issue. The cultural issue is the big one, and many other things flow from that. We have to keep learning.

**Professor Sir Liam Donaldson:** In my career I have achieved some of the greatest clinical change and modernisation by bringing in doctors together from places that have done things very successfully, and exposing them to their colleagues who perhaps are sceptical about what they have heard at a distance already in a journal. I think it is a very effective way of achieving change.

**Q146 Mr Allan:** Please assure me that this is the tip of the iceberg, that the actual work of the literature search—

**Professor Sir Liam Donaldson:** Oh, yes, of course, but we have been talking about changing clinical attitudes and culture, and part of that cultural change is exposing people who perhaps only read about things, or heard about them, to the people that have done it, and listening to what they say.

Q147 Mr Allan: Do you think the Danish rates are achievable? It appears to me that the rates of hospital-acquired infections are similar wherever you go, but the bugs that you get in British hospitals kill you, and the bugs you get in Danish hospitals do not, in very broad terms—or you are more likely to get one that kills you in a British hospital than a Danish hospital.

**Professor Duerden:** It is partly about the different strains that are circulating. It is not quite as simple as that. There are still people who die of hospital infections in other countries, even though their MRSA rate is low. They still have severe infections with other organisms.

**Q148** Mr Allan: Do you accept the characterisation of this being a British problem—

Professor Duerden: It is not particularly a British problem, it is a worldwide problem. We hoped it could bring together experts from this country with those from abroad. We have some of the best experts in infection control in this country—it is bringing them all together that is important.

Professor Sir Liam Donaldson: To give a comparison of a short-term change, there was an article published quite recently from Pennsylvania where one group of hospitals there reduced its MRSA rate from one case a month to one case a year over a period of two years. It took them two years to get there, but they did it. The problem is that even in places like Holland and Scandinavia they have not done it healthcare system-wide; it tends to be within individual hospitals and institutions. Doing it right across a whole health service is a very different thing.

Q149 Mr Allan: On the PFI side, Sir Nigel, you made play of the fact that PFI gives an opportunity to improve matters. The table we have referred to already about consultations says that 27% of infection control teams were never consulted on reviewing private planners' initiative building plans, and for Norfolk and Norwich, with a multimillion pound, brand new, shiny PFI hospital, the infection rate does not seem to have changed at all between 2001 and 2004, in other words the old and new hospitals, and still remains higher than the ancient buildings we have in Sheffield. Is that not a failure; that we have spent all this money and things are no better? You must have been able to get it right on a greenfield site.

Sir Nigel Crisp: What you are possibly indicating in Sheffield is that is that what people actually do with their-

## Q150 Mr Allan: It is management.

Sir Nigel Crisp: I suspect it is a lot of things. It is easier if you design it better. It is easier if you have more single rooms and easier if you have bigger spaces, and it is easier if you have got more money. All of these things are true. Actually, you have got to get the culture right and the design right, and the determination of practice right, and that is what we have now.

Q151 Mr Curry: Sir Nigel, I have had some encounters with NHS hospitals recently, since I have twin daughters who have both produced baby girls in NHS hospitals in the last couple of months. Once you run the gauntlet of the hospital shop selling fizzy drinks, crisps, chocolates and all the things the Government is trying to persuade us not to eat, you actually get to the ward, which you enter without any form of alcohol scrub. One of my daughters gave birth to a little girl in a very, very big modern London hospital and the ward sister said to her, "while your baby is being born you will get absolutely first-rate medical attention; for the rest of the time, you are on your own." That is a direct quote. She said: "We have got so much pressure on us that you will get the attention you need at the critical moment, but do not pretend that for the rest of the time you are going to get that same level of attention." As a result, there were problems of the emptying of waste bins, and if you went in there the waste bins were over-flowing and there were a lot of problems there. That brings me to the list of hospitals in this new little document, Annex B General Acute, and then the specialist hospitals. I am wondering whether there is a pattern in there at all because if you look at Annex B, on the whole—and I am very cautious about how I phrase this—the best hospitals do not appear to be serving very large metropolitan areas, whereas for the hospitals at the top of the list with a higher rate of infection there are significant numbers serving large metropolitan areas. Do you draw any conclusions from that?

Sir Nigel Crisp: May I make two comments, firstly on your point about your grand-daughter. We are coming to a situation where we have had to prioritise, and nursing staff and midwives and others prioritised. There will be prioritising to the clinical issues first and making sure we get those right, and then moving on-

### Q152 Mr Curry: I was not complaining.

Sir Nigel Crisp: I know you were not right, but we have now got to get the service aspect right as well, which is really very important that we develop that. In terms of the pattern, there are some patterns in here, and if you look at some of the specialist hospitals it is very interesting to see that even major orthopaedic hospitals have very low rates indeed, and that is partly because of the planning and no emergency admissions. In the big metropolitan hospitals, the big teaching hospitals, there are a lot more emergency admissions, admitting from a much wider area, where it is much harder to control how patients are coming in. It is particularly around the emergencies that we have got that sort of issue. So there are some points there.

Q153 Mr Curry: We have all been looking at the experience of the Scandinavian and Baltic countries. There is one major difference between the way they run their health service and the way we do. By and large, they are all local authority the health service is a local authority responsibility. If you look at Government funding, then the funding goes to the local authority and they are serving much more local areas, and there is much more community accountability, rather than this absolutely farcical electorate that you are trying to build around foundation hospitals. Do you think that makes a difference as well?

Sir Nigel Crisp: I think the creation of foundation hospitals means that those chief executives now are paying attention to their members, to their governors, to their local communities, in a way that they never had to do before. I think that actually will just be another way of making sure we are listening to the patients and the public.

Q154 Mr Curry: I think we will find the turn-out for these elections and even the turn-out for the regional referenda, had they taken place, would be

fairly spectacular! Looking at the old document, and then looking at one of the very good hospitals like Harrogate, which services my constituency, Harrogate's press release says: "Our success is simply down to a combination of maintaining cleanliness, strong emphasis on key antibiotic prescribing and continuous monitoring." In Appendix 3 it puts the success in Denmark and Netherlands to, "very strict application of screening and isolation guidelines, together with stringent antibiotic prescribing", which follows almost the same language. What does that mean? We have talked about alcohol scrub, but what are the clinical and medical actions that can be taken? Sir Nigel Crisp: I am not surprised that the two things are broadly similar. It is a mix of actions that we need to take to get this right. Some of it is about design, but a lot of it is about behaviour and a lot about following proper procedures and processes.

Q155 Mr Curry: Both of these talk about stringent antibiotic prescribing policies, so there is a role for drug intervention in doing this.

**Professor Sir Liam Donaldson:** That is right, something like 20–30% of antibiotics prescribed are unnecessary, and if they are prescribed unnecessarily it leads to the growth of antibiotic resistance, so you need very strict prescribing protocols in place and you need an element of challenge, so that when perhaps a director of infection control sees a prescribing chart that is prescribing an antibiotic that is not necessary, he or she has the power to challenge the clinician concerned and get them to change the prescription. It is measures of that sort that are effective.

**Q156** Mr Curry: I am trying to draw some threads together. Is the following statement a correct statement? "We know exactly what has got to be done to get us to the sort of outcomes that Denmark and the Netherlands have."

Sir Nigel Crisp: There are two qualifications I would make on that, subject to what my colleagues say. I am not sure we know exactly because actually the mix will be different in different places between the various elements that they talk about. Broadly, good processes, good procedures, good design, good antibiotic prescribing and good process of hand-washing and so on. There is a range of ingredients, but what the mix is in any individual situation—

**Professor Sir Liam Donaldson:** The way I would sum it up is that we know what should be done, based on evidence, but what can be done is a different matter because of some constraints.

**Q157 Mr Curry:** Given that it is not rocket science—is that a fair comment?

**Professor Sir Liam Donaldson:** It is more difficult to change behaviour than—

**Q158** Mr Curry: I was coming to that; so this is a question of culture, is it?

Professor Sir Liam Donaldson: Yes.

Q159 Mr Curry: What is the problem with the culture that has permitted this situation to arise? **Professor Sir Liam Donaldson:** The problem with the culture is that the quality of care received by parents around the world, even in places like America, which is the best-funded system in the world, has not been as core to the clinical work as some other considerations. We are now putting quality centre-stage, and once you do that and once you start to expose these problems with good information, and like the other feature of the Scandinavian countries that I would have picked out—they have always invested across all their public services much more in getting good, accurate information, whereas we have not because the minute we spend money on that people accuse us of employing pen-pushers.

Q160 Mr Curry: You also said that the increased throughput in the NHS had, in a sense, taken priority over these other issues. Would you like to phrase that in a way you would be happy with, because that is what came over to me?

Sir Nigel Crisp: I said that where hospitals have got busier, it becomes harder to maintain all your standards, including cleanliness. What I also said—and this is not impossible—and the example of Sheffield is a very good one, and other examples like the one in this Report which says that if you get the infection control right you can improve the—

Q161 Mr Curry: So you would say that every hospital, no matter whether it is housed in some Victorian building or whether it was a new PFI thing on the edge of town is capable of achieving the same standards because there is no link between structure and architecture and—

Sir Nigel Crisp: I would say they could all improve very clearly. We are talking about different hospitals; the bottom hospital here with the bottom rate is Moorfields, which only deals with eyes; so you have to compare like with like.

Q162 Mr Curry: Is there a design element here? Can you design a hospital to minimise this? We talk about design to minimise crime; to what extent are the criteria given to the people in PFI projects for an architecture that minimises disease, and is that compatible with the financial guidelines that they have to—

Sir Nigel Crisp: There are all kinds of design issues here, from the very simple ones about how patients flow through theatre—whether they come in on a clean side, as it were, and go out on a dirty side so that you have a route of how patients flow through an operating theatre. A lot of that is well understood and a lot of that is well in place, but there is more that can be done, I think absolutely straightforwardly in design.

