

THE NATIONAL ASSEMBLY FOR WALES

AUDIT COMMITTEE

Report presented to the National Assembly for Wales on 07 May 2008 in accordance with section 143(1) of the Government of Wales Act 2006

Minimising Healthcare Associated Infections in NHS Trusts in Wales

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Summary

1. Healthcare associated infections (HCAs) are infections that occur as a result of a person's contact with the healthcare system in its broadest sense – from care provided in one's own home, to primary care, nursing home care and care in acute hospitals. An HCAI can be classed as a hospital-acquired infection if it develops in a patient 48 hours or more after their admission to hospital.
2. It is unacceptable that patients should become infected as a direct result of receiving healthcare. These infections can be difficult to treat and can have serious, and in some cases fatal, consequences. NHS trusts should therefore have in place the appropriate strategies, facilities, processes, capacity and expertise to minimise HCAIs.
3. In 2004, the Welsh Assembly Government (the Assembly Government) launched its national strategy for minimising these infections, *Healthcare Associated Infections – A Strategy for Hospitals in Wales*. This strategy emphasised the need for infection prevention and control to become the responsibility of everyone and it set out the Assembly Government's intentions of tackling all HCAIs and not just the high profile organisms such as methicillin-resistant *Staphylococcus aureus* (MRSA) and *Clostridium difficile* (*C. difficile*).
4. On the basis of a report by the Auditor General,¹ we examined whether NHS trusts in Wales are doing the right things to minimise healthcare associated infections. We took evidence from Mrs Ann Lloyd, Director of the Health and Social Care Department of the Welsh Assembly Government, Dr Mike Simmons, Director for Health Protection, National Public Health Service for Wales (NPHS) and Mr Paul Barnett, Chief Executive, Carmarthenshire NHS Trust.
5. Overall, we concluded that NHS trusts have made good progress in tackling healthcare associated infections without undue focus on MRSA and *C. difficile*. However, they need to do even more, particularly to improve processes, capacity and information, because infection prevention and control is still not seen as everyone's business.

¹ Auditor General for Wales report, *Minimising Healthcare Associated Infections in NHS Trusts in Wales*, 8 November 2007

The general approach in Wales, which focuses on the prevention and control of all HCAs, appears to be delivering benefits although infection prevention and control is still not everyone's business

6. There is some evidence to suggest that the Welsh approach has contributed to reduced infection rates, although there are problems with some infection types. While there are limitations to all data in relation to infection rates, there are indications that the Welsh strategy's broader approach to tackling all HCAs, rather than those with a high public profile, has lowered infection rates. This appears particularly true when comparing Welsh infection rates with England, where the national approach appears to have involved a specific focus on MRSA.
7. The prevalence of HCAs in acute hospital inpatients is markedly lower in Wales than in England and Scotland, although it is higher than in Northern Ireland and the Republic of Ireland. Wales has also seen a significant reduction in the rate of MRSA bacteraemias² over recent years, and the prevalence of *C. difficile* infections in Wales is just over 50 per cent of that in England.
8. Of greater concern is evidence suggesting that the incidence of *C. difficile* infections increased significantly in Wales between 1993 and 2005. Data showing the top 10 most common bacteraemia-causing organisms suggest that the incidence of *Klebsiella* bacteraemias is higher than for MRSA among patients in Wales. Wales also appears to have a problem with infections following surgery. The data show that surgical site infections (SSIs) following specific types of orthopaedic surgery and Caesarean sections are higher than in comparative countries.
9. The approach in Wales has begun to secure the cultural change needed to improve infection prevention and control. The Assembly Government's decision to allow NHS trusts to set their own infection reduction targets rather than using a prescriptive national target appears to have generated ownership among NHS trusts. There is evidence that the national strategy's broad approach has resulted in trusts taking a similarly holistic view to minimising HCAs. Trusts are tackling HCAs in numerous ways rather than relying on single interventions to reduce infections which may not fully reflect local risks.
10. Witnesses said they were seeing the beginnings of a cultural step change in infection prevention and control. They gave examples of an improved willingness among clinicians to wash their hands and better attendance at infection prevention events.

² A bacteraemia is an infection of the bloodstream.

However witnesses' evidence suggested that the extent of this cultural shift has varied within Wales because of levels of ownership differ.

11. Despite apparent progress, infection prevention and control is not yet seen by everyone as their business. Some hospital staff remain disengaged and not all training has been effective in ensuring sustainable changes in infection prevention and control practices. Clinicians need to play a role as leaders and champions of infection prevention and control. There is also scope to engage more with patients and visitors to ensure that their behaviour does not increase the risk of infection.
12. Trusts need to show leadership in their corporate approach to HCAs. The pursuit of other operational or financial targets must not be to the detriment of patient safety through neglect of infection prevention and control. The Assembly Government plans to refresh its national strategy and we agree that a revision is needed to capitalise further on the progress that has been made and to ensure wider cultural change.

Efforts to reduce HCAs are being hampered by weaknesses in hospital processes and inappropriate capacity and facilities

13. There are variable standards of cleaning and other practices that help ensure patient safety, reflected by recent infection control spot checks undertaken by Healthcare Inspectorate Wales.³ Poor cleaning impacts on public confidence in, and experience of, the health service. While some trusts are adopting wide-ranging good practice in environmental cleaning, other trusts need to address basic shortcomings in hygiene. There are particular problems in cleaning around equipment that is inappropriately stored in clinical areas because of poor storage capacity elsewhere.
14. NHS Wales is currently seeking to improve other hospital processes and arrangements to minimise HCAs. The Chief Nursing Officer is leading work to reduce the potential impacts of staff clothing on infection rates and some hospitals are now implementing a national patient safety programme⁴ that involves minimising HCAs through safer clinical practices.
15. Effective infection control in some hospitals is constrained by a lack of adequate capacity and facilities. The number of infection control nurses in some trusts does not meet recommended levels. However there are some doubts about how these benchmarks are most appropriately applied, particularly in the absence of definitive guidance on this issue from the Assembly Government. Microbiologists also provide

³ Healthcare Inspectorate Wales, *Report on Infection Control - Findings and Themes*, November 2007

⁴ The Safer Patients Initiative is run by the Health Foundation in partnership with the Institute for Healthcare Improvement. The initiative is run as an organisational programme to improve patient safety.

vital infection prevention and control expertise and it is important that Wales has a strategy for retaining and bolstering microbiological capacity and expertise in future.

16. Capacity to isolate infected patients within single hospital rooms is important in preventing the transmission of HCAs. There has been limited progress in improving the capabilities of existing isolation rooms and also in developing additional capacity. Capital programmes associated with the current reconfiguration within NHS Wales provide an opportunity to ensure hospital design minimises the risks of HCAs through improved isolation facilities.

The quality of information on HCAs is improving but gaps remain

17. Wales has an extensive surveillance programme that aims to monitor the occurrence and impacts of HCAs. There are problems with clinicians failing to comply with the programme's reporting requirements, some of the data are not directly comparable with data from other countries and there is scope to make better use of the data that are collected.
18. The information recorded on death certificates is an unreliable source of information about the extent to which HCAs have resulted in death. The information recorded on certificates depends heavily on clinical judgement and reflects the potentially numerous causes of death which operate independently of each other and in combination. Even if it were possible to improve the current guidelines, the Assembly Government would be limited in its ability to change this process because death certification is not a devolved responsibility.
19. All NHS trusts have developed infection screening processes based on local assessments of risk. Screening involves microbiological testing to determine whether a person is carrying an infectious organism. The Assembly Government has asked the NPHS to assess the need for national guidance on screening.
20. NHS trusts cannot make fully informed decisions about infection prevention and control because they do not collect reliable information on the costs of HCAs. In addition to the impacts that HCAs have on the people who become infected, there are considerable impacts on NHS trusts. Infections result in direct financial costs of treating these infections and through the additional time patients spend in hospital while receiving treatment. There is also the opportunity cost of beds being occupied by infected patients rather than patients awaiting planned treatment. The NPHS has estimated the annual cost of HCAs in Wales to be £50 million. However NHS trusts do not routinely collect information on the costs they incur through HCAs. This lack

of cost information makes it difficult for trusts to develop robust business cases for more infection prevention and control resources.

21. Despite extensive surveillance of HCAs there is still much about these infections that is unknown. For example, trend data suggesting an increased incidence of *C. difficile* infections is relatively poorly understood, as are the reasons for such wide variation in infection rates between NHS trusts. Data on *C. difficile* infections is available only for people aged over 65. This reinforces the need to continue to invest in research and surveillance of HCAs.

Recommendations

- i. There are suggestions that the approach in Wales has begun to secure cultural change but a fresh impetus is now required to ensure this change is sustained. We recommend that:
 - a) **In revising its national strategy for minimising healthcare associated infections, the Assembly Government should implement the recommendations of this report and that of the Auditor General for Wales. The refreshed strategy should include, within the ethos of encouraging local priority setting, more definitive guidance for NHS trusts on issues such as specialist infection control staffing levels, patient screening and the collection of cost information.**
 - b) **NHS trusts should incorporate in their infection prevention and control action plans the recommendations of the Auditor General for Wales and the recommendations of this report.**
- ii. While everyone who makes contact with healthcare settings, including patients and visitors, has a responsibility for infection prevention and control, it is particularly important for staff who have regular contact with patients. Clinicians who move from patient to patient are an obvious potential route for transmitting infections and they should therefore be the primary focus of efforts to drive cultural change and ownership. More effective, needs-based training is required, which not only raises awareness but also secures sustained changes in practice. All trusts now have in place nominated leads for infection prevention and control in at least some of their directorates, but there is a broader need for clinicians to lead from the front in trusts' efforts to minimise healthcare associated infections, with stronger accountability for minimising healthcare associated infections. We recommend that:

- a. **Directorate leads for infection prevention and control should work with the infection control team to use the results of surveillance schemes to highlight individuals and teams with training needs;**
 - b. **NHS trusts should actively encourage senior medical staff to become champions for minimising HCAs within their specialties and to work in tandem with the nominated directorate leads. Where this does not already happen, these clinicians should be active participants in the process of setting infection reduction targets and should receive regular feedback on progress towards these targets. Trusts should also encourage these clinicians to attend the annual NPHS infection reduction feedback sessions to learn from good practice in other trusts; and**
 - c. **Where appropriate the Assembly Government should specify responsibility for infection control within all centrally-developed job descriptions, while trusts should include responsibility for infection control in all locally developed job descriptions. Trusts should assess during staff appraisals how adequately staff have discharged their responsibilities for infection prevention and control.**
- iii. While clinical staff should be the primary focus of efforts to drive cultural change, everyone who enters a hospital building is a potential transmitter of infection. Consequently, **NHS trusts should comply with good practice in highlighting the actions that every individual should take to minimise the risks of contracting or spreading healthcare associated infections. This good practice involves the production of patient information on the actions patients can take to minimise their risks of contracting infections, widespread availability of well-signed hand cleansing facilities, and innovative methods for reminding people to wash their hands such as automatic movement-activated announcements.**
- iv. The forthcoming mergers of several NHS trusts in Wales is both an opportunity to mainstream good practice and a risk to maintaining progress in minimising infections. **Infection control teams in the newly merged trusts should, as a priority, develop action plans to identify the best infection prevention and control practices from their predecessor organisations with a view to propagating these practices in the new trust.**

- v. Both Healthcare Inspectorate Wales and the Auditor General identified basic failings in housekeeping and hygiene in Welsh hospitals. Lack of storage and cluttered clinical areas can prevent effective cleaning. 'Surge capacity' can help to isolate for deep cleaning wards affected by outbreaks of infection. **We recommend that:**
- a. **Ward managers should be made more accountable for the cleanliness of clinical areas. They should act as champions for hygiene at a ward level and should oversee the work of cleaners who, as far as possible, should be assigned to specific wards to foster ownership and team working;**
 - b. **The Assembly Government should highlight in its guidance the importance of considering infection prevention and control in all capital programmes, discretionary or major. Trusts should involve infection control staff in the design of buildings to ensure there is an appropriate environment to prevent and control infections. The inclusion of suitable storage areas would prevent clutter, which should be further minimised through the development of central equipment stores. As far as possible, capital programmes should consider the possibility of including surge capacity to provide more appropriate isolation capacity for areas affected by outbreaks; and**
 - c. **Trusts should learn from good practice in cleaning, both the ongoing cleaning and periodic deep cleaning of wards, supported by the use of surge capacity to clear wards for the deep clean.**
- vi. Infection control nurses and microbiologists provide vital specialist knowledge and skills to inform efforts to minimise healthcare associated infections through prudent antibiotic prescribing. However, infection control team staffing levels in many areas do not meet recommended levels. **We recommend that:**
- a. **Based on its analysis of existing benchmarks, the Assembly Government should develop and issue national guidance on the ratio of infection control nurses to beds, reflecting secondary care reconfiguration and moves towards the provision of care in the community and closer to patients' homes;**
 - b. **The Assembly Government and the NPHS should jointly produce a succession planning strategy to provide Wales with an adequate number of appropriately trained microbiologists; and**