**Q163 Mr Curry:** Coming back to Annex A and the point Mr Allen raised about experts being flown in, I have the fear that the summit will beget a task

force, and the task force will beget an action team, and the action team will then beget something else, and we will all end up with another summit before very long. I do not know what world some people live in-"NHS patients should demand high standards of hygiene and should feel happy to ask staff if they have washed their hands". Can you imagine it? My Dad is 87; fortunately he is very, very fit; can you imagine my Dad saying to the nurse coming along, "sorry, dear, have you washed your hands?" He would be massively intimidated by doing that and could think, "My god, they are going to kick me out". The psychological relationship between a patient and their staff is not such that you can go around saying, "have you washed your hands?" It is a bit daft, is it not? Sir Nigel Crisp: The point is that in a clinical

Professor Sir Liam Donaldson: It is an easy one to make fun of, and I am not saying that it is the main mechanism by which we will get better compliance with hand-washing. However, it is not a bad idea to give patients a bit of power, and that is just one small example of it. In some hospitals in the United States, the doctors have a badge on, and the nurses, saying, "if you . . . please ask me" rather in the same way that we have on the back of buses, "if you think I am not driving safely or well, phone

Q164 Mr Curry: How many people—

situation-

this number".

Professor Sir Liam Donaldson: It is a small thing, but it is symbolic because it shows that we are willing to listen to patients and we want them to speak up, not-

Q165 Mr Curry: A nurse will go out of the ward and into the nurses' room and say, "there is a bloody bolshy one in room 4".

Professor Sir Liam Donaldson: Not if we get the cultural change that . . .

Chairman: Six members have indicated they wish to ask supplementary questions.

**Mr Steinberg:** It seems to me that you did not listen and seem to take advice, so what I want to know is why, after our report in 2000 when, as a result of that, you introduced a national manual, that that manual has totally disappeared and been ignored? Why? Who took any information from it and used it, and who ignored it? If you want to write to us on that one, you can.<sup>5</sup> The other important point is that apparently the only thing that the Health Service employees thought was worthwhile that you have done over the last four years was to introduce the infection control insurance standards. The Report tells us that 90% of the NHS who were involved thought it was a good idea-and you scrapped it. Since the Report came out the Committee received a letter from a Bob May,<sup>6</sup> who presumably you must know, who was the manager of the NHS national control insurance project for the Department of Health. He has written all members a letter in which he asks some very

pertinent questions. Presumably, you have not seen the letter. I would ask that the Chairman allow you to see the letter and respond to it on the point that he makes.<sup>7</sup>

Q166 Mr Bacon: Sir Nigel, given the fairly limited time, I did not give you a chance to answer a quite fundamental question about what causes compliance when you have got good infection control practice, and at any one time you have some areas of the country where there are very high levels of compliance and others where there is not. It is apparently not simply whether it is a shiny new building or an old Victorian building; and obviously there are certain issues, as the Report says, like lack of education, lack of clarity about the guidelines, time pressures. Many of these things will apply everywhere—certainly time pressures will. What is it that causes compliance in some areas and non-compliance in others?

Professor Sir Liam Donaldson: I would say it is the quality of the managerial and clinical leadership predominantly because that determines the culture and everything that flows from it.

Q167 Mr Bacon: Do you think that if they understood and realised and saw the consequences of not complying were much, much more serious, like the hospitals not getting any funding, and saying, "we are sending all your patients to Denmark", that you would get more rapid change? Sir Nigel Crisp: Indeed, I think that is-

Q168 Mr Bacon: Why do you not do that, then, and give it a try—do a pilot?

Sir Nigel Crisp: In a sense we are doing that. I do not actually mean sending them to Denmark, but we are giving patients choice, as we have been discussing, and I think they will exercise that. We have put this as one of the major relatively few remaining targets. We have made this a priority for the Healthcare Commission to inspect against. We are using all that battery of tools that will raise it up the individual managers' priority lists. It will be much more . . .

Q169 Jim Sheridan: Professor Duerden, in response to a question from Mr Williams, you said it would be difficult to define clearly just exactly how many people died from MRSA and what would be a contributing factor. Is that broadly what you said? Professor Duerden: That is what I said, yes.

**Q170 Jim Sheridan:** It is just that it rings alarm bells with me personally because that is the same kind of language that people in your profession used 20 or 30 years ago when people were dying of asbestosis and asbestos-related diseases.

**Professor Duerden:** I am sorry if it sounds that way. The problem with an infection in ill patients is how much is the infection contributing and how much is the underlying disease contributing, which is what we have to tease out.

<sup>&</sup>lt;sup>5</sup> Ev 36

<sup>6</sup> Ev 32-34

<sup>&</sup>lt;sup>7</sup> Ev 36

Q171 Mr Williams: Coming back to the figures we had a bit of a discussion about right at the beginning, in the Report on page 24, it says that there are at least 300,000 hospital-acquired infections a year, and you have signed up to that. Sir Nigel Crisp: Right, yes.

**Q172 Mr Williams:** I understand therefore that there are 7,400 MRSA cases. *Professor Duerden:* Yes.

Q173 Mr Williams: If you work on these figures, that MRSA is 40% of Staph;<sup>8</sup> that Staph is 50% of blood infection; and blood infections of 6% of hospital-acquired infection, then the figure is not 300,000; it is over 600,000.

**Professor Duerden:** Yes, and there is a mis-match in the bullet points here. The top line says "at any one time 9% of hospital patients has an infection" and on the next line it says that is 300,000. There were 7.7 million in-patients in the last year.

Sir Nigel Crisp: The second bullet point is wrong, Mr Williams.

**Q174 Mr Williams:** It is wrong, although you signed up to it. It brings the figure to less than half of what it really is. The figure is doubled with what the Report says.

Sir Nigel Crisp: In our report we have used the 9% and—

Q175 Mr Williams: So let us be clear—I do not want any misunderstanding—you are now agreeing that the figure for hospital-contracted diseases is probably, on the basis of the statistics we now put together, in excess of 600,000 a year, not the 300,000 shown in the Report.

**Professor Duerden:** That is the estimate that we have. The 9% is based on a survey in 1996, saying that overall 9% of patients have hospital infection, and we have 7.7 million patients to deal with. 9

Q176 Mr Williams: I am not worrying about the numbers, I am trying to get the numbers right, which is very important. The overall problem is far, far bigger than we have been briefed by the Report and so on to believe it to be. That is okay for the Report; it will help us in drawing our conclusion, so that is clarified. There is a second point I would like to clarify. I tried chasing the library today, although in fairness it was short notice. Annex D gives the names of the hospitals where there were more than five deaths in a year, and there is a footnote on the second page, which is page 12 of our supplementary brief. "The figures for deaths were in 2002. Hospitals with less than five deaths have not been listed to minimise the risk of disclosure of confidential information. A table of these remaining hospitals was placed in the House of Commons Library." In fairness to the library, they were not able to find it in time. I do not understand why there is a risk of disclosure of confidential information.

**Professor Sir Liam Donaldson:** This applies to a lot of official statistics, Mr Williams. If the Office for National Statistics were to release statistics with small numbers attributable to particular institutions or areas of residence, it is possible that someone—a journalist or someone else—might be able to find out who that individual is and approach them. Those are some of the rules in handling statistics.

Q177 Mr Williams: I am sorry, I do not understand that; they are dead, are they not? What if we had a situation where the Secretary of State has said that you have a right to know and the public have a right to know? I cannot understand why you find this particularly appropriate.

**Professor Sir Liam Donaldson:** If I may suggest, we can do you a note, having talked to the Office for National Statistics. <sup>10</sup> I guess officials were just following what they thought was . . .

Mr Williams: That is fine. Thank you.

Q178 Mr Jenkins: Sir Nigel, in response to Mr Sheridan on the role of the new matron, you said, "we want to give these people more power". Where does this power come from? Is it already existing? Does somebody already have this power and, if so, why are they not doing the job with this power? Sir Nigel Crisp: I am meaning that you will have found in a number of hospitals that the director of infection control already existed. We have given them more power and authority by making them report directly to the board. That is one way to make somebody have more power without transferring it necessarily to somebody else. That person also has more power because that person is going to be giving an independent report of the event, as we discussed earlier. That is the sort of thing I am talking about. I am not saying we should take away power from somebody else to do it; I am saying, let us give these people more prominence and make sure they are treated as people who have to be listened to when they are raising questions about cleaning or whatever it is. It varies from hospital to hospital. That is what I am talking about, putting them in a more powerful position.

Q179 Mr Jenkins: We know that the high occupancy rate is a continuing problem with infection control. Did you do any work with regard to the implications of the large-scale bed closures in the 80s? Are they partly responsible for this position we find ourselves in now? Do we need more beds?

Sir Nigel Crisp: Our view from the bed inquiry we had four years ago, or something of that sort, is that we needed a relatively small number of more beds, and those are being put in, but what we concluded more recently—and again you and I, around this table, have had this discussion before—was that we want more ring-fenced beds. We want more treatment centre beds and more dedicated hip places and things like that, which incidentally will

<sup>&</sup>lt;sup>8</sup> Staphylococcus aureus

<sup>&</sup>lt;sup>9</sup> Ev 34

improve infection control as well. We did do that inquiry about five years ago I think which said to us that we did need more beds.

Professor Sir Liam Donaldson: There was an innocent explanation for some of the changes in that the popular view amongst experts was that because of the advent of day surgery we would need smaller hospitals. I can remember being told very authoritatively by an expert that there is no new hospital being built that is too small, and that has been shown to be inaccurate.

Q180 Mr Allan: What is nice on this Committee is to see that people have learnt from mistakes and made improvements. When we are building new hospitals, we are not just building new buildings but we have new cleaning contracts, and it is a greenfield opportunity. One would hope that they would be better than the old ones. Can you produce data on the new hospitals versus the old ones to see if this investment of public money is making any difference to the public concern?11 Most of them will be PFI, but it is not the PFI bit that I am interested in; it is the fact that it is a new site with new management hopefully and new procedures. Secondly, Sir Nigel, it is fair to say that a lot of what you have said today is that in a sense the management has been overstretched; you have been dealing with so many other initiatives that this has not been a priority and that is why you have not done as much over the last four years as you could have done.

Sir Nigel Crisp: I think I said that it has been a priority, but there have been other priorities as well, and what managers have to do is to manage those priorities together. If there were this one thing that we were singly focused on, we would have moved further—I have no doubt about this. We have actually moved forward on quite a broad range of things.

Q181 Mr Allan: In that context, what one is concerned about with foundation hospitals is that they will be another management distraction. It would be helpful, as they progress, to be able to see the distinction between foundation hospitals dealing with this issue, and other hospitals. They have been sold to us, as it were, as improving things across the board. The concern must be that for management priorities, the fact that they are having to do everything new and working with these new bodies may be a distraction rather than an assistance.

Sir Nigel Crisp: Can I make one point on that, which is a very important one? I believe that the NHS is learning to be ever better at talking and listening to its patients and treating people, and this is part of the choice agenda, to start treating people as the owners of the system apart from anything else—that they should be treated with respect and not with arrogance.

Chairman: I think, Sir Nigel, you should quit while you are ahead and end on that point because that is a very good answer and nobody now will ask you any more questions. I have a couple of points, which you can deal with in a note, to save time. You referred to figure 8 and making this information available to patients. Currently participation in surveillance is voluntary. Are you now going to make it mandatory for all hospitals? We would like to have a note on that.12 I understand from the Sun newspaper that there are no cases of MRSA in Gt Ormond St Hospital, and it would be interesting to know why that is.<sup>13</sup> Lastly, and most importantly, we have focused heavily on MRSA today, but why is so little information available on other infections? Perhaps I could have a further note on that.<sup>14</sup> This was brought up right at the end of the hearing by possibly the most important question of the whole afternoon, which came from my colleague Mr Williams, where apparently the figure that we are now dealing with is not 300,000 but 600,000; and I think we will have to return to this in our report because it is extremely important, with the help of the National Audit Office. Perhaps lastly, Sir Nigel, the very last word should go to Florence Nightingale, who wrote in 1860: "It cannot be necessary to tell a nurse that she should be clean or that she should keep her patient clean seeing that the greater part of nursing consists in preserving cleanliness." I am sure you would all agree with that. Thank you very much.

# Memorandum submitted by the National Audit Office

IMPROVING PATIENT CARE BY REDUCING THE RISK OF HOSPITAL ACQUIRED **INFECTION: A PROGRESS REPORT (HC 876)** 

SUPPLEMENTARY INFORMATION AND KEY DEVELOPMENTS SINCE PUBLICATION OF THE NAO REPORT

New information from the Department of Health

1. On 12 July 2004, the Secretary of State for Health announced new action plans for cleaner, safer hospitals. On 14 July 2004, the publication date of the Comptroller and Auditor General's report, the Department of Health also published MRSA bloodstream infection rates for each acute NHS trust. The Comptroller and Auditor General had included this data, both nationally and by region, in his report. The

<sup>&</sup>lt;sup>11</sup> Ev 37

 $<sup>^{13}</sup>$  Ev 38

<sup>14</sup> Ev 38

National Audit Office were unaware however, of the Department's intention to publish individual rates by acute NHS trust, or the Secretary of State's intention to publish new action plans. This memorandum now provides a summary of the action plans and newly published trust MRSA data. We have also used this opportunity to provide other information published since the Comptroller and Auditor General's report. This information does not affect the conclusions or recommendations made in the report, but is included to assist the Committee's consideration of this important subject.

Towards cleaner hospitals and lower rates of infection: A summary of action, 12 July 2004

2. The Secretary of State for Health announced new action to cut levels of hospital acquired infections like MRSA and to improve general standards of hygiene. The Health Secretary in acknowledging that cleanliness contributes to controlling infection noted that preventing infections requires more than just cleanliness and proposed a number of measures. Whilst some of these, such as empowering modern matrons, asking staff to wash their hands and cleanliness inspections have been trailed in previous departmental guidance (Appendix 1 of our report). The main measures are listed at Annex A.

MRSA bacteraemia (blood stream infection) rates by individual named trust, 14 July 2004

- 3. In our report, we published MRSA bacteraemia data obtained from the Health Protection Agency (HPA). This showed that since the introduction of mandatory reporting in April 2001 the number of *Staphylococcus aureus* bloodstream infections has continued to increase, from 17,933 (7,250 MRSA) in 2001–02 to 19,311 (7,647 MRSA) in 2003-04 (paragraph 3.7 and Figure 6, p25). We also identified marked regional variations (paragraph 3.8 and Figure 7). The HPA were due to publish this information in their weekly Communicable Disease Report (*CDR* 15 July 2004) and agreed to share with us their findings so that our report presented the most up to date picture available. At the time the HPA was undertaking additional analysis and validation work to identify performance at trust level.
- 4. On the same day as the publication of our report, the Department of Health published individual trust MRSA bacteraemia rates on their website, including a table of trend data by trust for the first three years of mandatory reporting. The data show that MRSA rates tend to be highest in specialist trusts (with specialist services which receive patients referred from other trusts for these services), and lowest in single specialty trusts (for example trusts only undertaking orthopaedics or cancer). Annex B lists the MRSA bacteraemia rates by trust for the last three years, within each trust type, ranked by the MRSA rate in 2003–04.
- 5. In our report we noted that the mandatory reporting of MRSA rates has had some benefits at trust level but that there were some concerns about interpreting the data (paragraph 3.11–3.12). In publishing individual trust rates the Department of Health noted that care needed to be taken in interpreting the results as the MRSA bacteraemia infections reported by an acute trust were not necessarily acquired there; some trusts had a more complex case mix than others; bed occupancy figures used to derive the MRSA bacteraemia rate are from a period before the MRSA data; and the bed occupancy figures apply only to overnight admissions, so MRSA bacteraemias in patients who are not admitted overnight may make a trust's figures look falsely high.

New data on international comparisons, 12 July 2004

- 6. In our report, we presented a map (opposite page 1) that showed data on the levels of MRSA bloodstream infections as a proportion of all *Staphylococcus aureus* bloodstream infections for various European countries. This data showed that the United Kingdom has amongst the worst rates in Europe in 2002 (paragraph 10). On 12 July, the European Antimicrobial Resistance Surveillance System (EARSS) updated their website with data for 2003. Annex C shows the figures for each country compared with 2002.
- 7. These data for 2003 showed that the United Kingdom, whilst showing a slight improvement, still has amongst the worst rates in Europe (42.9% of *Staphylococcus aureus* is methicillin resistant compared with 43.8 in 2002). In comparison Greece's rate has increased from 43.8% in 2002 to 51.4% in 2003 and Portugal and Romania are now showing higher rates than the United Kingdom (45.5% and 45.9% respectively). Scandinavian countries continue to have much lower rates, with the Netherlands, Denmark, Sweden and Finland having rates of 0.9, 0.6, 0.9 and 1.4% respectively. Over all, the rates have increased in 12 of the participating countries, decreased in nine, and stayed the same in one.

Trust level analysis of mortality and MRSA, 22 July 2004

8. In paragraph 3.23 of our report, we noted that the extent of deaths due to MRSA is not routinely identified but that two research projects, funded by the Office for National Statistics and the HPA, involving the manual examination of death certificates, had shown that the number of deaths which mentioned MRSA had increased 15 fold from 1993 to 2002. On 22 July, in response to a Parliamentary Question raised by

Andrew Mackinlay MP, the National Statistician, Len Cook, provided information by individual hospital on the number of deaths in 2002 where MRSA was a contributory factor (Annex D). To minimise the risk of disclosure of confidential information hospitals with less than five deaths were not listed.

9. The National Statistician noted that it is not possible to put a firm figure on the number of people who die from MRSA, because people are often very sick with a number of other conditions, so the contribution of MRSA to the outcome in any particular case is uncertain. We noted in our report that there is currently no International Classification of Diseases Code for MRSA (or indeed any other hospital acquired infection). Internationally accepted guidance from the World Health Organisation on the completion of death certificates requires that only those conditions that contribute directly to death should be recorded. Doctors are required to complete the medical certificate of cause of Death (MCCD) to the best of their knowledge and belief. Since publication of the report the Committee has received a number of letters from members of the public who identify concerns that the death certificate of a relative or friend, whom they believe died as a result of contracting MRSA, does not mention MRSA, although completion of certificates is a matter of clinical judgement. The lack of data is the reason for the Department of Health's commissioning of an audit of deaths.

New health and social care standards and planning framework for 2005–06 to 2007–08, 21 July 2004

- 10. In our report we highlighted the important role that Controls Assurance had played in raising the profile of infection control at NHS trust level, and in ensuring that it provided the necessary framework for trusts to monitor their infection control arrangements (paragraph 2.3-2.4). On 21 July, the Department announced that the existing NHS Controls Assurance regime would be scrapped from 1 August 2004, to be replaced by new slimmed down standards to reduce the burden on staff and to strengthen risk management at a local level. This followed a consultation on the new Health Care Standards launched by the Department in February 2004. The new Standards for Better Health was published as an Annex to the Department's National Standards, Local Action: Health and Social Care Standards and Planning Framework 2005–06 to 2007–08. It forms a key part of the new performance assessment regime by the Healthcare Commission of all health care organisations. The Healthcare Commission is currently determining the details of how this performance assessment will be conducted.
- 11. The document was also used to announce that overall there would be fewer national targets, based on the Department's Public Service Agreements (PSA), but with one target on MRSA—which is not part of the PSA—Achieve year on year reductions in MRSA levels, expanding to cover other health care associated infections as data from other mandatory surveillance becomes available.
  - 12. Of the 24 Core standards, two are relevant to hospital acquired infection:
  - C4 Health care organisations to keep patients, staff and visitors safe by having systems to ensure that:
    - (a) the risk of health care acquired infection to patients is reduced, with particular emphasis on high standards of hygiene and cleanliness, achieving year on year reductions in MRSA;
    - (b) all reusable medical devices are properly decontaminated prior to use and that the risks associated with decontamination facilities and processes are well managed;
    - (c) the prevention, segregation, handling, transport and disposal of waste is properly managed so as to minimise the risks to the health and safety of staff, patients, the public and the safety of the environment.
- C21 Health care services are provided in environments which promote effective care and optimise health outcomes by being well designed and well maintained with cleanliness levels in clinical and non-clinical areas that meet the national specification for clean NHS premises.