- c. The Assembly Government should review the impact of antimicrobial expertise and prudent antibiotic prescribing on infection prevention and control with a view to issuing guidance to NHS trusts on the potential benefits of employing antimicrobial pharmacists.**
- vii. Surveillance of the extent and impacts of healthcare associated infections is crucial in monitoring trends and identifying factors that impact on infection rates. Whilst we welcome the fact that Wales has a broad and extensive national surveillance programme, some trusts' compliance with the surgical site surveillance is poor and *C. difficile* surveillance covers only patients aged over 65. There is also scope to improve and extend the surveillance programme to provide data that are more comprehensive and enable direct comparisons with other countries. **We recommend that:**
 - a. NHS trusts that have low levels of compliance with surgical site surveillance programmes should develop a task and finish group of clinicians, representatives of the information department and infection control specialists to develop an action plan to secure compliance;**
 - b. If an ongoing NPHS survey of NHS trusts identifies significant numbers of *C. difficile* infections in patients aged under 65, then the Assembly Government should extend the current surveillance scheme to include patients of all ages;**
 - c. In discharging its performance management of trusts, the Assembly Government should pay due attention to levels of compliance with surveillance schemes and the list of the top ten bacteraemias and**
 - d. The NPHS should work with equivalent organisations in the rest of the UK and Ireland to ensure its surveillance data are, as far as possible, directly comparable with the data from other countries. It should also identify whether there are lessons it can learn from the approach to infection prevention and control in the Republic of Ireland, which has a lower HCAI prevalence than the UK.**
- viii. The Assembly Government has not issued any formal guidance on screening procedures. Current screening protocols in Wales are therefore generally based on UK-wide guidance produced by the Hospital Infection Society in 2006, adjusted to reflect local assessments of risk. The Assembly Government has asked the NPHS to provide it with a statement on its view on screening. **Based on the forthcoming advice from the NPHS, the Assembly Government should develop national**

guidance on screening. This should include analysis of the costs and impacts of various screening programmes, which will assist NHS trusts to develop local risk assessments concerning the organisms that should be screened for and the circumstances in which screening should be carried out.

- ix. The NPHS has estimated the total annual cost of healthcare associated infections to be £50 million. Collecting information about the costs and impacts of healthcare associated infections is important in developing business cases for additional infection prevention and control resources, but NHS trusts do not routinely collect information on the costs and impacts of healthcare associated infections. **We recommend that the Assembly Government should produce guidelines on the specific cost information that should be collected and analysed by NHS trusts. This information might include data relating to ward closures, lost bed days and patients readmitted with an infection they acquired during a previous hospital stay. This guidance should take into account the cost data collected through a Scottish prevalence survey in July 2007.**

The general approach in Wales, which focuses on the prevention and control of all HCAs, appears to be delivering benefits although infection prevention and control is still not everyone's business

There is some evidence to suggest that the Welsh approach has contributed to reduced infection rates, although there are problems with some infection types

22. Infections are caused by micro-organisms that are unpredictable in the way they affect individuals, which makes it difficult to define categorically when an infection has taken place. This, in turn, can limit the reliability and consistency of measures of the extent of infections and the effectiveness of interventions to reduce them. Notwithstanding these limitations, Wales has an extensive national surveillance programme that collects a wide range of data with the aim of monitoring trends in infection rates.
23. On the available data, there are suggestions that the adoption by the Assembly Government of a broad strategy, which seeks to tackle all HCAs rather than focusing on only the high profile organisms, has contributed to lower rates for some infections in Wales than in other countries.⁵ This appears particularly true when comparing the Welsh rates of infection with England, where the national approach has been less holistic and has involved a particular focus on MRSA.⁶
24. In 2006, the third National Prevalence Survey⁷ showed that 6.4 per cent of all patients in Welsh acute hospitals had an HCAI. This prevalence was markedly lower than the rest of the UK mainland with the prevalence in England and Scotland being 8.2 per cent and 9.5 per cent respectively. However, the Welsh prevalence was higher than in the Republic of Ireland (4.9 per cent) and Northern Ireland (5.4 per cent).⁸
25. Wales has seen a significant reduction in the incidence of MRSA bacteraemias over recent years.⁹ While the incidence rose steeply between 1995 and 1997 and then less steeply until 2000, the level remained fairly stable until there was a statistically

⁵ Annex A, paragraph 24

⁶ Annex A, paragraphs 15 and 22-24

⁷ Prevalence is the number of all cases (new and existing) of a disease or infection in a particular population. Prevalence can be measured over a defined period of time (period prevalence) or at a specific point in time (point prevalence). The survey was carried out between February and May 2006 by the Hospital Infection Society and the Infection Control Nurses Association. All countries in the UK and Ireland took part although Scotland's survey was carried out between October 2005 and October 2006 and used a slightly different methodology.

⁸ AGW report, paragraphs 1.1-1.2 and Figure 1

⁹ Incidence is the number of new cases of a disease or infection that occur in a particular population over a specific time period.

significant reduction between April 2005 and July 2006.¹⁰ Dr Simmons told us that Wales had demonstrated clear declines in MRSA bacteraemias.¹¹

26. The prevalence of *C. difficile* infections in Wales (1.1 per cent) is just over 50 per cent of the prevalence in England (1.98 per cent). While the Welsh prevalence is identical to that in Northern Ireland, it is higher than in Scotland (0.82 per cent) and the Republic of Ireland (0.5 per cent).¹²
27. The surveillance evidence suggests that the incidence of *C. difficile* infections increased significantly in Wales between 1993 and 2005.¹³ However, there were limitations in the quality of the surveillance data during this period, and an improved surveillance programme is now in place.¹⁴
28. Surveillance data have also revealed the incidence of less well publicised infectious organisms because the Assembly Government collects information on the top ten bacteraemias in order to place high profile infections, such as MRSA, in their proper context.¹⁵ Surveillance of the ten most common organisms to cause bacteraemias in Welsh hospitals shows that the top four are typically community-acquired organisms but the fifth most common bacteraemia is *Klebsiella*, an organism typically associated with hospital-acquired infections.¹⁶ MRSA bacteraemias appear sixth in the list, which adds weight to the argument that a focus on MRSA risks missing other organisms that also cause very significant problems for patients. Dr Simmons told us that these data suggest that more people are likely to die from a *Klebsiella* infection or an *E. coli* infection than from MRSA.¹⁷
29. Infections acquired following surgery appear to be a particular problem in Wales.¹⁸ These surgical site infections (SSIs) occur in a part of the body that has undergone surgery and they account for 18 per cent of all HCAs in Wales. This is a higher proportion than in England (13.8 per cent), Northern Ireland (13.8 per cent) and Scotland (15.9 per cent), although it is lower than in the Republic of Ireland (21.5 per cent).¹⁹ The National Prevalence Survey also showed that the proportion of patients

¹⁰ AGW report, paragraph 1.13 and Figures 5 and 6

¹¹ Annex A, paragraph 31

¹² AGW report, paragraph 1.12 and Figure 1

¹³ AGW report, paragraph 1.15 and Figure 8

¹⁴ AGW report, paragraph 1.15

¹⁵ Annex A, paragraph 32

¹⁶ If a hospital inpatient develops an infection less than 48 hours after their admission to hospital their infection is categorised as having been derived from the community and is hence defined as a community-acquired infection. Infections developed after 48 hours in hospital are deemed to be hospital acquired.

¹⁷ Annex A, paragraph 33

¹⁸ AGW report, paragraph 1.17-1.21 and Figures 10-12.

¹⁹ AGW report, paragraph 1.17

undergoing surgery who go on to contract an SSI is higher than in the rest of the UK and Ireland.²⁰ The national surveillance programme in Wales requires trusts to report rates of SSIs following four specific orthopaedic procedures. The incidence of SSIs following these procedures is higher than in Scotland and Northern Ireland.²¹ Also in relation to SSIs, the incidence of these infections following Caesarean sections in Wales is significantly higher than in other European countries, although there are some limitations in the comparability of these data.²² Mrs Lloyd and Dr Simmons told us that part of the reason for Wales appearing to have high rates of SSIs is because some trusts are failing to report the required information to the surveillance scheme.²³ This issues is discussed further in paragraphs 58 and 59.

The approach in Wales has begun to secure the cultural change needed to improve infection prevention and control

30. The Assembly Government decided not to set a national target for reducing HCAs and has instead required NHS trusts to develop their own local infection reduction targets and register them with NPHS. The guiding principle is that decisions about local targets should be taken locally.²⁴ Mrs Lloyd said targets that allow the problems to be acknowledged and owned locally by the staff who must implement any improvements are a much better way forward than an enforced set of guidance or targets. She said that the results in Wales now show that this localised approach has been the right one.²⁵
31. The NPHS organises annual infection reduction feedback meetings where the infection control teams from all trusts get together to share their progress in meeting their local targets. Dr Simmons said that, while the system of targets and seminars was initially unpopular with infection control teams, there was incredible enthusiasm by the third year with clinical teams, as well as central infection control teams, starting to get involved.²⁶
32. The witnesses gave more general evidence of what they saw as changing attitudes towards infection prevention and control in Wales. Dr Simmons said there had been a step change and that Wales was now in an exciting phase. This had been

²⁰ AGW report, paragraph 1.17 and Figure 10; these data were not recorded in Scotland.

²¹ AGW report, paragraph 1.18 and Figure 11; comparable data are not available for the rest of the UK and Ireland.

²² AGW report, paragraph 1.21

²³ Annex A, paragraphs 81-82

²⁴ Annex A, paragraph 74

²⁵ Annex A, paragraph 120

²⁶ Annex A, paragraph 125

demonstrated by the impressive turnout from NHS Trust Chief Executives at an Assembly Government-hosted HCAI conference in March 2007.²⁷

33. Mrs Lloyd highlighted the importance of involving health service staff in the early phases of developing the national strategy and she said that there has been a huge increase in awareness of staff about the importance of infection prevention and control.²⁸
34. Dr Simmons said the Safer Patients Initiative has also contributed to changes in staff behaviour. He said it was important that messages about HCAIs get inside the heads of staff and he gave an example of where this approach had resulted in high levels of hand hygiene compliance amongst clinical staff at Gwent Healthcare NHS Trust.²⁹ Mr Barnett claimed that the attitude of his clinical staff had contributed a great deal to the improvements in infection prevention and control in his Trust.³⁰
35. The national strategy emphasises that minimising HCAIs is everyone's business including patients, relatives and other hospital visitors.³¹ Mr Barnett said his Trust had achieved gradual improvements through reinforcing this message with the community and through the media.³² Mrs Lloyd noted that hospital visitors are now using the hand gel that is provided on hospital wards and she credited the clean**your**hands campaign with improving this awareness amongst hospital visitors.³³
36. There is evidence that the Assembly Government's broad approach to tackling all HCAIs has resulted in trusts taking a similarly holistic approach, and trusts have put in place many of the structures set out in the national strategy to embed infection prevention and control.³⁴ Mr Barnett said his Trust was working in numerous ways to minimise HCAIs, including investment in deep cleaning, the introduction of an antibiotic pharmacist, better screening of elective patients arising from separation of elective and emergency work in General Surgery and Orthopaedics, improvements to isolation facilities and a programme of regular infection control audits.³⁵
37. The progress that has been made in Wales has been acknowledged in a national awards ceremony. Dr Simmons told us that two out of the five trusts that contested