Annex A

# TOWARDS CLEANER HOSPITALS AND LOWER RATES OF INFECTION: A SUMMARY OF ACTION—ANNOUNCED BY THE SECRETARY OF STATE FOR HEALTH

The proposals, as announced by the Secretary of State in his press notice, <sup>1</sup> fall into six areas:

Being open to the public about this issue; Measures to involve patients in monitoring the situation in their local hospital; measures to give staff at ward level the tools and encouragement to put cleanliness and infection control a top priority; moves to ensure consistent national standards of reporting; measures to ensure that lessons are learned from the best at home and abroad; and moves to ensure science makes the maximum contribution to tackling this problem.

In particular:

<sup>&</sup>lt;sup>1</sup> Department of Health 2004/0259. New Action for Cleaner Safer Hospitals. Press notice—Secretary of State for Health, issued 12 July 2004. The document "Toward cleaner hospitals and lower rates of infection" is published at www.dh.gov.uk/ publicationsandstatistics

- (i) Ensuring every hospital publishes and displays its infection rates and trends, as patients have the right to know. Patients will have a choice of hospitals by the end of next year, and this could become a factor in their decision;
- (ii) NHS patients should demand the highest standards of hygiene, and since human contact is a major way infection spreads in hospital, to feel happy to ask staff if they've washed their hands;
- (iii) Patients' forums to conduct cleanliness inspections four times a year, using a checklist drawn up by infection control nurses and the results will be made public;
- (iv) As bedside phones are introduced, they should have a pre-programmed housekeeping button so patients and visitors can be put through to the hospitals cleaning service straight away;
- (v) Matrons and nurses at ward level should have the power to ensure high standards are maintained; putting matrons in charge of cleaners, and having alcohol rubs at all staff patient contact points;
- (vi) Putting cleanliness at the heart of the NHS inspection regime and introducing a new target to cut MRSA, ensuring that the whole NHS gives the issue the same high priority as the public does;
- (vii) Because MRSA rates vary from hospital to hospital, the whole NHS should learn from the best at home and abroad. Experts are to be flown in from other countries with low MRSA, and an MRSA summit will be held in the autumn;
- (viii) New research into testing cleanliness levels and a science summit of leading experts to advise us on the best avenues for research into hospital infection.

Annex B

DEPARTMENT OF HEALTH MANDATORY BACTERAEMIA SURVEILLANCE SCHEME—
MRSA BACTERAEMIA BY NHS TRUST: APRIL 2001—MARCH 2004

# GENERAL ACUTE—RANKED BY MRSA RATE IN 2003-04

Name of NHS Trust	Number of MRSA bacteraemia reports	MRSA rate per 1,000 bed-days	Number of MRSA bacteraemia reports	MRSA rate per 1,000 bed-days	Number of MRSA bacteraemia reports	MRSA rate per 1,000 bed-days
	Apr 01– Mar 02	Apr 01– Mar 02	Apr 02– Mar 03	Apr 02– Mar 03	Apr 03– Mar 04	Apr 03– Mar 04
North Middlesex Hospital NHS Trust	45	0.25	48	0.30	53	0.33
Epsom and St. Helier NHS Trust	84	0.30	72	0.24	88	0.32
Weston Area Health NHS Trust	25	0.27	31	0.30	32	0.28
Barnet and Chase Farm Hospitals NHS	Trust 62	0.20	94	0.28	94	0.27
Ealing Hospital NHS Trust	40	0.33	38	0.29	36	0.26
Lewisham Hospital NHS Trust	54	0.30	45	0.24	49	0.26
Birmingham Heartlands and Solihull (Teaching) NHS Trust	75	0.18	95	0.23	106	0.26
Frimley Park Hospital NHS Trust	52	0.29	35	0.18	49	0.25
West Middlesex University NHS Trust	32	0.24	41	0.27	34	0.25
Royal United Hospital Bath NHS Trust	44	0.24	45	0.23	53	0.24
Hinchingbrooke Healthcare NHS Trust	12	0.10	26	0.21	26	0.24
South Warwickshire General Hospitals NHS Trust	19	0.13	18	0.11	37	0.24
Barking, Havering and Redbridge Hospitals NHS Trust	92	0.17	77	0.16	116	0.24
Mayday Healthcare NHS Trust	39	0.19	48	0.20	56	0.23
Sherwood Forest Hospitals NHS Trust	58	0.22	57	0.21	61	0.23
City Hospitals Sunderland NHS Trust	41	0.15	47	0.17	56	0.22
Northern Devon Healthcare NHS Trust	13	0.08	18	0.18	23	0.22
Royal Liverpool and Broadgreen Hospitals University NHS Trust	72	0.17	58	0.14	88	0.22
Royal Cornwall Hospitals NHS Trust	55	0.21	51	0.18	60	0.22
Queen Mary's Sidcup NHS Trust	30	0.22	32	0.25	28	0.21
Ipswich Hospital NHS Trust	50	0.22	52	0.22	52	0.21
Norfolk and Norwich University	62	0.22	57	0.20	64	0.21

	Number f MRSA acteraemia reports	MRSA rate per 1,000 bed-days	Number of MRSA bacteraemia reports	MRSA rate per 1,000 bed-days	Number of MRSA bacteraemia reports	MRSA rate per 1,000 bed-days
	Apr 01– Mar 02	Apr 01– Mar 02	Apr 02– Mar 03	Apr 02– Mar 03	Apr 03– Mar 04	Apr 03– Mar 04
Hospital NHS Trust						
Shropshire and Telford Hosipital NHS Trust	28	0.11	33	0.12	58	0.21
Countess of Chester Hospital NHS Trust	31	0.21	39	0.26	32	0.21
Sandwell and West Birmingham Hospitals NHS Trust	79	0.20	77	0.20	82	0.20
Royal Devon and Exeter Healthcare NHS Trust	38	0.16	36	0.14	50	0.20
Mid Cheshire Hospitals NHS Trust	20	0.11	23	0.13	31	0.20
Worcestershire Acute Hospitals NHS Tru		0.14	43	0.15	57	0.19
Whittington Hospital NHS Trust	27	0.18	30	0.21	29	0.19
Queen Elizabeth Hospital NHS Trust	18	0.11	35	0.21	29	0.19
Mid Yorkshire Hospitals NHS Trust	70	0.14	95	0.19	87	0.19
Heatherwood and Wexham Park Hospitals NHS Trust	47	0.19	28	0.13	40	0.19
East and North Hertfordshire NHS Trust	72	0.19	86	0.26	56	0.19
Kings Lynn and Wisbech Hospitals NHS Trust	31	0.16	36	0.19	30	0.18
Mid Essex Hospital Services NHS Trust	44	0.18	33	0.14	43	0.18
Scarborough and NE Yorkshire Healthcare NHS Trust	31	0.18	15	0.08	33	0.18
James Paget Healthcare NHS Trust	39	0.24	36	0.22	30	0.18
Princess Alexandra Hospital NHS Trust	33	0.16	37	0.18	32	0.18
George Eliot Hospital NHS Trust	15	0.11	27	0.20	25	0.18
Blackpool, Fylde And Wyre Hospitals NHS Trust	44	0.20	40	0.18	64	0.18
Bedford Hospitals NHS Trust	21	0.14	19	0.13	26	0.18
West Suffolk Hospitals NHS Trust	40	0.19	24	0.12	37	0.18
Northumbria Healthcare NHS Trust	45	0.12	74	0.20	67	0.17
Surrey and Sussex Healthcare NHS Trust	28	0.12	43	0.16	48	0.17
West Hertfordshire Hospitals NHS Trust	77	0.28	40	0.15	45	0.17
United Lincolnshire Hospitals NHS Trust	72	0.15	65	0.13	85	0.17
Newham Healthcare NHS Trust	25	0.17	33	0.23	24	0.17
South Devon Healthcare NHS Trust	31	0.11	24	0.09	28	0.16
Gateshead Health NHS Trust	11	0.04	20	0.08	36	0.16
Bradford Hospitals NHS Trust	45	0.16	48	0.17	44	0.16
Aintree Hospitals NHS Trust	34	0.09	66	0.20	48	0.16
Bolton Hospitals NHS Trust	38	0.13	35	0.11	38	0.16
Dartford and Gravesham NHS Trust	30	0.22	36	0.24	24	0.16
East Sussex Hospitals NHS Trust	67	0.17	52	0.13	60	0.15
Wolverhampton Hospitals NHS Trust	38	0.16	46	0.19	38	0.15
Barnsley District General Hospital NHS Tru		0.15	18	0.12	22	0.15
Northampton General Hospital NHS Trust	24	0.14	23	0.12	30	0.15
Whipps Cross University Hospital NHS Tru		0.13	43	0.16	37	0.15
Mid Staffordshire General Hospitals NHS T		0.08	30	0.17	25	0.15
East Lancashire Hospitals NHS Trust	57	0.11	66	0.13	63	0.15
Good Hope Hospital NHS Trust	19	0.11	29	0.16	26	0.14
The Pennine Acute Hospitals NHS Trust	98	0.12	103	0.13	95	0.14
Kingston Hospital NHS Trust	23	0.13	42	0.23	26	0.14
Trafford Healthcare NHS Trust	7	0.04	18	0.10	20	0.14
Basildon and Thurrock General Hospitals NHS Trust	60	0.30	38	0.18	30	0.14
West Dorset General Hospitals NHS Trus		0.08	17	0.14	17	0.14
Poole Hospitals NHS Trust	12	0.06	25	0.12	30	0.14
Airedale NHS Trust	11	0.06	10	0.06	20	0.14

	Number f MRSA acteraemia reports	MRSA rate per 1,000 bed-days	Number of MRSA bacteraemia reports	MRSA rate per 1,000 bed-days	Number of MRSA bacteraemia reports	MRSA rate per 1,000 bed-days
	Apr 01– Mar 02	Apr 01– Mar 02	Apr 02– Mar 03	Apr 02– Mar 03	Apr 03– Mar 04	Apr 03– Mar 04
York Health Services NHS Trust	27	0.07	16	0.04	31	0.13
Doncaster and Bassetlaw Hospitals NHS Trust	27	0.08	33	0.11	46	0.13
Salisbury Healthcare NHS Trust	25	0.12	17	0.11	21	0.13
East Somerset NHS Trust	18	0.15	23	0.18	12	0.12
Luton and Dunstable Hospital NHS Trus	t 22	0.14	28	0.17	21	0.12
Southend Hospital NHS Trust	33	0.13	23	0.10	27	0.12
Calderdale and Huddersfield NHS Trust	38	0.09	39	0.10	37	0.12
Dudley Group of Hospitals NHS Trust	27	0.10	17	0.06	31	0.12
Rotherham General Hospitals NHS Trust	22	0.11	14	0.06	25	0.11
Kettering General Hospital NHS Trust	16	0.10	22	0.14	20	0.11
Worthing and Southlands Hospitals NHS Trust	21	0.11	15	0.08	22	0.11
Hillingdon Hospital NHS Trust	33	0.16	36	0.17	24	0.11
Burton Hospitals NHS Trust	30	0.23	24	0.18	15	0.11
Winchester and Eastleigh Healthcare NHS Trust	21	0.10	13	0.08	18	0.11
Wrightington, Wigan and Leigh NHS Tru	ıst 27	0.09	35	0.11	28	0.11
Walsall Hospitals NHS Trust	15	0.07	16	0.07	23	0.10
South Tyneside Healthcare NHS Trust	7	0.04	13	0.07	15	0.10
Gloucestershire Hospitals NHS Trust	46	0.09	40	0.08	45	0.10
Northern Lincolnshire and Goole Hospitals NHS Trust	36	0.13	34	0.12	28	0.09
North Cumbria Acute Hospitals NHS Tru	ıst 26	0.09	27	0.12	22	0.09
County Durham and Darlington Acute Hospitals NHS Trust	30	0.08	40	0.10	38	0.09
Bromley Hospitals NHS Trust	37	0.19	32	0.17	18	0.09
Morecambe Bay Hospitals NHS Trust	33	0.10	24	0.07	30	0.09
Homerton Hospital NHS Trust	14	0.09	19	0.12	14	0.09
North Cheshire Hospitals NHS Trust	39	0.15	59	0.21	24	0.09
Tameside and Glossop Acute Services NHS Trust	26	0.22	22	0.11	18	0.09
Swindon and Marlborough NHS Trust	20	0.12	35	0.20	17	0.09
Stockport NHS Trust	13	0.04	18	0.05	30	0.09
East Cheshire NHS Trust	12	0.07	13	0.08	10	0.09
Taunton and Somerset NHS Trust	19	0.08	37	0.14	23	0.09
Chesterfield and North Derbyshire Royal Hospital NHS Trust	21	0.13	14	0.08	14	0.08
Wirral Hospital NHS Trust	28	0.08	24	0.07	28	0.08
St Helen's and Knowsley Hospitals NHS Trust	28	0.08	24	0.07	21	0.07
Essex Rivers Healthcare NHS Trust	24	0.10	18	0.08	16	0.07
Royal Bournemouth and Christchurch Hospitals NHS Trust	15	0.06	37	0.14	18	0.07
North Tees and Hartlepool NHS Trust	21	0.09	19	0.08	15	0.06
Milton Keynes General Hospital NHS Tru	ust 9	0.08	13	0.11	7	0.06
Southport and Ormskirk Hospital NHS T	rust 4	0.02	11	0.06	10	0.05
Isle of Wight Healthcare NHS Trust	17	0.12	16	0.11	8	0.05
Peterborough Hospitals NHS Trust	12	0.06	10	0.05	10	0.05
Harrogate Health Care NHS Trust	13	0.08	11	0.07	6	0.05
Hereford Hospitals NHS Trust	6	0.06	12	0.13	4	0.04

# SINGLE SPECIALITY—RANKED BY MRSA RATE IN 2003–04

Name of NHS Trust	Number of MRSA bacteraemia reports	MRSA rate per 1,000 bed-days	Number of MRSA bacteraemia reports	MRSA rate per 1,000 bed-days	Number of MRSA bacteraemia reports	MRSA rate per 1,000 bed-days
	Apr 01– Mar 02	Apr 01– Mar 02	Apr 02– Mar 03	Apr 02– Mar 03	Apr 03– Mar 04	Apr 03– Mar 04
The Cardiothoracic Centre—Liverpool NHS Trust	. 4	0.07	10	0.16	15	0.28
Papworth Hospital NHS Trust	12	0.23	24	0.45	13	0.23
Christie Hospital NHS Trust	12	0.14	9	0.11	12	0.15
Robert Jones and Agnes Hunt Orthopaedic and District Hospital NHS Trust	1	0.02	1	0.02	7	0.12
Birmingham Children's Hospitals NHS Trust	7	0.09	3	0.04	8	0.11
Royal National Hospital for Rheumatic Diseases NHS Trust	0	0.00	0	0.00	2	0.11
The Walton Centre for Neurology and Neurosurgery NHS Trust	5	0.15	7	0.16	4	0.10
Royal Orthopaedic Hospital NHS Trust	1	0.03	2	0.06	3	0.09
Clatterbridge Centre for Oncology NHS Trust	1	0.04	4	0.15	2	0.08
Nuffield Orthopaedic NHS Trust	1	0.02	3	0.07	3	0.07
Sheffield Children's Hospital NHS Trust	3	0.08	0	0.00	2	0.06
Royal Marsden Hospital NHS Trust	6	0.08	7	0.10	4	0.06
Great Ormond Street Hospital for Children NHS Trust	7	0.09	13	0.17	4	0.05
Royal Liverpool Children's NHS Trust	8	0.12	2	0.03	3	0.05
Royal Brompton and Harefield NHS Trust	9	0.07	9	0.07	5	0.04
Royal National Orthopaedic Hospital NHS Trust	2	0.04	6	0.14	1	0.02
Birmingham Women's Healthcare NHS Trust	2	0.04	1	0.02	0	0.00
Moorfields Eye Hospital NHS Trust	0	0.00	0	0.00	0	0.00

# SPECIALIST—RANKED BY MRSA RATE IN 2003–04

Name of NHS Trust	Number of MRSA bacteraemia reports	MRSA rate per 1,000 bed-days	Number of MRSA bacteraemia reports	MRSA rate per 1,000 bed-days	Number of MRSA bacteraemia reports	MRSA rate per 1,000 bed-days
	Apr 01– Mar 02	Apr 01– Mar 02	Apr 02– Mar 03	Apr 02– Mar 03	Apr 03– Mar 04	Apr 03– Mar 04
Guy's and St. Thomas' NHS Trust	114	0.32	154	0.43	166	0.45
Addenbrooke's NHS Trust	110	0.27	127	0.32	126	0.38
Hammersmith Hospitals NHS Trust	89	0.28	115	0.35	125	0.37
University Hospital Birmingham NHS Trust	189	0.66	169	0.49	123	0.35
King's College Hospital NHS Trust	92	0.31	108	0.37	107	0.35
North Staffordshire Hospital NHS Trust	83	0.30	87	0.22	135	0.35
Royal Free Hampstead NHS Trust	122	0.41	101	0.39	98	0.34
University College London Hospitals NHS Trust	94	0.33	84	0.33	85	0.32
Portsmouth Hospitals NHS Trust	97	0.32	105	0.33	105	0.32
Plymouth Hospitals NHS Trust	99	0.32	81	0.26	98	0.31