²⁷ Annex A, paragraph 210

²⁸ Annex A, paragraphs 15 and 22

²⁹ Annex A, paragraph 149

³⁰ Annex A, paragraph 20

³¹ Annex A, paragraph 208

³² Annex A, paragraph 72

³³ Annex A, paragraph 146

³⁴ AGW report, paragraphs 2.5-2.11

³⁵ Annex A, paragraphs 67-70

the final of the Nursing Times infection control award in 2007 were Welsh trusts, and the ward was won by Swansea NHS Trust.³⁶

Despite apparent progress, infection prevention and control is not yet seen by everyone as their business

38. Despite the positive evidence of the beginnings of cultural change, it is clear that infection prevention and control is still not seen as everyone's business and that there is variation in the ownership of the problem of HCAs amongst trusts. NHS Wales needs to guard against complacency and work to ensure broader recognition of personal responsibility for infection control. The Auditor General's report highlighted cases of poor engagement of clinicians, while Mr Barnett acknowledged that hand hygiene compliance varies among these staff.³⁷ We agree with Dr Simmons that while infection prevention and control is everyone's responsibility, it is most critical for staff, such as clinicians, who move from patient to patient.³⁸ And Mrs Lloyd is absolutely right to say that there can be no excuse for clinicians failing to lead from the front in efforts to minimise HCAs.³⁹
39. Effective education and training is critical to securing staff engagement in minimising HCAs. The Assembly Government's HCAI e-learning programme is being rolled out across Wales, but Dr Simmons accepted that the provision of training does not in itself ensure sustainable changes to infection prevention practices.⁴⁰ He said that mandatory training in infection prevention and control would not necessarily work but he said all training should be needs-based, that is targeting areas and individuals who most need it.⁴¹ Mr Barnett emphasised that securing staff engagement in infection prevention and control is not something that can be achieved and then forgotten about; there is a need to constantly refresh the message to genuinely achieve improvements in infection control practices.⁴² The Assembly Government plans to refresh its national strategy for tackling healthcare associated infections to coalesce with the recent publication of its strategy for community infections. We agree that a revision is needed to capitalise further on the progress that has been

³⁶ Annex A, paragraph 125

³⁷ AGW report, paragraphs 3.6-3.7 and Annex A, paragraph 144

³⁸ Annex A, paragraph 150

³⁹ Annex A, paragraph 148

⁴⁰ Annex A, paragraphs 212 and 220

⁴¹ Annex A, paragraph 216

⁴² Annex A, paragraph 72

made, to reflect the findings and recommendations of this and the Auditor General's report, and to embed wider cultural change.⁴³

40. Strong leadership at the ward level is important to reinforce messages about hand hygiene and environmental cleanliness. We see ward managers as key to ensuring high standards of hygiene in clinical areas and we were pleased to hear that the work initiated by the Minister in relation to ward leadership will report in the next few months.⁴⁴
41. Corporate leadership is equally important if NHS trusts are to show genuine commitment to minimising HCAs. While trusts have to balance all aspects of their business, the pursuit of operational and financial targets must not be to the detriment of patient safety, for example if it results in the neglect of infection prevention and control.⁴⁵ It is particularly important that infection prevention and control remains a high priority during and following the current trust merger process.⁴⁶ One obvious manifestation of this will be the assimilation of infection control targets, staff and processes between the merging trusts, and the need for the Assembly Government to consider the impacts of these mergers when refreshing its strategy.

Efforts to reduce HCAs are being hampered by weaknesses in hospital processes and inappropriate capacity and facilities

There are variable standards of cleaning and other practices that help ensure patient safety

42. While the specific links between cleanliness and some HCAs are unclear, a lack of cleanliness can be a contributory factor in the spread of *C. difficile* infections.⁴⁷ Unclean hospitals are also a concern for the public and poor cleanliness can damage the public's confidence in, and experience of, the health service.⁴⁸
43. National arrangements for monitoring environmental cleanliness in Welsh hospitals include a baseline assessment that is being carried out by Healthcare Inspectorate Wales. This involves a combination of external inspection by Healthcare Inspectorate Wales and self assessment against the cleanliness-related aspects of the Healthcare Standards for Wales. This baseline review is due to come through

⁴³ Annex A, paragraph 17

⁴⁴ Annex A, paragraph 146

⁴⁵ Annex A, paragraphs 140-142

⁴⁶ Annex A, paragraph 205

⁴⁷ Annex A, paragraph 64

⁴⁸ AGW report, paragraph 3.25 and Box 7

later in 2008.⁴⁹ Mrs Lloyd also drew attention to the helpful role of the Community Health Councils (CHCs) in assessing the application of the fundamentals of care.⁵⁰

44. Some trusts are adopting wide-ranging good practice in environmental cleaning. Mr Barnett gave details of the actions his trust is taking to improve environmental cleanliness. This has involved investment in deep cleaning, ongoing refurbishment and the introduction of new cleaning technologies such as steam and microfibre cleaning.⁵¹ The Auditor General's report also included examples of trusts employing good practice in ensuring the patient environment minimises HCAs.⁵²
45. Despite these examples of good practice, some trusts have basic failings in hygiene. The Healthcare Inspectorate Wales's infection control spot checks in four NHS trusts found problems with basic housekeeping, including variable standards of cleaning, variable practices in waste disposal, limited time for training in cleaning and problems with hygiene practices in ward based kitchens.⁵³
46. A particular problem is the storage of equipment in clinical areas and the associated difficulties in cleaning around them. Mrs Lloyd said that problems stem from the failure to include adequate storage space in ward design in the 1980s, when changes in hospital design saw a reduction in storage and non-patient areas of approximately 35 per cent. She said that this had resulted in clutter and cited stories of dust collecting in corners and insufficiently frequent cleaning. Mrs Lloyd highlighted the need to take advantage of the current capital building programme in Wales to look more creatively at the management of equipment.⁵⁴
47. The Auditor General recommended that, as far as possible, all cleaners should be made part of ward teams.⁵⁵ His report presented evidence that where cleaners have been made part of ward teams there may be greater ownership of the standards of cleanliness.⁵⁶ Mr Barnett said that in his Trust cleaning and housekeeping staff are very much part of the ward team.⁵⁷
48. The Auditor General's work also identified concerns that where cleaning contracts are outsourced to private companies there can be problems with ownership, morale

⁴⁹ Annex A, paragraph 76

⁵⁰ Annex A, paragraph 162

⁵¹ Annex A, paragraphs 67-68

⁵² AGW report, case studies G and I

⁵³ AGW report, paragraph 3.10

⁵⁴ Annex A, paragraphs 161 and 162

⁵⁵ AGW report, recommendation 4

⁵⁶ AGW report, paragraph 3.30

⁵⁷ Annex A, paragraph 159

and confused line management.⁵⁸ Mrs Lloyd said that there are only three small hospitals in Wales that outsource their cleaning but she stressed that, regardless of these contracts, it is the supervision of cleaning that is important.⁵⁹

49. We agree that effective supervision of cleaning is imperative in maintaining high standards, and we were pleased to hear that the Minister has initiated work regarding ward-based responsibility and leadership.⁶⁰ Mr Barnett said the ward managers in his Trust are responsible for what happens on the ward, including cleaning. He said that the ward managers receive training on auditing cleanliness, work closely with the housekeeping staff and identify the work programmes for these staff.⁶¹
50. In addition to measures to improve cleaning, NHS Wales is currently seeking to improve other hospital processes to minimise the risks of HCAs. For example, the Minister has asked the Chief Nursing Officer to run a task and finish group looking into the potential impacts of staff uniforms and clothing on infection rates.⁶² The Auditor General found that while there is no conclusive evidence that uniforms pose a significant hazard in relation to spreading infections, the public perceive there to be a risk.⁶³
51. Some trusts are now improving their hospital processes through the implementation of the Safer Patients Initiative.⁶⁴ This aims to improve patient safety through improved clinical practices such as care bundles. These are the amalgamation of several components of patient care into a single check list of actions that clinical staff carry out daily to improve clinical outcomes.⁶⁵ Mrs Lloyd said that care bundles have been developed throughout Wales over the past couple of years and that the Safer Patients Initiative has worked extremely well.⁶⁶ This care bundle approach has so far focused initially on intensive care units and there is potential to extend this to other settings.⁶⁷ This reflects the crucial importance of managing patient safety issues on a strategic basis. We agree with Mrs Lloyd about the importance of focusing on improving patient safety and standardising care to reduce inequalities and ensure

⁵⁸ AGW report, paragraph 3.30

⁵⁹ Annex A, paragraph 171

⁶⁰ Annex A, paragraph 146

⁶¹ Annex A, paragraph 159

⁶² Annex A, paragraph 229

⁶³ Annex A, paragraph 3.18 and Box 6

⁶⁴ AGW report, case study O

⁶⁵ AGW report, paragraph 3.94

⁶⁶ Annex A, paragraph 235

⁶⁷ AGW report, paragraph 3.95

that patients and carers know exactly what they are going to get when they enter a community or hospital service.⁶⁸

Effective infection control in some hospitals is constrained by a lack of adequate capacity and facilities

52. The expertise provided by infection control nurses and microbiologists is vital to effective infection prevention and control in hospitals. Benchmarks developed through American research have suggested that one infection control nurse is required for every 250 acute hospital beds. Another benchmark suggests that the ratio should be 1:100. However, the application of the benchmarks in Wales is confused because infection control teams cover beds in community hospitals as well as in acute settings.⁶⁹
53. The Auditor General identified wide variation in the ratio of infection control nurses to acute beds in Welsh trusts.⁷⁰ There is also variation across Wales in the amount of time consultant microbiologists are able to dedicate to infection control, and some trusts do not have adequate access to this specialist time.⁷¹ Mrs Lloyd said she has requested that the Assembly Government's workforce development teams look into the American benchmarks to assess what would be the ideal infection control team staffing given the needs and local targets in each organisation. Mrs Lloyd expected the workforce development proposals in this regard to come out in October.⁷²
54. Trusts also need to develop adequate capacity to be able to isolate infected patients. Placing infected patients in single hospital rooms can be an effective approach to preventing the transmission of HCAs. A review of isolation facilities carried out by Welsh Health Estates in 2005 showed in 2005 that two thirds of all single rooms that were supposed to have negative air pressure to contain airborne organisms were not fit for purpose. The Auditor General also found a high level of dissatisfaction with the availability of isolation facilities. The Assembly Government issued recommendations in August 2006 that aimed to improve the functionality of these rooms.⁷³
55. Despite the fact that the problems have been well known for some time, in recent years only limited progress has been made in improving isolation facilities. Mrs Lloyd told us that while some trusts have taken action in turning some ward areas into more

⁶⁸ Annex A, paragraph 236

⁶⁹ AGW report, paragraphs 3.77

⁷⁰ AGW report, paragraph 3.76 and Figure 16

⁷¹ AGW report, paragraph 3.79

⁷² Annex A, paragraph 207

single rooms with infection control measures such as reverse pressure ventilation, progress across Wales has been patchy. For that reason she has asked Welsh Health Estates to undertake a second review of these facilities. We were pleased to hear Mrs Lloyd say that the Assembly Government will be looking to ensure that the facility is available within the capital programme for organisations that are still unable to comply with the norm in terms of design and adequacy of facilities, to comply with modern practice on patient isolation and the more flexible management of patients. It is also important that trusts consider using their discretionary capital to improve the adequacy of isolation facilities.⁷⁴

The quality of information on HCAs is improving but gaps remain

Compliance with the requirements of surveillance schemes is improving but is still not good enough overall, and not all schemes produce results that permit comparisons with other countries

56. Surveillance of HCAs involves the collection of information about the extent of, and trends in, infection rates. This information is important in the identification of infection control risks, setting priorities and targets, planning services and evaluating progress.⁷⁵
57. Most Welsh trusts have their own local arrangements for surveillance. They use surveillance data to monitor infection types that are a particular risk in their hospitals. In addition, the Assembly Government has developed a national surveillance programme that requires trusts to submit a range of data to the NPHS.⁷⁶ Mrs Lloyd told us that the surveillance requirements have been ratcheted up, which has resulted in far more accurate information about the rates of infection in hospitals and the ways in which HCAs might be better controlled.⁷⁷ We welcomed Dr Simmons' comment that he believes Wales is the only country in the world that captures every single data item that goes through its microbiology laboratories.⁷⁸ Nevertheless, Dr Simmons said that the Welsh Healthcare Associated Infections Sub Group (WHAISG) is constantly looking at ways to improve HCAI surveillance, and there was