Name of NHS Trust	Number of MRSA bacteraemia reports	MRSA rate per 1,000 bed-days	Number of MRSA bacteraemia reports	MRSA rate per 1,000 bed-days	Number of MRSA bacteraemia reports	MRSA rate per 1,000 bed-days
	Apr 01– Mar 02	Apr 01– Mar 02	Apr 02– Mar 03	Apr 02– Mar 03	Apr 03– Mar 04	Apr 03– Mar 04
St. George's Healthcare NHS Trust	115	0.38	75	0.24	93	0.31
Oxford Radcliffe Hospitals NHS Trust	92	0.23	114	0.29	127	0.30
Brighton and Sussex University Hospitals NHS Trust	86	0.23	74	0.18	107	0.30
United Bristol Healthcare NHS Trust	81	0.29	107	0.37	86	0.28
St. Mary's NHS Trust	64	0.34	72	0.35	59	0.27
Queen's Medical Centre, Nottingham University Hospital NHS Trust	71	0.23	58	0.19	77	0.25
Salford Royal Hospitals NHS Trust	55	0.24	66	0.28	71	0.25
Leeds Teaching Hospitals NHS Trust	196	0.22	165	0.19	204	0.24
Maidstone and Tunbridge Wells NHS Trust	56	0.21	50	0.19	61	0.24
Hull and East Yorkshire Hospitals NHS Trust	106	0.26	75	0.18	102	0.24
Ashford and St Peter's Hospitals NHS Trust	60	0.29	65	0.32	44	0.23
Chelsea and Westminster Healthcare NHS Trust	36	0.27	32	0.22	38	0.22
Medway NHS Trust		29	0.13	48	0.22	
Southampton University Hospitals NHS Trust	45	0.12	53	0.13	62	0.21
South Tees Hospitals NHS Trust	120	0.30	96	0.23	69	0.20
University Hospitals Coventry and Warwickshire NHS Trust	74	0.18	82	0.21	79	0.20
North West London Hospitals NHS Trust	59	0.23	44	0.16	55	0.20
University Hospitals of Leicester NHS Trust	163	0.26	144	0.20	132	0.20
Newcastle Upon Tyne Hospitals NHS Trust	88	0.17	71	0.14	93	0.18
Royal Surrey County Hospital NHS Trust	13	0.10	35	0.23	28	0.18
Barts and the London NHS Trust	62	0.19	74	0.21	62	0.17
Central Manchester and Manchester Children's University NHS Trust	39	0.11	38	0.12	59	0.17
Nottingham City Hospital NHS Trust	73	0.25	85	0.29	51	0.17
Lancashire Teaching Hospital NHS Trust	76	0.22	58	0.16	56	0.16
Buckinghamshire Hospital NHS Trust	39	0.13	43	0.14	47	0.16
The Royal West Sussex NHS Trust	33	0.23	22	0.14	22	0.16
Sheffield Teaching Hospitals NHS Trust	67	0.11	91	0.15	103	0.16
South Manchester University Hospital's NHS Trust	30	0.09	31	0.10	39	0.15
North Bristol NHS Trust	144	0.32	114	0.20	88	0.15
North Hampshire Hospitals NHS Trus	t 29	0.21	13	0.10	20	0.15
Royal Berkshire and Battle Hospitals NHS Trust	33	0.14	42	0.17	38	0.15
Southern Derbyshire Acute Hospitals NHS Trust	45	0.14	26	0.09	49	0.15
East Kent Hospitals NHS Trust	99	0.20	85	0.18	70	0.15
Queen Victoria Hospital NHS Trust	6	0.22	5	0.19	3	0.12
Liverpool Women's Hospital NHS Tru	ast 0	0.00	4	0.05	4	0.07

Source: Department of Health website at www.dh.gov.uk/publications and statistics

Annex C EUROPEAN ANTIMICROBIAL RESISTANCE SURVEILLANCE SYSTEM DATA FOR 2002 AND 2003

Country (in alphabetical order)	2002(% S. aureus that is methicillin resistant)	2003 (% S. aureus that is methicillin resistant)
Austria	10.6	14.2
Belgium	28.3	29.5
Croatia	36.9	36.9
Czech Republic	5.9	6.1
Denmark	0.9	0.6
Estonia	1.2	4.1
Finland	0.8	1.4
France	32.8	28.9
Germany	18.7	18.2
Greece	43.8	51.4
Hungary	9	14.9
Ireland	42.5	42.1
Italy	38.2	37.6
Netherlands	1	0.9
Poland	23.1	19.3
Portugal	38.1	45.5
Romania	35.8	45.9
Slovakia	8.5	12.4
Slovenia	13.8	12.7
Spain	23.3	24
Sweden	0.7	0.9
United Kingdom	43.8	42.9

Note:

Data on Levels of Bloodstream infections as a proportion of all Staphylococcus aureus bloodstream infections show that the United Kingdom is amongst those with the highest levels.

Source: European Antimicrobial Resistance Surveillance System (EARSS) 2002 and 2003.

Annex D NUMBER OF DEATHS WHERE MRSA WAS A CONTRIBUTORY FACTOR IN 2002, BY HOSPITAL

Hospital Name	No of deaths where MRSA was a contributory factor	Percentage of all deaths
England and Wales	721 Hospitals with five or more deaths where MRSA was a contributory factor	0.2
Addenbrookes Hospital, Cambridge	10	0.6
Alexandra Hospital, Redditch	5	0.7
Arrowe Park Hospital, Birkenhead	5	0.3
Ashford Hospital	6	0.9
Birmingham Heartlands Hospital	17	0.9
Bristol Royal Infirmary	6	0.5
Broomfield Hospital, Chelmsford	8	0.6
City Hospital, Winson Green	10	0.7
Conquest Hospital, St Leonards on Sea	9	0.7
Derriford Hospital, Plymouth	22	1.1
Freeman Hospital, Newcastle	9	0.9
General Hospital, Bishop Auckland	5	0.8
General Hospital, Southampton	7	0.3
General Infirmary, Leeds	11	0.6
George Eliot Hospital, Nuneaton	5	0.4
Hull Royal Infirmary	5	0.3
Ipswich Hospital NHS Trust	9	0.5

Hospital Name	No of deaths where MRSA was a contributory factor	Percentage of all deaths
King's College Hospital, London	5	0.4
Lister Hospital, Stevenage	5	0.4
Luton and Dunstable Hospital	5	0.4
Maelor Hospital, Wrexham	10	0.8
Medway Maritime Hospital, Gillingham	13	0.8
Morriston Hospital, Swansea	7	0.5
Musgrove Park Hospital, Taunton	7	0.5
New Cross Hospital, Wolverhampton	8	0.4
Norfolk and Norwich University Hospital	7	0.3
North Middlesex Hospital, Edmonton	5	0.5
Prince Charles Hospital, Merthyr Tydfil	6	0.6
Princess Margaret Hospital, Swindon	5	0.4
Princess of Wales Hospital, Bridgend, Mid Glamorgan	6	0.6
Queen Alexandra Hospital, Portsmouth	15	0.7
Queen Elizabeth Hospital, Edgbaston	5	0.6
Royal Berkshire Hospital, Reading	5	0.4
Royal Cornwall Hospital, Truro	5	0.4
Royal Infirmary, Doncaster	6	0.4
Royal Infirmary, Huddersfield	5	0.5
Royal Preston Hospital	5	0.4
Royal Sussex County Hospital, Brighton	6	0.4
Southmead Hospital, Bristol	5	0.5
St. Helier Hospital, Carshalton	5	0.4
St Mary's Hospital, Westminster	9	1
St Thomas's Hospital, London	9	0.8
Stoke Mandeville Hospital, Aylesbury	5	0.7
Torbay Hospital	5	0.4
University Hospital Aintree	7	0.4
University Hospital of Wales, Cardiff	8	0.4
University Hospital, Nottingham	6	0.3
Warwick Hospital	5	0.5
Whittington Hospital St Mary's Wing, Islington	6	0.7
Wycombe General Hospital	5	0.6

### Note:

Figures are for deaths occurring in 2002. Hospitals with less than five deaths have not been listed to minimise the risk of disclosure of confidential information. A table on these remaining hospitals was placed in the House of Commons library.

Source: Office for National Statistics and HPA—identified using the methodology described in Griffiths C, Lamangi T L, Crowcroft N S, Duckworth G and Rooney C (2004) Trends in MRSA in England and Wales; analysis of morbidity and mortality data for 1993–2002. Health Statistics Quarterly 21, 15-22.

August 2004

# Memorandum submitted by Mr Bob May, former NHS National Controls Assurance Project Manager

Until 30 August 2004 when I took early retirement, I was the NHS National Controls Assurance Project Manager at the Department of Health. I proposed the controls assurance process in 1995 and was fortunate to manage the project for nine years. Through controls assurance NHS Boards have been providing annual public assurances on the effectiveness of the whole system of internal control, risk management and compliance with applicable laws and regulations. The requirement to provide an annual statement on internal control, adopted voluntarily by the NHS under controls assurance in the mid-1990s, was only recently made mandatory by HM Treasury across the public sector (following private sector practice).

In 1999 a set of controls assurance standards, including one on infection control, was launched by the then Health Minister. After 1 August 2004, following a so-called "efficiency scrutiny" by the Department of Health and Cabinet Office Regulatory Impact Unit, it was announced that controls assurance had been "scrapped" from 1 August 2004. Unfortunately:

— the department's new healthcare standards, issued earlier this year, still specifically require compliance with controls assurance;

more seriously, the Healthcare Commission have not yet published the draft criteria for the new standards that will be used to assess compliance. The Department is promising more information later in the year on what NHS bodies should do between 2 August 2004 and whenever the new system is put together.

I have read the proceedings and 42nd PAC Report (2000) and would like to draw your attention to two issues:

- in the PAC hearing in June 2000 the Department refuses to concede the PAC's point about the need to take urgent action over hand washing. And yet in August 2004, the month before this hearing, the NPSA announces that maybe 450 hospital acquired infection fatalities a year could be prevented if hands were washed between beds. Presumably the four years between the two PAC hearings represents 18,000 infections and 1,800 deaths.
- At the 2000 PAC, the chief executive and CMO were arguing that Controls Assurance would solve the problem by putting the systems and processes in place and that this would then lead to measurable improvements. (PAC Agreed Report Para 4. (iv) "Key to achieving progress will be the effective implementation of the new Controls Assurance System, which builds on the statutory duty of chief executives for quality of care.") And indeed the NAO survey found that controls assurance had indeed put the systems and processes in place. (The NAO Reports says at para 2.4, "In ranking controls assurance as the main driver for change, nine out of ten chief executives reported that it provided the necessary framework for monitoring their infection control arrangements . . . as a result most trusts have reported year on year improvement in compliance with the infection control standard.") One might be forgiven for thinking, therefore, that a solid foundation had been put in place upon which to build. Yet in the month before this hearing the department ignores the NAO findings and "abolishes" controls assurance. Worse, the Director of Finance of the Department of Health is reported by the NHS Appointments Commission (Non-Exec Bulletin Issue, 5 July 2004, page 7) telling everyone that controls assurance is a "monster" and "one of the biggest bureaucratic burdens on the NHS".