⁷³ AGW report, paragraph 3.71-3.74

⁷⁴ Annex A, paragraphs 196 and 197

⁷⁵ AGW report, paragraph 3.33

⁷⁶ AGW report, paragraph 3.33 and 3.34

⁷⁷ Annex A, paragraph 14

⁷⁸ Annex A, paragraph 43

a need to introduce more clinical surveillance schemes to provide robust outcome data based on individual patients, surgeons and hospitals.⁷⁹

58. There is also scope for improvement in the extent to which trusts comply with the national requirements.⁸⁰ Mrs Lloyd acknowledged that there are areas where the mandatory surveillance is not being undertaken and that particular problems exist in ensuring compliance with the orthopaedic SSI surveillance scheme.⁸¹ Just 37 per cent of the relevant orthopaedic procedures were reported to the surveillance scheme in 2005.⁸² Mrs Lloyd said the NPHS has been working alongside orthopaedic surgeons to secure better compliance by simplifying the reporting documentation and minimising the need to duplicate the reporting of such information to other schemes looking at the outcomes of the use of prosthetics.⁸³
59. Mr Barnett highlighted the significant improvement made by his Trust in compliance with the orthopaedic SSI surveillance programme. While Carmarthenshire NHS Trust reported only 20 per cent of relevant orthopaedic procedures in 2005, Mr Barnett said it is now reporting 78 per cent. This had been achieved through the creation of a task and finish group to look specifically at compliance with the surveillance scheme. One of the orthopaedic surgeons chaired the group, which helped secure clinical involvement and ownership. The group developed a process map that identified where reporting was failing, and ensured the information department provided prompt feedback on compliance rates to the group so there was more ownership of the data. Mr Barnett recognised that 78 per cent compliance is still not good enough and the current variation in compliance rates between trusts in Wales shows that much more needs to be done to improve the national surveillance data.⁸⁴
60. The national HCAI strategy states that one of the aims of the surveillance programme is to produce data that are comparable with other countries. While a pan-Celtic agreement has allowed the direct comparison of orthopaedic SSI data between Wales, Scotland and Northern Ireland, and the Third National Prevalence Survey provided comparable data for all of the UK and Ireland except Scotland, there are aspects of the Welsh programme that are not directly comparable with other countries.⁸⁵ Direct comparisons would be particularly helpful in identifying, for

⁷⁹ Annex A, paragraph 40

⁸⁰ AGW report, paragraphs 3.36-3.39

⁸¹ Annex A, paragraphs 18 and 81

⁸² AGW report, paragraph 3.38

⁸³ Annex A, paragraph 81

⁸⁴ AGW report, Figures 14 and 15, and Annex A, paragraphs 84-86

⁸⁵ AGW report, paragraphs 1.1, 1.18-1.19 and 1.21

example, if there are any lessons that can be learnt from the approach to infection prevention and control in the Republic of Ireland, which has lower HCAI prevalence than the UK.

61. There is also a need to make better use of the information that is already collected in Wales. Dr Simmons told us that he believes Wales is the only country in the World that captures all of the data that passes through hospital microbiology laboratories.⁸⁶ While the national surveillance programme considers only *C. difficile* infections in patients who are aged over 65, laboratory data includes information on patients of all ages who test positive for these infections. Dr Simmons said that the WHAISG is currently surveying Infection Control Teams to find out to what extent they monitor *C. difficile* infections in patients aged under 65.⁸⁷

The information recorded on death certificates is an unreliable source of information about the extent to which HCAs have resulted in death

62. Data from the Office for National Statistics show that between 2001 and 2005 there was an increase in the number of death certificates that mentioned either MRSA or *C. difficile*. However, death certificates are currently unreliable in showing whether an HCAI has contributed to a person's death.⁸⁸
63. Mrs Lloyd agreed that the detail that is included on a death certificate is very much a matter of individual clinical judgement about whether an HCAI contributed to the death. Consequently, the information is a very subjective measure at the moment.⁸⁹ Dr Simmons said that the introduction and application of central guidelines on completing death certificates would probably improve the robustness of the data, but the matter is complicated because the issue has not been devolved and currently comes under the jurisdiction of the Home Office.⁹⁰

All NHS trusts have developed infection screening processes based on local assessments of risk

64. Screening is the systematic microbiological testing of people to see whether they carry an infectious organism. The aim is to identify people who have been colonised by an infectious organism and are therefore at risk of contracting or transmitting an infection. The Auditor General found that all trusts have formal screening processes;

⁸⁶ Annex A, paragraph 43

⁸⁷ Annex A, paragraph 35

⁸⁸ AGW report, paragraph 1.24

⁸⁹ Annex A, paragraphs 106 and 108

⁹⁰ Annex A, paragraphs 110 and 111

while these mainly focus on testing for MRSA, there is variability in the screening protocols based on local assessments of risk.⁹¹

65. There has been no central guidance from the Assembly Government in relation to HCAI screening. Consequently, most trusts have used UK guidance from the Hospital Infection Society, together with local risk assessments, when developing their screening protocols.⁹²
66. Mr Barnett said he would welcome guidance from the Assembly Government, but emphasised the importance of trusts being allowed to develop their own localised protocols based on the organisms and infection types that pose the highest risks in their hospitals.⁹³ The Assembly Government has asked the NPHS to provide it with a statement on the future for screening in Wales, but Dr Simmons said that it is possible that this statement may highlight the importance of screening based on local risk assessments.⁹⁴
67. Dr Simmons told us that Scotland is considering screening all hospital patients for MRSA and is investing in a pilot scheme to test out the effectiveness of this universal approach. However, there are concerns about the robustness of the data that support this universal approach, and the NPHS in Wales is now using data from the Americas to further assess the impacts of universal screening. He said it would be unwise for Wales to change its stance on screening until the Scottish pilot scheme has reported on the effectiveness of the universal approach.⁹⁵

NHS trusts cannot make fully informed decisions about infection prevention and control because they do not collect reliable information on the costs of HCAs

68. HCAs have serious and sometimes tragic consequences for the patients who become infected. The effects on NHS trusts can also be considerable. HCAs result in direct financial costs because of the care and treatment that infected patients require. There are also opportunity costs because infected patients occupy beds that could otherwise be used for patients awaiting planned treatment.
69. The NPHS has estimated the annual cost of HCAs in Wales as £50 million.⁹⁶ Despite this considerable cost, most NHS trusts do not routinely collect information about the financial impacts of HCAs or their effects on service delivery. This lack of cost information can make it difficult for trusts to develop robust business cases to

⁹¹ AGW report, paragraph 2.21

⁹² AGW report, paragraph 2.18

⁹³ Annex A, paragraph 135

⁹⁴ Annex A, paragraph 137

⁹⁵ Annex A, paragraph 131

justify the benefits of increased investment in infection prevention and control resources.⁹⁷

70. Mr Barnett said his Trust had carried out a specific piece of work to analyse the costs of HCAs, as a result of which it had developed a successful business case that set out the potential costs and benefits of investing further in infection prevention and control. Mr Barnett ordered the work in response to a series of outbreaks in his Trust about two and a half years ago. His director of finance estimated the annual costs of these outbreaks of infection to be £72,000, on which basis the Trust decided there would be significant benefits in employing an antibiotic pharmacist and an infection control coordinator. The Trust now believes that as a result of this investment it is making financial savings as well as improving the quality of care.⁹⁸
71. Mrs Lloyd said she has asked WHAISG to investigate whether it is possible to capture explicitly the costs of infections.⁹⁹ Dr Simmons said that, although it is important to know the costs of HCAs, he would prefer to see surrogate measures of cost developed rather than taking infection control teams away from their core duties to collect data on costs.¹⁰⁰
72. Dr Simmons explained that Scotland has conducted a comprehensive study of the costs of HCAs, alongside its prevalence survey carried out between October 2005 and October 2006. He said the other UK countries are now hoping to use the Scottish data to estimate the costs of HCAs in their hospitals.¹⁰¹

There is still much about HCAs that is unknown

73. The NPHS runs annual infection reduction feedback meetings, which are developing into effective fora for all trusts' infection control teams to get together and share information about what works and what does not work in preventing and controlling infections. It is a positive development that these meetings are now beginning to be attended by clinical teams as well as by infection control teams.¹⁰² However, there is scope to encourage wider participation and to broaden the message that infection prevention and control is everyone's business.

⁹⁶ AGW report, paragraph 3.52

⁹⁷ AGW report, paragraphs 3.55-3.61

⁹⁸ Annex A, paragraphs 192-193

⁹⁹ Annex A, paragraph 188

¹⁰⁰ Annex A, paragraph 189

¹⁰¹ Annex A, paragraph 190

¹⁰² Annex A, paragraphs 74 and 75

74. Despite the national surveillance programme in Wales, there is still much about HCAs that is unknown. For example, Dr Simmons said that while he could give suggestions about the reasons for an increase in *C. difficile* infections since the 1990s, he was unable to explain this trend categorically.¹⁰³ Similarly, Mrs Lloyd said that much work is still required to explain the variation in infection rates between NHS trusts in Wales.¹⁰⁴ This reinforces the need to continue to invest in research and surveillance of HCAs.

¹⁰³ Annex A, paragraph 63

¹⁰⁴ Annex A, paragraphs 60 and 61

Glossary

Acute beds	Includes beds on the following wards: Intensive care, terminally ill/palliative care, all surgical, medical and paediatric, acute maternity and acute elderly and young physically disabled.
Acute NHS Trust	Hospitals, which are managed by their own Boards and which provide acute beds linked to medical and surgical intervention.
Antibiotic	A substance that destroys or inhibits the growth of bacteria. Action may be selective against certain bacteria.
Antibiotic policy	Written guidance that recommends antibiotics and their dosage for treating and preventing specific infections.
Antimicrobial/Antibiotic resistance	Resistance to anti microbial agents that is either naturally occurring or develops in a micro-organism over time.
Antimicrobial agent	Any compound that selectively destroys or inhibits the growth of micro-organisms.
Clostridium difficile	A toxin producing bacterium which can cause severe diarrhoea or enterocolitis. This most commonly occurs following a course of antibiotics which has disturbed the normal bacterial flora of the patient's gut.
Compliance	The degree to which patients follow the instructions for taking a course of treatment or healthcare workers follow an infection control policy.
Healthcare Associated Infection	An infection acquired via the provision of healthcare in either a hospital or community setting.
Hospital acquired infection	An infection that was neither present nor incubating at the time of a patient's admission which normally

manifests itself more than forty eight hours after the patient's admission to hospital.

Hospital hygiene	The hospital's routine procedures on cleaning, housekeeping, disinfection, sterilization of instruments, equipment, production of sterile supplies, safe collection and disposal of clinical waste, kitchen hygiene, control of insects, vermin, etc.
Incidence	The number of new events/episodes of a disease that occur in a population in a given time period.
Infection	Invasion and multiplication of harmful micro organisms in body tissues.
Infection control doctor	Normally a consultant medical microbiologist, with knowledge of aspects of infection control, which should include epidemiology. The infection control doctor normally provides leadership to the infection control team and is responsible to the NHS Trust Chief Executive for its work.
Infection control nurse	A registered general nurse, normally with higher specialist training in infection control. The infection control nurse is usually the only full-time member of the infection control team.
Infection control team	A team within an NHS Trust which has prime responsibility for, and reports to the Chief Executive on, all aspects of surveillance prevention and control of infection. The members of the team include an infection control doctor and infection control nurse(s) and may include surveillance nurses and clerical support staff.
Infectious	Caused by or capable of being communicated by infection.

Inspection	A visit carried out as part of a review, investigation or study to inspect premises or documents, or to require explanation.
Isolation	To remove a patient from the general ward setting to a place where contact with other people can be controlled.
Medical Microbiologist	A doctor who studies the science of the isolation, identification and infectivity of micro-organisms that cause diseases in humans and applies this knowledge to treat, control and prevent infections.
Microbiology	The science of the isolation, identification and mode of infectivity of micro organisms. Medical microbiology is concerned with those micro-organisms which cause diseases in humans.
Micro-organism	An organism too small to be seen with the naked eye. The term includes bacteria, fungi, protozoa and viruses.
MRSA (Methicillin Resistant <i>Staphylococcus aureus</i>)	A strain of <i>Staphylococcus aureus</i> that is resistant to methicillin and other penicillin and cephalosporin antibiotics.
Outbreak	An incident in which two or more people have the same infectious disease or similar symptoms, and in which there is a time/place/person association. Also a situation where the observed number of cases unaccountably exceeds the expected number.
Prevalence	The total number of cases of a specific disease in existence in a given population at a certain time.
Screening	Involves taking specimens from patients and staff which are then subject to microbiology testing to determine whether that individual is colonised by specific micro-organisms eg MRSA.

Self-assessment	A method whereby individuals and organisations assess their own performance using a series of questions or statements.
Standard	A deserved and achievable level of performance against which actual performance can be measured.
Staphylococcus	A group of bacteria which cause a wide variety of infections especially of skin and wounds. More serious infections include bacteraemia and pneumonia as well as heart valve, bone and joint infections.
Surveillance	Systematic collection of data from the population at risk, identification of infections using consistent definitions, analysis of these data and dissemination of the results to those responsible for the care of the patients and to those responsible for implementation of prevention and control measures.



**Cynulliad Cenedlaethol Cymru
The National Assembly for Wales**

**Y Pwyllgor Archwilio
The Audit Committee**

**Dydd Iau, 7 Chwefror 2008
Thursday, 7 February 2008**

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Procedural Motion

Cofnodir y trafodion hyn yn yr iaith y llefarwyd hwy ynndi yn y pwyllgor. Yn ogystal, cynhwysir cyfieithiad Saesneg o gyfraniadau yn y Gymraeg. Mae hon yn fersiwn ddrafft o'r cofnod. Cyhoeddir fersiwn derfynol ymhen pum diwrnod gwaith.

These proceedings are reported in the language in which they were spoken in the committee. In addition, an English translation of Welsh speeches is included. This is a draft version of the record. The final version will be published within five working days.

Aelodau Cynulliad yn bresennol
Assembly Members in attendance

Lorraine Barrett	Llafur Labour
Eleanor Burnham	Democratiaid Rhyddfrydol Cymru Welsh Liberal Democrats
Chris Franks	Plaid Cymru The Party of Wales
Janice Gregory	Llafur Labour
Irene James	Llafur Labour
David Melding	Ceidwadwyr Cymreig (Cadeirydd y Pwyllgor) Welsh Conservatives (Committee Chair)
Darren Millar	Ceidwadwyr Cymreig Welsh Conservatives

Eraill yn bresennol
Others in attendance

Paul Barnett	Prif Weithredwr, Ymddiriedolaeth GIG Sir Gaerfyrddin Chief Executive, Carmarthenshire NHS Trust
Jeremy Colman	Archwilydd Cyffredinol Cymru, Swyddfa Archwilio Cymru Auditor General for Wales, Wales Audit Office
Bethan Jenkins	Plaid Cymru The Party of Wales
Ann Lloyd	Pennaeth yr Adran Iechyd a Gwasanaethau Cymdeithasol, Llywodraeth Cynulliad Cymru Head of Department of Health and Social Services, Welsh Assembly Government
Dr Mike Simmons	Cyfarwyddwr dros Ddiogelu Iechyd, y Gwasanaeth Iechyd Cyhoeddus Cenedlaethol Director for Health Protection, National Public Health Service

Swyddogion Gwasanaeth Seneddol y Cynulliad yn bresennol
Assembly Parliamentary Service officials in attendance

John Grimes	Clerc Clerk
Abigail Phillips	Dirprwy Glerc Deputy Clerk

Dechreuodd y cyfarfod am 1 p.m.
The meeting began at 1 p.m.

Cyflwyniad, Ymddiheuriadau, Dirprwyon a Datgan Buddiannau
Introduction, Apologies, Substitutions and Declarations of Interest

[1] **David Melding:** Good afternoon. I welcome everyone to this meeting of the Audit Committee.

[2] I will start with the usual housekeeping announcements. The proceedings will be conducted in Welsh and English, and, when Welsh is spoken, a full translation is available on

channel 1. Should you need to hear the amplification of our proceedings, it is available on channel 0. If you have any difficulties, indicate to the ushers and they will help you.

[3] Please completely switch off mobile phones and any other electronic devices, such as BlackBerrys; they will interfere with our recording equipment if they are on silent mode. We are not anticipating a fire alarm test. Ergo, should one sound, it is probably real, so please follow the instructions of the ushers.

[4] I regret to inform you that Huw Lewis has suffered a very close family bereavement and will miss this meeting. I know that we would all wish to extend our deepest sympathy to Huw. Lesley Griffiths has apologised, as has Helen Mary Jones, but I am please to say that Bethan Jenkins will substitute for Helen. Welcome to our meeting this afternoon, Bethan.

1.01 p.m.

Heintiau a Gysylltir â Gofal Iechyd Healthcare-associated Infection

[5] **David Melding:** I welcome our witnesses. First, Ann Lloyd, who is head of the Welsh Assembly Government's Department for Health and Social Services. It is fair to say that she has been a regular witness at the proceedings of this Audit Committee and previous committees, and we fear that, as your retirement looms, we will miss your presence fairly shortly. However, I think that I speak for everyone in saying that we were delighted that your public service has been recognised by Her Majesty the Queen, with the award of a CBE in the new year's honours list. If you have not been to the palace already—

[6] **Ms Lloyd:** No, not yet.

[7] **David Melding:** We wish you a splendid day.

[8] **Ms Lloyd:** Thank you, Chair.

[9] **David Melding:** Other witnesses are Paul Barnett, chief executive of Carmarthenshire NHS Trust and Mike Simmons, Director for Health Protection, National Public Health Service for Wales. Welcome to you both. I think that Mr Barnett is the only witness who has not been before us previously. We have a fairly set pattern, where each Member will ask questions; some of them will be to you, and others will not, but, should you wish to make a response, please indicate as we proceed.

[10] Before I introduce this session with the short preamble of my first question, I welcome our new clerking team, which is already serving us extremely well. I know that we will enjoy working with you both.

[11] I will now set the scene. We will now discuss the findings of the Auditor General for Wales's report, 'Minimising Healthcare Associated Infections in NHS Trusts in Wales'. The auditor general's report makes clear, and I am sure that no-one here would disagree, that it is unacceptable that patients should contract an infection as a direct and avoidable result of their treatment in the health service. The consequences for patients affected by healthcare-associated infections can be devastating, and the costs incurred by the health service can be considerable. In this session, we will examine whether NHS trusts have taken the appropriate steps to minimise healthcare-associated infections, in line with the Assembly Government's strategy.

[12] I will now open the questions, and the first question is for you, Ann. Are healthcare-

associated infections being tackled sufficiently robustly, and to what extent has the Assembly Government's strategy been effectively implemented by trusts in Wales?

[13] **Ms Lloyd:** Considerable progress has been made since we published the strategy in 2004, although no-one can ever be complacent. This is a considerable worry to carers and patients alike; one thing that comes through our audits of patients' experiences is that they truly worry about this in coming into contact with hospitals.

[14] The Wales Audit Office has recognised the improvements that have been made, and I think that that is largely due to the fact that we have been fairly robust in the way in which infection control procedures have been implemented. We have ratcheted up surveillance requirements for all organisations, which means that we are getting far more accurate information about the rate of infection in our hospitals and the ways in which it might be better controlled. Education and training have also been improved, as has information for patients and their carers. There is a section in the paper about what is necessary.

[15] All of those things have helped. As you know, over the last six months, the Minister has announced in the Chamber her intention to improve the general patient environment, the cleanliness of the organisation's facilities. That work will be concluded within the next month or two. I am sure that the Minister will share those results with you. However, more needs to be done. We have produced our community infections strategy, which will be very important in looking at the ways in which we can ameliorate the effects of infection as we move to a more community-orientated service. The WAO report, the conclusions that you reach, and the outcome of the work commissioned by the Minister will allow us to refresh that 2004 strategy. So, there has been a huge increase in awareness among all staff in the health service in Wales about the importance of controlling infections and ameliorating the effects of infection when they occur. That has led us to have a more holistic approach to HCAs than has been effected in England. This was the right thing to do, given the results that we now have before us.

[16] **David Melding:** That is very helpful. We will follow up some of the specific points that you made in our questions this afternoon. Would you say that the 2004 strategy is still generally robust and current and not in need of fundamental change, although you feel that it should be more effectively implemented? Is that basically the position?

[17] **Ms Lloyd:** As we have improved surveillance, we are now clear about the real causes of infection, hence the need to improve education and training, both among our staff and providing information for patients. We need to pause and see how we might best use that surveillance information, consider what we need to keep an eye on in the future, and update the strategy so that it coalesces with the community strategy that we have now published. We will see the first results of the implementation of the community strategy over the next year.

[18] Implementation can always be improved. You have seen the areas where mandatory surveillance is now being undertaken, and what we have tried to do to improve that. So, I would never be complacent about implementation, but we could refresh this guidance over the next six months and ensure that it is reinforced with the service and patients.

[19] **David Melding:** Thank you. I have a question for Mr Barnett. You have heard the general response from Ann Lloyd; in terms of your particular trust, what are the main challenges for you in more effectively implementing this strategy?

[20] **Mr Barnett:** Infection control is a main priority for us, as is patient safety. We have been doing a lot over the years: we have been measuring, for example, MRSA since 2001 and have been able to demonstrate a year-on-year improvement. This is a major part of our focus. As Ann has suggested, the main challenges are providing information, getting the right

messages across to the general public about what is required in the community and what happens when they come into hospital. We also need to provide education and training for our staff and ensure that we assiduously follow up on this all of the time. We need to carry out audits, and act upon the results. It is about the involvement of all staff, but particularly clinical staff. I would like to think that our clinical staff have taken up the gauntlet and contribute a great deal to the improvements that we have made. Those are some of the challenges that we face.

[21] **David Melding:** Infection rates are generally lower in Wales than in England. Ann, could you reflect on that? Is there evidence that this is because of something that we are doing—that is, the strategy is better—or is it that the prevalence in the general population is different and that we do not have such a high rate anyway? What is the position, in your view?

1.10 p.m.

[22] **Ms Lloyd:** Dr Simmons can talk to you about prevalence, on which he is an expert. However, I think that it is because we actually took a stand and looked at the whole range of hospital-acquired infections rather than just one small section. You can see from the data collected by the WAO that MRSA, on which there is so much focus in England, is actually a small, but important, infection, which we are dealing with in Wales. We got the staff on board at a very early stage. They helped us to construct this strategy and Dr Simmons, who put this document together in the first place, was our adviser on hospital-acquired infections. Getting the staff on board and thinking about the very practical ways in which we could control and manage hospital-acquired infections was what we did in Wales, rather than thinking, ‘MRSA is the big problem, the super infection; it will be tackled and we will give targets to do it’. You can see, from this report, the issues that arose from making it a target and from almost forgetting about the rest of the problem that was there. Important though it was, we felt that we should tackle the whole issue of infection in hospitals and seek to strive to make sure that the whole lot were tackled successfully and were reduced. Dr Simmons, I do not know what you would say about the prevalence being different.

[23] **Dr Simmons:** It is different, of course. When we consider the prevalence data for the mainland UK, we see that we are the lowest. Indeed, if you look at us in comparison with Northern Ireland, while there appears to be a lower figure for Northern Ireland, when you look at what statisticians call the 95 per cent confidence level, you see that there is an overlap. The one that does stand out as being different to the rest in the five nations is the Republic of Ireland and that is possibly because of its different healthcare system. The five nations will continue to work on this and tease this out.

[24] We have a very different figure. We are lower in many areas and I, like Ann, think that it is due to the fact that the Assembly took very brave decisions—you were a member of the Health and Social Services Committee when it looked at this. The Assembly backed the stance that we, as professionals, were recommending, and said, ‘Look, do not get seduced into the MRSA problem’. Now it is *Clostridium difficile* and, as we can perhaps illustrate later on, it could be other organisms. However, you did not do that. As an Assembly, as politicians and across the Welsh Assembly Government, you backed this approach, which was evidence based and professionally led, and we are light years ahead of the other UK countries. You begin to hear statements where they are playing catch-up on this holistic approach to all healthcare-associated infections.

[25] **David Melding:** Thank you. We are now going to look at MRSA specifically. Mr Barnett, the rates in your trust have been fairly constant since 2001. Would you have hoped to have seen those reduce more significantly? Sorry, I know that you would have, but why do you think that they have not?