I would simply observe that the Cabinet Office/Department's review of controls assurance and this NAO Report on acquired infection are totally at odds with one other. This is something that needs to be clarified, not just because managing risks in our hospitals is an extremely serious problem and not a game, but because this apparent clash between the NAO and the DH surveys casts a wider shadow over the worth of all central reviews. Particularly those central reviews that can't be scrutinised. The NAO have published their Report and survey data in full for all to see; it would help if the Department/Cabinet Office would do the same. If not now, please could they ensure their officials don't lose the data before the Freedom of Information Act comes into force in January 2005?

It is the case that the (controls assurance) infection control standard would have been amended to require a self-assessment against the controls recommended by the NPSA if that were policy. It is also true that the controls assurance process is led by NHS boards. Whether that is "bureaucratic" or not seems to me rather a moot point given the importance of the subject. It is my belief that:

- whatever was perceived as being wrong with controls assurance should have been fixed;
- "abolishing" controls assurance in 2005 only to re-invent the self-same criteria in 2006 in a rummaged-around fashion via the Healthcare Commission (inevitable because most of the stuff in the standards is indivisible) only serves to transfer responsibility from one arm of the government (Health Dept) to another part of the same arm (Healthcare Commission). That is, it gets us nowhere:
- but a year is lost and all the historical data is seriously compromised. The original PAC Agreed Report (Paragraph 3) says, "Without robust, up to date, data, it is difficult to see how the Department of Health, the NHS Executive, health authorities and NHS Trusts can target activity and resources to best effect." I contend that a great deal of use can be made of controls assurance data to target areas of greatest risk reduction potential as had started to be demonstrated via the NHS controls assurance reporting system (ROCA). ROCA is an on-line, real time system, and the remarks in the review on the Cabinet Office website about the collection process are just plain wrong. I was able to take some small part in the NAO analysis through sharing data and believe that a great deal of use could still be made of the controls assurance data. I note the evidence of relationships between controls assurance data and various output indicators in Appendix 6 of the NAO Report. Quality information derived from robust data is absolutely vital, and it was a big mistake to abandon the system.

It seems to me that Controls Assurance—including the infection control standard should not have been withdrawn, certainly not before a suitable replacement system was put in place. I suggest that:

- the Department of Health should review its decision to abandon controls assurance before a replacement system is in place;
- (b) the Department of Health should explain why the benefits it promised the PAC under the banner of controls assurance have not accrued, if that is the case;

- (c) further, if it is true that the system of assuring the public "that systems are in place to protect patients, staff and visitors from risks of all kinds" (controls assurance) was an unnecessarily "bureaucratic" exercise, will they publish the cost-benefit analysis? When did it realise this? When did the CMO change his opinion from that he expresses to the PAC at the last hearing? Apparently not before January 2002 when his infectious diseases strategy, "Getting Ahead of the Curve" set a target for full compliance with the controls assurance infection control standard.
- (d) What constructive steps were taken to remedy the system? Why will the new healthcare standards and the new audit regime be any better? Are NHS bodies not going to have to render/share risk management and control data under the new system?
- (e) Now that controls assurance has been abolished, what exactly is the system of internal control now, what will it be in 2005–06 and what, if anything will the NHS sign up to in terms of managing risk, including infection control, in the period between now and March 2006?
- (f) The Department should certainly publish their survey data, including all comments made by respondents so that the discrepancy with the NAO findings can be examined further.

8 September 2	200	4
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## Letter to the Committee from Sir Nigel Crisp KCB, Chief Executive, Department of Health and NHS

I am writing to clarify the discussion during the hearing on 8 September about the number of hospital acquired infections (Questions 171-175, Mr Williams).

Mr Williams showed that by successively applying firstly, the proportion of staphylococcal infections which were caused by methicillin resistant *Staphylococcus aureus* (MRSA), secondly the proportion of bloodstream infections which were caused by *Staphylococcus aureus*, and thirdly, the proportion of health care associated infections which were bloodstream infections, the total number of infections per year was over 600,000. He contrasted this with the statement on page 24 of the National Audit Office (NAO) Report that there are "at least 300,000" hospital acquired infections a year.

Professor Duerden also said at the hearing that the figure of 9% of hospital patients who have an infection caught in hospital quoted in the same table in the NAO Report should be considered alongside the 7.7 million patients admitted each year. Applying the figure of 9% to all admissions would also produce a figure in excess of 600,000.

This led me to suggest in the hearing that the figure of 300,000 in the NAO Report might be incorrect. I undertook to look into this, and write to explain the apparent discrepancy.

The 9% (600,000) figure applies to prevalence, ie the number of patients with a Health Care Acquired Infection (HCAI) in hospital on any one day, whilst the 300,000 applies to incidence, ie the number of new cases arising in hospital on any one day. The figures differ because patients with a HCAI will tend to stay longer in hospital longer and would therefore be included in a daily count more often than those without. As the NAO Report says, 300,000 is still our best estimate of the number of HCAI per year.

I hope that this clarifies the matter.

19 October 2004

# Supplementary memorandum submitted by the Department of Health

Question 102 (Mr Williams): Is there a correlation between the contracting out of cleaning services and the number of deaths where MRSA is a contributory factor?

Since the number of deaths in which methicillin resistant *Staphylococcus aureus* (MRSA) is a primary or contributory factor is not reliably known at Trust level, and attributing deaths to MRSA is problematic, analysis has been conducted instead on the *incidence* of MRSA bacteraemias (blood borne MRSA infections). This is, in any case, likely to be the best available proxy measure for variation between Trusts in the number of deaths associated with MRSA.

Analysis by the Department of Health of Trust level data suggests that there is no significant simple correlation (either positive or negative) between whether or not cleaning has been contracted out and the MRSA incidence rate.

Since MRSA rates are thought to be influenced by a variety of factors which vary by Trust, a more robust approach than a simple correlation is to control for a range of other characteristics and to test whether, *other things equal*, contracting out is significantly correlated with the rate of MRSA. This question has been explored including a wide range of other control variables relating to the characteristics, operational performance, policy and casemix of the hospital.

Tentative preliminary results from this ongoing work suggest that, after controlling for these other observable factors, there is no statistically significant relationship between the contracting out of cleaning services and the incidence of MRSA at Trust level.

Question 109 (Mr Williams): How many PFI contracts have included infection control specifications?

All Private Finance Initiative (PFI) contracts include infection control specifications.

Under the PFI procurement process a Trust expresses its requirements to bidders through a series of output specifications. These cover the full range of objectives, outputs and outcomes the consortium must take into account in developing the proposals it will submit to the Trust. It is the responsibility of the Trust to ensure that the specifications comply with all the NHS standards for the design, construction and performance of facilities as contained in comprehensive guidance produced by NHS Estates. The most recent policy on infection control is set out in *Infection Control in the Built Environment* (NHS Estates 2002). Individual Health Technical Memoranda (HTMs) contain detailed requirements such as the specification of clinical wash hand basins and the special type of taps and handles required.

Bidders are now required to respond to the Trust's output specifications in a standard format. This states specifically that: "proposals of how decontamination and control of infection are to be achieved should be provided". To ensure compliance with the specifications Trusts are required to review and sign-off the clinical functionality of proposals before any contract is entered into.

All PFI contracts contain specific clauses which require the private sector consortium to follow precisely and comply with the Trust's specifications for the project. In addition they contain a general clause which requires the consortium to comply with Trust policies and relevant NHS requirements, not just at the time of contract signature, but on an ongoing basis (for example new updated NHS guidance on infection control policy). PFI contracts oblige the consortium to respond to, and rectify, any failures within an agreed time period.

Questions 111-114 (Mr Williams): Why, when present, is MRSA not always included on a death certificate and what are the symptoms to look for?

MRSA infection will be included on a death certificate if the certifying doctor considers it to be the underlying cause of death. However, many patients who become infected with MRSA have other serious and potentially fatal underlying medical conditions. These will be given as the underlying cause of death (eg cancer, cardiovascular disease). It is then a matter of individual professional judgment whether the doctor lists MRSA infection as a contributory cause and this will depend, generally, on whether the doctor thinks that the patient would have survived for a significantly longer period if they had not developed an MRSA

The situation is made more difficult in terms of disease classification and coding for certification purposes. The International Classification of Diseases (ICD) codes specify the clinical types of infection such as septicaemia, abscess and pneumonia, but there is currently no individual code for MRSA infection. The Office for National Statistics has worked with the World Health Organisation (WHO) to develop new ICD codes for antibiotic resistance. WHO has recommended that these new codes should be used internationally from 2006, and thus, better data should be available in the future.

We are on the verge of fundamental changes to the way that deaths are certified. The proposed changes should enable death certification to be done electronically, and information from patient records to be linked electronically to the registration, with the consent of the family member registering the death. This will help identify cases where MRSA or other hospital acquired infections may have played a role.

The audit of deaths to be undertaken by Health Protection Agency and Office for National Statistics is at an advanced stage of planning.

Staphylococcus aureus (including MRSA) causes a wide range of infections from asymptomatic colonisation, ie, the MRSA is doing no damage, to fatal septicaemia (the most severe blood stream infection).

There is no specific "MRSA disease", unlike tuberculosis, meningococcal meningitis or typhoid. Staph. aureus infects a range of tissues and body systems giving general symptoms of infection that are common to infection with various different bacteria.

- 1. Wounds Staph. aureus/MRSA is the commonest cause of wound infection—either after accidental injury or surgery. This shows as a red, inflamed wound with yellow pus seeping from it. The wound may break down. A wound abscess may develop.
- 2. Intravenous line infections MRSA may infect the entry site of an intravenous line causing local inflammation and pus and tracking into the blood stream to cause a bacteraemia (blood stream infection).
- 3. Superficial ulcers pressure ulcers, varicose ulcers and diabetic ulcers (all due to poor blood supply and superficial skin damage) are often infected with MRSA. There is further tissue damage with extension of the ulcer. Infection may spread deeper.