[26] **Mr Barnett:** Bearing in mind that this was one of our targets for the first two years, we would have hoped that it would have come down more significantly. However, I think that the measures that we have put in place for MRSA have generally improved the situation across the board with all the other infections. As I say, we are continuing to work closely on MRSA, among the others, and we have lots of actions in place, not least the actions that will come out from the audit report that we are addressing today. This audit report has been to our audit committee, we have had a brief presentation on it, and it has now gone from the audit committee to our infection control conference, where an action plan has been prepared. Clearly, there are actions in this that will address MRSA in the future, along with all the other things. As you say, we have been fairly constant, in the middle, but perhaps towards the lower end, and I am confident that that situation will improve.

[27] **Eleanor Burnham:** It is, as you have already indicated, mostly MRSA and *Clostridium difficile* that get the media attention. I know very little about this other than that my mother in her eighties acquired one of these dreadful infections when she was in hospital, which was really nasty; she had only been there for a couple of hours and she fell foul of this horrible infection. I am concerned about whether or not there is sufficient focus on monitoring and tackling the other infections that are mentioned in figures 2 and 3, because even *E. coli* in figure 3 on page 19 seems to be top of the pops in this regard. What are your views, because we cannot go on like this? Many people have different views—some think that it is about a lack of accountability in terms of proper cleaning, and Gordon Brown decided that there would be a one-off deep clean. You then have the issue of high bed occupancy, and so on. Some people regard it as the down to the use of agency nursing, and others talk about the over-use of antibiotics or handwashing—you could go on and on. This is a really serious issue, and while we are spending so much money on these wonderfully complicated, fantastic surgical procedures, people are becoming very ill or even dying from these infections. It is quite a scandal, and we should not tolerate it in the twenty-first century.

[28] **David Melding:** If you could concentrate on the surveillance issue—

[29] **Eleanor Burnham:** I am sorry, I got carried away.

[30] **David Melding:** You did start the question, and I will now ensure that you finish it. I presume that this general approach has looked at the surveillance issues and the pattern overall.

[31] **Dr Simmons:** Eleanor said that it cannot go on like this, but I would suggest that it is not going on as she suggested. What we have demonstrated in Wales is clear declines over the years; we have a number of locally-based trust targets whereby individual trusts will demonstrate reductions in their target. As a result of the surveillance, although we did not target MSRA, we have seen that it has fallen by a statistically significant amount; we are two standard deviations below the mean, which is significant. So, we are making progress in all of these areas.

[32] You pointed to pages 18 and 19, but we must be very careful. With regard to the top 10 bacteraemias in figure 3, we deliberately developed that surveillance scheme to carefully place MRSA in context for you, from an Assembly point of view. Nowhere else in the UK is doing that and that is possibly part of the reason why you get this constant focus. Of the bacteraemia listed, you would normally associate the top four infections as coming in from the community. So, in other words, a patient has an infection and they get admitted to hospital because it is serious. *E. coli* is a common infection—it is gut flora and commonly causes urinary tract infection, and severe urinary tract infection will bring people into hospital. We are conscious of that, because the other side is that all of those top four infections, but especially the first two infections, can be acquired after 48 hours in hospital. So if we

catheterise a patient inappropriately, that catheter can acquire organisms over time, including *E. coli*, and the patient can get a bacteraemia.

[33] The fifth infection in the list, *Klebsiella*, is interesting. That, generally, would be considered to be a healthcare-associated or hospital-acquired infection. It is above MRSA in the list and it has no focus. Our strategy is to focus on all aspects of healthcare-associated infection, and, while the Office for National Statistics does not tell us how many patients have died of *Klebsiella*—because it has not bothered to look at it and has focused on the infections that have received attention—I would suggest that more people are likely to die of a *Klebsiella* infection or of an *E. coli* infection than would ever die of MRSA. These are much more potent organisms because of their very nature—with regard to septicaemia or endotoxaemia, we are aware that endotoxin is part of the cell wall of some of these gram-negative organisms, such as *E. coli* or *Klebsiella*. MRSA is totally different. *Staphylococcus aureus* being what is called a gram-positive organism, it does not have endotoxin and cannot cause an endotoxaemia. It does kill people, but less frequently than the gram-negative organisms. Our surveillance is demonstrating where we need to focus. An individual trust will have access to data such as that in figure 2 outlining the issues for that trust and what it should be tackling. We set this challenge: use the surveillance to ask the question, locally, ‘What should I do here to tackle healthcare-associated infection?’.

1.20 p.m.

[34] **Eleanor Burnham:** There are lots of associated questions, so I will try not to ramble on. There are limitations to these surveillance schemes, so how can those be improved, given what you have told us already? In what ways could the surveillance programme be continued to, for example, include patients aged under 65, particularly in respect of *C. difficile*?

[35] **Dr Simmons:** A survey from the Welsh healthcare-associated infection committee is currently going out to the infection control teams to ask their views on the assessment of people under 65 with regard to *Clostridium difficile*. It is an organism that primarily affects people over 65, so we are checking to see how many infection control teams look in other age groups. The schemes in the different UK countries are not directly comparable because we use different denominators. That said, that aspect that will be looked at.

[36] On the limitations, one of the issues with MRSA, and the reason for choosing bacteraemia, is that it is very easy to collect laboratory data. Therefore, it is easy to compile a list of the top 10 bacteraemia. It is robust data; it is probably near 100 per cent of all data on bacteraemia—in the top 10 that is—that we get in Wales. We chose bloodstream, because blood is normally sterile. If we get into the mess of taking wound swabs, a microbiology laboratory can tell you only that a wound swab has an organism on it, which does not necessarily tell you that that organism represents an infection. This is where, so often, we get confused between what is called ‘colonisation’ and infection. I briefed Mrs Lloyd and she gave me permission to tell you that I have *Staphylococcus aureus* up my nose. Look around this room; every third person is likely to have *Staphylococcus aureus*, the Methicillin-sensitive *Staphylococcus aureus*, up their nose. Depending on their own contacts—and if I sneeze you are going to get it—

[37] **David Melding:** I think that I am far enough away. [*Laughter.*]

[38] **Dr Simmons:** Depending on your social circle, you may equally be colonised with MRSA, particularly if you have had antibiotics, because it is resistant to simple antibiotics. Therefore, instead of your normal *Staphylococcus aureus*, you might have acquired an MRSA. That does not mean that you are infected—I am not infected; I am just one of the people who is colonised with it. We are walking bags of bugs; there are billions of us here in this room if we include all the bugs in our guts.

[39] The surveillance of laboratory data is easy to do, but it is not surveillance in the same sense as in figure 2, which is very labour-intensive to do. That is a prevalence study, which involves going to every single patient in ward or hospital—and in Wales we chose to survey every single acute bed in a hospital in the shortest possible period. We went to every patient and asked whether, clinically, they had an infection. That is how you get the really robust data, but it is labour-intensive and costly, which is an issue. There is a cost-balance equation. We must consider how often it is appropriate to do a prevalence survey, because when people are running around with clipboards they cannot do their usual jobs—education, if they are in infection control, or management of places or nursing. Paul will have had to set people aside to run the prevalence survey to answer these important questions. They are important questions, but the survey has been run only once every 10 years nationally because it is so labour-intensive.

[40] If we want to improve surveillance, clinical surveillance is important, and that is why Ann mentioned earlier surgical site infection, how we need to work with orthopaedic surgeons and obstetricians, and how we need to introduce more of these clinical surveillance schemes to give us robust outcome data based on individual patients, surgeons, hospitals and whatever other units you wish to cover. That is where improvement would be worth looking at. From our committee's point of view, we are constantly looking at ways of trying to encourage and improve how we collect that data, so that surgeons, again, are not running around with a clipboard, but doing their surgery, which is important.

[41] **David Melding:** I think that you have successfully indicated your enthusiasm—

[42] **Eleanor Burnham:** I will just ask my last question. Do you have any idea of the numbers of patients under 65 who have contracted *C. difficile*? Is it important, even?

[43] **Dr Simmons:** We have no surveillance scheme that will readily give that answer. We can pull the data off; again, Wales is unique in that it is the only country in the world, I believe, that captures every single data item that goes through our microbiology laboratories. It will exclude a few patients in Powys who go into England, so it is not a complete Welsh picture, but it as near as damn makes no difference. That is down to the Welsh Office, which, I think, invested in this scheme. Therefore, we could pull off all the *C. difficile* results from all the under-65s, but that would not give you a handle on whether we have captured the whole population. However, with patients who are over 65-years-old, we have a scheme so that when they have diarrhoea, and fit certain criteria, we take a specimen for *C. difficile*—however you wish to pronounce it; I never know which way is right.

[44] **Irene James:** Following on from that, we all know that MRSA is the huge focus for everyone. However, you are saying that there are many other important infections that we do not seem to be addressing. I mention MRSA because I have an 85-year-old mum who needs a hip replacement but will not go into hospital because she is afraid of contracting MRSA.

[45] **Dr Simmons:** That is the tragedy. That is where risk assessment comes in. Part of what we need to be doing is to educate people. You will presumably turn to screening at some point, Chair, so we can address that later. If I can counsel Mrs James—

[46] **Irene James:** No, you will not—not my mum. [*Laughter.*]

[47] **Dr Simmons:** Maybe she could contact me and I will have the debate with her. With hip operations, it is devastating if you get deep-seated infection; we know that, and it causes problems. However, the number of patients going for a hip operation who will get deep-seated infection is less than 1 per cent. Most of the organisms that the patient will get—even if all of these were gram-positive groups—would be ordinary skin Staphylococci that we all

carry, and nothing to do with even *Staphylococcus aureus*, what are called coagulase-negative *Staphylococcus*. Therefore, we would not even begin to address at least 50 per cent of cases. The other 50 per cent might be *Staphylococcus aureus*, and a fraction of those—probably 50 per cent—would be MRSA. Therefore, it is a risk of around 0.25 per cent, and probably lower.

[48] **Irene James:** That was what I was going on to ask about, but you have pre-empted it. We seem to be concentrating on MRSA, but you are saying that there are many other infections that we need to be looking at, which we do not seem to be doing.

[49] **Dr Simmons:** We are doing that; we are collecting that information. From a clinical point of view, you do not need to know the organism; you need to know whether the patient is infected, and then where you go.

[50] **David Melding:** I believe that we have had ample evidence on this point, which is reassuring. Janice Gregory has the next questions.

[51] **Janice Gregory:** I do not understand most of the words that are being used, but I am caught up in Mike's enthusiasm, and I am trying to avoid him sneezing as well. [*Laughter.*] I was going to ask about the principal reasons for Wales having a lower rate of MRSA, and you have touched on that. Could you expand on your comment about the Republic of Ireland, which is better than us, but has a different healthcare system? It is important for people who may be tuned in this afternoon, and especially for me, to know what that difference is. I was pleased to hear you mention the fact that Wales is light years ahead of everyone else; perhaps you could expand on that too.

[52] **Dr Simmons:** What was the first question? My memory is awful.

[53] **Janice Gregory:** I am glad that someone else is like me, and you have all this information retained. [*Laughter.*] It was about the Republic of Ireland—why is it so different, and why is it better?

[54] **David Melding:** It is not satisfactory just to say that it has a different healthcare system; there is presumably a bit more that we can say in terms of comparisons.

[55] **Dr Simmons:** I do not know the ins and outs of the system in the Republic of Ireland. It does not have a national health service, as I understand it, in the same way that we do. I believe that it is more akin to the French system, which has public and private elements. You may know more about it than I do, Ann; I do not know the details. I have seen the draft paper that my colleagues are putting together, which comes out of the prevalence study. The table in figure 2 is taken from the report that the various countries are putting together. It includes authors from the Republic of Ireland who are part of the survey. Between them, they have agreed a comment along the lines of, 'We have a different system', so we cannot entirely explain it, but Ann might want to expand on the different system because I do not know the details of it.

1.30 p.m.

[56] **Ms Lloyd:** The system there is different from ours but I am not at all clear to what extent that would affect the prevalence rate, and I would not be convinced until we received the final document relating to the differences between the systems that are used. My suspicion is that stuff is collected differently and is probably not collected from some elements of the system used, but we would have to guard ourselves on that.

[57] **David Melding:** Okay. We do not need to pursue it if we do not know what the

answer is—

[58] **Janice Gregory:** I just wondered whether or not that was the case. So, in fact, those figures could be slightly skewed and we could be better again.

[59] I have another question and it is for Ann and Mike again. What are the main reasons for the variation in rates between the trusts? Why do you think that some trusts have been able to bring their rates down while others have seen an increase, according to the figures?

[60] **Ms Lloyd:** I will start and then Mike can add the detail. There are about five reasons why you would expect a difference between the trusts. First, you would expect an increase in infection rates—and Mike will be able to explain why—if the trusts were dealing with highly complex interventions and care. So, the more complex the range of services that you deliver, the more you would expect the incidence to rise because of the nature of the patients with whom you are dealing. There are other issues too, such as the availability of isolation facilities and specialist infection control staff. You could also look at bed occupancy and the staffing of the facilities, and some of it comes down to the ownership of the problem by the teams concerned. All of those are varying factors.

[61] We have been trying to pick up the issues and feed back to the trusts on the outcome of the prevalence and incidence rates per trust. When we give trusts their information, we require them to look critically at it and at the top risks for them as organisations and their patients individually and then respond back to us and to Mike's department, stating what they are doing about these risks. The prevalence and the incidence will be slightly different for each organisation. On bed occupancy in particular, some of the data do not bear out the argument on that. It is not sophisticated enough yet to hang your hat on it, but it will depend on how many beds within this occupancy rate relate to intensive care or specialist services, where they may not have as high a rate of occupancy as you would see going through general medicine, general surgery, orthopaedics and so on. So, if you look baldly at the rates of bed occupancy in the acute hospitals in particular, you will find that they will not correlate with the rates of infection at present. So, much work needs to be done. We are gradually investigating with all the trusts the effects of these other features on the ways in which we can control and then lower the infection rates.

[62] **Chris Franks:** I will refer to paragraph 1.15 and figures 8 and 9. Initially, I will address my remarks to Dr Simmons. Can you explain the main reasons for the increase in *C. difficile* infections since the 1990s?

[63] **Dr Simmons:** I do not believe that we can. We can give lots of suggestions as to what is going on there. First, whenever you introduce a surveillance scheme, you capture all the data, or attempt to do so, which perhaps you were not previously capturing. This goes back to the question that I was asked earlier about the under-65s—at the moment, we do not have a scheme. We could tell you how many we were getting in the laboratory, but it would not necessarily translate into a rate, with a proper denominator. So, whenever you introduce a scheme and you get a take-off period, you will get a rise; we have seen that with most schemes, whenever they are introduced.

[64] The complexity of all this, in terms of the way that we interact with our environment, and so on, is a factor, as is the way that we interact with and use antibiotics. There will be variations across the piece, and you will be aware that there have been concerns about how strains come in and go out. You will have heard of the 027 strain in England, in particular, and we have the occasional case in Wales. That is an example of how a bacterial clone might establish itself, and, up until now, we have had concerns about MRSA, but in the 1960s, I think, there was a strain of a methicillin-sensitive *Staphylococcus aureus* that was incredibly pathogenic, and spread around hospitals just as widely. In the 1950s, you used to hear stories

of an E. coli strain that was causing horrendous problems in neo-natal baby units, and that went all around the country. We cannot get to the bottom of our interaction with the ecosystem that we are part of. There are other things that have a role in this, and, from a C. difficile point of view, cleaning is undoubtedly a factor—we have recognised that, of all the infections, this is one where there is potentially a link with cleaning, whereas with most others it is down to hand hygiene and opportunity for transfer. That still applies to C. difficile, but there is this other factor that also has a role to play, and we must tackle that as well. I do not think that there is an easy answer as to why it is coming though at this particular time.

[65] **Chris Franks:** We have been told that there is no easy answer but, Mr Barnett, your trust has the second lowest infection rate. How have you done so well?

[66] **David Melding:** That was specifically on C. difficile.

[67] **Mr Barnett:** We identified it as one of our infection targets, and it has been our target for the past two years. In fact, it is our target again this year. We recognised that we needed to improve, and we worked closely with clinical and other staff to look at how we could improve as we develop, and how we could reduce our rates. Specifically, we invested in deep cleaning and attached a refurbishment programme to that, so that we have been able to take wards out of use and move patients elsewhere, so that wards can be deep cleaned and we can make them as free from infection as possible.

[68] We have also managed to do something about what we call surge capacity. Where we have identified that an outbreak is taking place, we have isolated that area and ensured that we do not put any more patients into that ward or that bay. We have then opened up another ward or bay in another part of the hospital to take the admissions that would have gone into that area. That, in turn, ensures that you isolate the outbreak, you keep control of it, and you are able to keep going with the capacity that you need to carry out your admissions, and so on. Cleaning has been mentioned, and we have introduced new cleaning technologies such as steam cleaning and microfibre cleaning. On a subject that might come up later on, we have separated the elective and emergency general surgical approach in Carmarthenshire, and also the orthopaedics. That means that we have been able to screen patients coming in for elective orthopaedics in particular, and, as a result, we have kept potentially infectious cases away from the area concerned. Again, that improves our infection rates. We have also been able to introduce an antibiotic pharmacist recently, whose specific role is to work at ward level with the junior doctors and nursing staff to ensure that prescribing practice is in line with our guidelines and with national recommendations. In that way, we ensure that we are not going off kilter and we save money because we are working within the guidelines and ensuring that we are not indulging in free prescribing, as it were.

1.40 p.m.

[69] In addition to that, we have improved a number of side rooms and isolation rooms in recent years. That has enabled us, as soon as we identify a problem, to use that capacity to ensure that cases do not infect other patients. In that way, again, we have improved our rates.

[70] I mentioned at the beginning the variety of audits that we carry out regularly. We have annual audits from the infection control committee and quarterly audits from our infection control links on each of the wards and in each of the departments, and all those audits are well attended. As a result of those, we learn from them and implement good practice. So, many things have been going on, which have contributed to improving the rates.

[71] **Chris Franks:** The message that I am receiving is that it is not one single hit, but a whole layer of practice and practices.

[72] **Mr Barnett:** In terms of one single hit, you cannot say that you have ever achieved, because you have to come back to it over and over again. In a sense, it involves behaviour modification because we have to continue to get the message across and get the responsibility across to all staff. We have taken the view that this is everyone's responsibility—everyone who enters the hospital, so not only the staff, but the patients and their relatives and loved ones who visit the hospital. In that way, we are building on the message that is going out to the community and that we present in the media. We have to keep reinforcing it, and that is why things have gradually improved.

[73] **Chris Franks:** That is pretty comprehensive, but, perhaps, the more difficult question is why have other trusts not done the same?

[74] **Dr Simmons:** I will try to answer that. As I explained earlier, one of the things that we have adopted in Wales is the principle that decisions on what should be a local target should be taken locally. Otherwise, we get the silly situation where we may have a national MRSA target, but the trust is not affected by MRSA or there are few cases. The data produced will then be up and down and will be meaningless. So, by setting these infection control targets that are locally derived from a national direction, we ask trusts to look at their particular problems. Each trust is then required to register that with my organisation, with the team that looks after healthcare-associated infection on behalf of the Welsh Assembly Government. We then hold an annual feedback meeting with the infection control teams, or, even better, with the clinical teams. That is beginning to happen now.

[75] Last year, the people that Paul's trust sent along included the antibiotic pharmacists and various other members of staff, and not only the infection control team. That demonstrates how this is beginning to be recognised as being everybody's business. They then bounce these ideas off each other and see what is and what might not be working so that they can respond and think, 'Now that we have this problem, we should be liaising and doing the same'. That is how we try to tackle it.

[76] **Ms Lloyd:** Paul has described the ideal. He has flexibility in his accommodation to be able to do this type of thing. Some trusts do not have that flexibility and that is why we are working with them to ensure that they understand what the best practice is, and the website that Mike runs is helpful in that respect. That is why we have asked Health Inspectorate Wales to review everyone and for people to self-assess against the new healthcare standard in terms of infection and cleanliness, but some organisations might not have the facility that Paul's trust has and some might not be applying sufficient effort to tackling some of these problems. That is why this baseline survey is coming through this year from Healthcare Inspectorate Wales's audit and self-audit.

[77] **Eleanor Burnham:** I find the point about antibiotics and pharmacists intriguing. My daughter lives in Romania, and they are given probiotics when they are given antibiotics there. Do you have a comment to make on that? Surely, this is part of the big picture of what is happening elsewhere, which might be effective here.

[78] **Dr Simmons:** With probiotics, we are in the realms of the good or friendly bacteria and so on. I cannot say that I know the science issues backwards in the argument for probiotics. However, we know that a number of trusts use live yoghurts or brewer's yeast as part of their management regimes. No-one in Wales has been able to set up a probiotic trial. One of our trusts reported a terrible failure at the first infection-reduction seminar. It thought that it would be an excellent idea to run a trial based on what amounts to a food—a drink produced by Yakult or Danone. It was one of those drinks that we are all encouraged to buy in the adverts on the television, and sometimes we do and sometimes we do not. That trust wanted to see whether it could demonstrate that probiotics provide a benefit. It had two care wards on which there were regular outbreaks of *Clostridium difficile*, and it decided that its

infection-reduction target would be to treat the patients on one ward with a probiotic daily from the time of their admission, and to use the patients on the other ward as the control. It was a fabulous idea for a study, but it could not get through the ethical committee. It was a disappointing decision, and I have been trying to encourage that trust to tackle it again, because the situation is daft. This is not a drug; it is a food, and it is recognised as such.

[79] **David Melding:** I do not want to get onto the front page of the *Western Mail*. We are now drifting into interesting evidence, which, I think it fair to say, is not yet at a robust stage. So, we will not pursue the subject.

[80] **Bethan Jenkins:** I have a question for Ann Lloyd on figure 11 on surgical site infections, which shows that infections are more prevalent following surgery, particularly orthopaedic surgery and caesarean sections. Do you think that a more rigorous outlook is needed to encourage people to comply with the reporting requirements? Why are post-surgery infections more prevalent in Wales than in other countries? I think that it was said earlier that Northern Ireland is different, but why are the figures in Wales higher than those in other countries?

[81] **Ms Lloyd:** One problem with orthopaedic surgical site infections has been getting people to comply with filling in the forms so that we can draw together the proper information. Mike and his team have been working hard with the orthopaedic surgeons, who have said that the forms are far too difficult to fill in, and that they are already doing an awful lot on outcomes with prostheses, and so on. So, he has been working with them on the forms that need to be filled to report surgical site infections so that they comply, and there has been some success with that.

[82] The other reason why our surgical site infection prevalence rate may appear higher is the way in which we report infections, which is very different here compared with England. In England, if you get an infection after leaving hospital, it is not counted the minute you are out of the door. We shoot ourselves in the foot sometimes, but we think that it is more honest to follow what happens to the patient, so we gather more evidence of infections than other country at the moment. However, the compliance must be improved so that we can make real inroads to this and to spread some good practice.

1.50 p.m.

[83] **Dr Simmons:** England is the odd one out. The Celtic nations are using a similar scheme for this one and Northern Ireland is the same. Ann is right to say that it appears to be due to compliance, but Paul would know, because we have updated data from Carmarthen, which would be quite helpful in explaining why the rates are higher.

[84] **Mr Barnett:** The table in front of you identifies our compliance at about 20 per cent, but it is fair to say that we have moved on in the past year and it is now up to 78 per cent. There is a good reason for that, because we have used evidence to identify this as an issue. We have worked with our clinicians to improve their involvement and to get more ownership of the data so that they give the data back to us. In addition, we have made sure that they get regular feedback as individual clinicians and as a group.

[85] We pulled together a task-and-finish group to look at this specific area, which was chaired by one of our orthopaedic surgeons. That guaranteed clinical involvement and ownership. We developed a process map to identify where compliance was failing, and we looked at those areas and identified what it was that the group needed to do. The group identified it, it owned it, and it has done something about it to put it right. We also have to involve our information department in this, as has been said. Not only is it important that we put the information in, but also that we get prompt and timely feedback, so that the

department can improve its practice. The information comes back to the group quarterly through our Myrddin PAS system, and it can act on that timely information as a result.