- 4. **Deep abscesses** If MRSA (or any *Staph. aureus*) spreads from a local site into the blood stream it can lodge at various sites in the body (eg lungs, kidneys, bones, liver, spleen) and cause one or more deep abscesses distant from the original site. These present with pain, high fever, a high white cell count in the blood and signs of inflammation related to the site. The patient will be very unwell and may have rigors (shivers) and low blood pressure (shock). Over a period, the body enters a catabolic state with breakdown of tissue, loss of weight and failure of essential organs. This is usually linked with an associated septicaemia.
- 5. **Lung infection** MRSA/*Staph. aureus* is a rare cause of lung infection except in Intensive Care Units. There, the patient is on a ventilator with a tube in the trachea, bypassing the defences of the nose and throat. MRSA can gain entry to the lungs via the tube and cause pneumonia which may be fatal.
- 6. **Bacteraemia/septicaemia** MRSA/*Staph. aureus* gains entry to the normally sterile blood stream either from a local site of infection (wound, ulcer, abscess) or via an intravenous catheter. Bacteraemia describes the presence of MRSA/*Staph. aureus* in the blood. Septicaemia is a clinical description of severe illness caused by bacteria in the blood stream. The signs and symptoms are not specific to MRSA and are the same for many different bacteria that cause septicaemia: high fever; raised white cell count; rigors (shaking); disturbance of blood clotting with a tendency to bleed; failure of vital organs (kidneys, liver, heart). This is the form of MRSA infection that has the highest mortality; it can develop from localised infections and often affects debilitated patients.

Question 165 (Mr Steinberg): What has happened to the national manual? Who took any information from it and used it, and who ignored it?

Obtaining a consensus view from frontline healthcare professionals of what is required from a national manual proved to be more complicated and time consuming than originally envisaged. This part of the process is very important, as it is necessary to ensure any material produced at national level is appropriate and useful at local level.

Following a scoping study of what NHS professionals want from a national infection control manual, the infectious disease branch of the National Electronic Library for Health (NeLH) are taking this work forward. The national manual will form part of a "one stop shop" electronic resource for infection control specialists. The NeLH already has in place an expert group of professionals to guide this work. The infection control website will signpost users to other relevant resources. This proposal was greeted with enthusiasm by the attendees of the first conference for Directors of Infection Prevention and Control held in mid-October.

The Department has issued guidance on best infection control practice to the NHS. In January 2001, guidelines for preventing hospital acquired infection were published as a supplement to the *Journal of Hospital Infection* and had three components: standard principles for preventing HAI, prevention of infection associated with short-term indwelling urethral catheters, prevention of infection associated with central venous catheters.

Department of Health funded national evidence based guidelines on the prevention of healthcare associated infection in primary and community care were issued by the National Institute for Clinical Excellence in 2003. These cover standard prinicplies for preventing healthcare associated infection, prevention of infection associated with long term urinary catheters, prevention of infection associated with enteral feeding, prevention of infection associated with cental venous catheters and the education of patients, carers and healthcare personnel.

Question 165 (Mr Steinberg): Can you please provide a response to Mr May's letter about the Department's decision to abandon controls assurance?

The decision to replace the Controls Assurance process arose out of concerns about the growing bureaucratic burden that it placed on the NHS. This was highlighted in an NHS Confederation report published in 2003. This report outlined the findings of a study into "smarter reporting" conducted by the NHS Confederation at Central Manchester and Manchester Childrens University Hospitals NHS Trust back in December 2002, and concluded that: "Although there is a consensus that controls assurance is a valuable way of identifying and managing organisational risk, it is also seen as time-consuming and bureaucratic". The report went on to recommend that the Department should: "Reduce the amount of upwards reporting required by the controls assurance process".

The key elements of the Controls Assurance Standards have been incorporated into the *Standards for Better Health*—the first ever set of national standards for all NHS funded health care published in July 2004 and the requirements of the separate set of Controls Assurance Standards were abolished. *Standards for Better Health*—under the statutory power provided by section 46(1) of the Health and Social Care (Community Health and Standards) Act 2003—specifically requires at Standard C4(a) that "Health care organisations keep patients, staff and visitors safe by having systems to ensure that the risk of health care acquired infection to patients is reduced, with particular emphasis on high standards of hygiene and cleanliness, achieving year-on-year reductions in MRSA".

Question 177 (Mr Williams): Can you provide the data on the hospitals with less than five deaths related to MRSA?

Where the number of deaths when MRSA was a contributory factor in an individual hospital was less than five, numbers were not provided in order to reduce the risk of disclosure of personal information about individuals in line with Office for National Statistics (ONS) release practice guidelines. Data provided for national statistics should only be used for statistical purposes and should not breach personal confidentiality or identify individuals.

Advice given ONS to the Department of Health and the NHS is that no information about an individual that is not already in the public domain should be identifiable in official statistics. There is increasing concern about disclosure, particularly in relation to small data sets. NHS organisations are advised not to release figures into the public domain that could potentially identify an individual. It is recommended that figures should not be presented on the internet, NHS web or hardcopy public reports or publications that are based on a count of less than five. This includes figures that may be disclosive when subtracted from totals, sub-totals or other published figures. This is in line with the Office for National Statistics' Code of Practice on Data Access and Confidentiality

Question 180 (Mr Allan): Can you produce data on the new hospitals versus the old ones to see if this investment of public money is making any difference to the public concern?

It is difficult, for a variety of reasons, to test robustly the hypothesis that new hospitals are cleaner and/ or have lower MRSA or other healthcare associated infections (HCAI) rates than older hospitals. Firstly, there are only a relatively small number of major new hospitals in recent years which make formal statistical testing difficult and lacking in power. In addition, completion of many schemes is phased over a number of years or covers only a part of the total Trust infrastructure, which makes it unlikely that sudden step changes should be observable in Trust level measures of cleanliness of MRSA rates.

Over 30 major capital projects involving both public and PFI funding (those greater than £10 million in value) were completed between April 1998 and December 2003. Analysis by the Department of Health has explored whether or not a Trust that has had a major publicly funded capital project during this period is significantly correlated with either current MRSA rates or cleanliness (PEAT) scores. This analysis holds constant a variety of factors relating to the characteristics, operational performance, policy and casemix of the hospital. These results suggest that, other things equal, there is no significant correlation between recent major capital investment and either MRSA rates or cleanliness measures. These results should, however, be interpreted with some caution subject to the caveats outlined above.

There is, however, good evidence of a significant relationship between the age and quality of the physical hospital environment<sup>2</sup> and MRSA rates. Other things equal, Trusts with older, poorer quality buildings have higher rates of MRSA. Since major capital projects demonstrably reduce this level of backlog expenditure, they would therefore be expected to have an impact on MRSA rates through this measure, even if recent major capital investment per se does not show up as significantly affecting MRSA rates.

The impact of reducing the age and improving the quality of hospital buildings is likely to have a proportionately larger effect on all HCAIs (many of which are airborne) than on MRSA, which is overwhelmingly spread through direct contact only.

Question 181 (Chairman): How are you going to make this information available to patients and will the surveillance, that is currently voluntary, be made mandatory for all hospitals?

The website www.nhs.uk is being enhanced to provide easily understood comparative information on NHS services about location, waiting times and the current Healthcare Commission star ratings performance indicators. This will be available to patients and GPs to support choice.

It is recognised that some patients will need more information and support to help them make their choices. Additionally therefore, Primary Care Trusts will provide targeted packages of support through GP practices and voluntary and community services to patients and communities that the NHS finds harder to reach.

The MRSA bacteraemia reporting scheme is mandatory and has now been running for three years. All acute Trusts have to provide reports for this data set.

Mandatory reporting has now been extended during the last year to: glycopeptide (vancomycin) resistant enterococci causing bacteraemias, Clostridium difficile infection (antibiotic associated diarrhoea and colitis), surgical site (wound) infection in elective orthopaedic surgery, and untoward incidents that include hospital outbreaks of infection. The first year's data set from this extended mandatory surveillance will be available in 2005 and will provide a baseline for monitoring future trends.

<sup>&</sup>lt;sup>2</sup> As proxied by the backlog expenditure required to bring all buildings and facilities up to physical condition Category B, as defined by NHS Estates.

Question 181 (Chairman): What are the reasons for the very low levels of MRSA at Great Ormond Street?

Great Ormond Street Hospital actively screens all admissions for MRSA. The compliance is monitored through an automated computerised system and feedback is given to the wards when admission screening is missed. The hospital isolates all children with antimicrobial resistant organisms. This is possible because of the high ratio of single cubicles (60%).

The hospital promotes good hand hygiene practice and has alcohol hand rubs by each clinical hand wash basin. They will shortly begin an empowerment programme where children and parents will be encouraged to ask staff to wash their hands.

In common with other healthcare facilities, Great Ormond Street Hospital has a problem with healthcare associated infections caused by other non-MRSA bacteria.

*Question 181 (Chairman): Why is so little information available on other infections (other than MRSA)?* 

Data on a wide range of infections have been collected and published for many years by the Public Health Laboratory Service, now the Health Protection Agency. This is based upon the voluntary reporting of a list infections from microbiology laboratories. One data set is all bacteraemias and these include important causes of healthcare associated infection such as *E.coli, Klebsiella,* and other related bacteria. Antibiotic resistance data are also collected in these reports. However, the data set is incomplete. Many but not all laboratories provide reports and not all laboratories that report infections provide full data sets. The results are useful in showing national trends but not for comparison between Trusts.

The most robust data set is the MRSA bacteraemia mandatory reporting scheme that has now been running for three years. All acute Trusts have to provide reports for this data set.

Mandatory reporting has now been extended during the last year to: glycopeptide (vancomycin) resistant enterococci causing bacteraemias, *Clostridium difficile* infection (antibiotic associated diarrhoea and colitis), surgical site (wound) infection in elective orthopaedic surgery, and untoward incidents that include hospital outbreaks of infection. The first year's data set from this extended mandatory surveillance will be available in 2005 and will provide a baseline for monitoring future trends.

25 October 2004