[86] I mentioned earlier that we segregated elective and emergency orthopaedics in the past year, which is clearly having an impact. We have also increased the number of side rooms so that cases can be isolated. So, there is clinical involvement, and clinicians are taking responsibility, but 78 per cent is still below what we seek to achieve. We are not being complacent, but we need to get that figure up even higher, and we are working with our colleagues to do that.

[87] **Bethan Jenkins:** The reason you have had such a significant change in percentage is because you initiated a task-and-finish group, which has seen a lot of success in the area.

[88] **Mr Barnett:** That is right. We identified that there was an issue, the clinicians accepted and owned that, and set about doing something about it.

[89] **Dr Simmons:** To illustrate the point about the rates of infection, I would just add that my understanding, from the conversation that I had with Paul last week, is that now that more data are collected, providing a more complete picture, the infection rate has fallen.

[90] **Mr Barnett:** Yes, that is right.

[91] **Dr Simmons:** We currently have an incomplete number of forms coming through, perhaps just a subset of forms. However, once we increase compliance, surgeons will think, 'Crumb, there is an infection here, so I had better fill the form in', and as Carmarthen has demonstrated, the rate of infection will fall towards the expected mean.

[92] **Mr Barnett:** It is currently at 0.9 per cent, and the all-Wales figure is 2.4 per cent.

[93] **Bethan Jenkins:** Are you hoping that other trusts will take on board what you are doing in this area?

[94] **Ms Lloyd:** According to the current compliance rates, there has been a real improvement in the percentage of compliance. Only one or two trusts for orthopaedics and caesarean sections are lagging way behind, but they are being tackled.

[95] **David Melding:** Okay, before we move on to the next question, Darren wanted to come in.

[96] **Darren Millar:** I just wanted to pick up on that point. You are suggesting that increased compliance is why rates have fallen, and yet, earlier, we were told that it was because of the improvements in infection control. This question is to you, Paul. We were told that the reason infection rates for *Clostridium difficile* had fallen so dramatically was because of the regime that you had installed, for example, improved cleaning, deep cleaning, and investment in other programmes to ensure that the clinical staff and everyone else at the hospital was taking this as a serious issue. Which one of those two is it, or are they both contributing to the lower rates?

[97] **Mr Barnett:** In a sense, you are looking at two different surveillance schemes, and it is like comparing apples and pears. They are two different arenas. Having said that, the general approach of involving our staff and making it everyone's business is the right one, particularly on the surgical side, as they are the people who are at the heart of delivering the service, who can make a difference.

[98] **Darren Millar:** In that case, why would orthopaedic surgeons and clinicians, for

example, be more likely to record a case where there was an infection rather than one where there was not? Can you explain that?

[99] **Dr Simmons:** It is because they think, ‘Crumbs, there is a scheme that I am supposed to be following; I had better fill in this form’. I am only guessing, but that is human nature. The aim is to make this routine. It is a very simple tick-box form that goes through a scanner. It is a similar system to that used by patients to order their dinners in a hospital. It is designed to be simple so that you can get on and do it every time as a matter of course. We know that this scheme works clinically, because it works with tonsillectomies: every single tonsillectomy in Wales is captured and we have 99 per cent compliance, because those surgeons own that process. They want to know, from an audit point of view, whether there are problems with certain instruments. Your clinicians have to be engaged. Sadly, orthopaedics was chosen on the back of schemes with England and the fact that the national orthopaedic register was coming on board. People thought that it might be a good idea to join them all up. We did not get that clinical sign-up. There are differences in this arena. Just compare it with intensive therapy unit surveillance, where there is 100 per cent compliance because the clinicians have ownership of it. Paul has demonstrated that, when you get that clinical engagement, your compliance goes up. When clinicians understand why it is important to measure something, you then get that compliance. I think that we missed a trick early on with this.

[100] **David Melding:** You may add, but not amplify. We are getting some good evidence, but I need to move the committee on. It is useful to know that some surgeons are doing it though others are not. It is a cultural issue, presumably.

[101] **Mr Barnett:** We are dealing with competitive people. There is an element of peer review in all of this. If some of our colleagues perceive that other clinicians are doing well, they will also want to do well.

[102] **David Melding:** Let us move on. Bethan will ask question 8.

[103] **Bethan Jenkins:** I will move quickly on to something about which people will have heard more anecdotal evidence recently, namely the prevalence of infections such as the norovirus. Since the report was published, there have been far more of these cases. [*Interruption.*] Perhaps I am wrong, then, and there has just been more media attention. My question is for Paul Barnett. Have recent outbreaks had any additional effects on your trust and the way in which you operate?

[104] **Mr Barnett:** Since last September, we have had no confirmed cases of norovirus in our acute hospitals. Over Christmas, we had one outbreak in one of our community hospitals. From that point of view, we have not been able to compare and contrast why the situation has changed. We report all outbreaks to the Welsh healthcare associated infection programme, and we comply with the mandatory reporting arrangements. In years gone by, the situation has been different and the report identifies that, for the year in question—2006-07—we had 10 outbreaks, which involved 62 patients and 35 members of staff. However, we have been able to cope with this and improve on the situation for all the reasons that I identified previously.

[105] **Darren Millar:** The worrying thing about such infections is that, ultimately, they can lead to death. That is why there is a great deal of interest in these. In paragraph 1.24 of the auditor general’s report, we are told that the number of death certificates that mention methicillin-resistant *Staphylococcus aureus* or *Clostridium difficile* has increased quite significantly. The report goes on to say that that is not necessarily a good indicator of the number of deaths in which these infections were a contributory factor. How do you think that we should establish a better way of measuring when a hospital-acquired infection is a

contributory factor?

2.00 p.m.

[106] **Ms Lloyd:** I will start. What goes on to a death certificate, in either of its parts, is very much a matter of clinical judgment. They have to decide whether, in their view, any HCAI has contributed to a death and I think that that is exactly what they are doing at the moment. Due to the change in the way in which the information is collected, I think that they have a heightened awareness of ensuring that the sections of death certificates are completed as comprehensively as possible. I agree with the auditor general that it is a very subjective measure at the moment. I think that, basically, our more wholesale investigation into the rate of infection and the cause of infection will give us a better way of handling a reduction of harm to patients than just relying on this sort of measure.

[107] **Darren Millar:** So, you do not think that it would be important, for example, to capture information on the death certificate where a hospital-acquired infection was a contributory factor, even if it was not perhaps the biggest factor, in someone's death. Do you not think that that would be helpful?

[108] **Ms Lloyd:** I think that, at the moment, it is too subjective to place a huge reliance on it and it certainly should not be used as a sole indicator.

[109] **Darren Millar:** Would it be helpful if you were to issue guidance along those lines, in order to be a bit more prescriptive about the way in which these things are recorded?

[110] **Dr Simmons:** Guidance would be fine. One of the difficulties that we have in this area is that I do not think that we have powers to influence this issue, because I think that it comes under the Home Office. That is the cause of some of the difficulty in this area and, therefore, we are rather beholden to the English nonsense about MRSA and so on. Frankly, I am not entirely impressed by the Office for National Statistics thinking that this is a valid approach in relation to a study. Yes, if you had proper rules, but the trouble with MRSA, which I was hinting at earlier, is that it is different.

[111] If you remember, we talked about the *Staphylococcus aureus* up my nose. I worry about it being mentioned on a death certificate, because it will often be a junior doctor who will be filling it out. If you had guidelines and we applied them correctly, that would probably be a way of getting more robust data on this, but I would like to see a lot more than just MRSA or *Clostridium difficile* being looked at. If you are going to make sense of this, you need to mention whatever organism is responsible and then we could get the Office for National Statistics to look at all of them, including *Klebsiella* for example. How big an issue is this from the point of view of deaths?

[112] My parallel to all of this, to try to explain it—and I tested it on one of my microbiology colleagues this morning, so I think that it is all right—is that if you have a patient dying of lung cancer, how often would a doctor mention cigarettes? I think that there is a parallel there. He could mention cigarettes because we know that they are a causative factor, but you do not die of a cigarette even if somebody throws one at you, in the same way that you do not die, necessarily, of the fact that you are colonised by an MRSA. That is why I get worried about some of this. It would be far more meaningful to say, 'Let us have a sensible clinical system around death certification, that is, did this patient die of septicaemia, an infection, or pneumonia, and so on?'. If we look for those sorts of clinical-infection types of diagnosis, it would be more helpful in terms of this and of understanding where all the different organisms might fit in.

[113] **Darren Millar:** However, there is nothing to stop the Welsh health service from

introducing a supplementary form that would add to the data that you collect when someone has passed away. That could help you to tackle these problems. There is nothing to stop that happening, is there?

[114] **Dr Simmons:** I am not sure.

[115] **Ms Lloyd:** I do not think that it is a devolved matter.

[116] **Darren Millar:** I am not suggesting changing the statutory death certificate, all I am suggesting is that this information might be useful for you to collate, in any case, and that there is nothing to stop you requiring that information to be collected.

[117] **Dr Simmons:** Again, it goes back to the perception of how valuable you think that it is to know about an individual organism that killed somebody. In a way, this is the health service and we should be concentrating on that. We know that we need to learn lessons if things are going wrong, but this is again about putting MRSA in context. I would be much more interested in knowing how many people are dying from streptococcus pneumonia, E. coli or Klebsiella, because these have much more of an influence. That said, I can collect good surrogate data via my laboratory system of what the top 10 bacteraemia do across Wales, because we know how these organisms behave and which ones are likely to kill people. So, in a way, we have obtained that information by way of the top 10 bacteraemia—this is bloodstream infection and serious stuff, and a percentage of people who get them will die of these organisms. We can use that information to inform whatever we do from an individual trust point of view.

[118] **Mr Barnett:** If I could just add that, at a hospital level, we concentrate on the outcomes for the patient, as is mentioned in the Wales Audit Office report. We have regular mortality and morbidity meetings with the clinicians, and if death has occurred we analyse the reasons why. However, the important thing is that we keep looking at the outcomes for the patient, post-discharge, with 30-day surveys. In that way, you concentrate on where the patient has gone and what has happened subsequent to that, rather than look back at the data on this area.

[119] **Irene James:** Many of my questions have been answered. I had a question to Mrs Lloyd on whether all trusts are taking infection prevention and control sufficiently seriously. What we have heard is that it is not only infection control with MRSA, but that we also need to look at all other infections. So, to go on from that, has the Assembly's approach, to allow local targets to be set, helped with infection control and prevention targets?

[120] **Ms Lloyd:** Yes, I definitely think so. As Mike said earlier, if the problem can be acknowledged and owned locally by the staff who must implement any improvements, it is a much better way forward than an enforced set of guidance or targets. From the results that we have had in Wales, the localised approach has been the one that has worked.

[121] **Irene James:** So, do you think that those targets have been ambitious enough?

[122] **Ms Lloyd:** They are not targets; they are local targets. That is why we have placed so much emphasis on the Welsh risk pool's looking at how well people are complying and how well local targets are being effected. Mike's team also does that for us. All this has been incorporated into the self-assessment scheme for Healthcare Inspectorate Wales. So, we are keeping the pressure on because one has to, but there has been a distinct improvement in all organisations in Wales over the past few years since we set—

[123] **Irene James:** Is that true on different infections?

[124] **Ms Lloyd:** Yes.

[125] **Dr Simmons:** When we had the first of our feedback meetings, the infection control teams said that they did not like it, but, by year 3, there was incredible enthusiasm. They realised that it was making a difference. Hopefully, I will make Sharon—who is Paul's senior infection control nurse—turn red, but in the *Nursing Times* infection control award last year, in Wales we had two out of the five finalists. I know that Sharon did not win for Carmarthenshire, but Carmarthenshire was one of the finalists and it did incredibly well. I have heard the presentation, because we invited them down to show off to the Health Protection Agency when it was in Wales, and it was a brilliant presentation. The other trust was Swansea NHS Trust, which won. So, we had two out of five finalists for the *Nursing Times* award for infection control, and those trusts presented our infection reduction targets, which are making a difference, and it was incredible. So, it is making a real difference.

[126] **Lorraine Barrett:** I am looking at paragraphs 2.17 to 2.22, covering the issue of screening patients. Will Ann tell us how satisfied she is with the adequacy of screening approaches in the Welsh trusts, and why has the Assembly Government not issued central guidance on screening, particularly with regard to patients from residential homes?

[127] **Ms Lloyd:** We thought long and hard about the screening programmes, and we know very well that, in some parts of the UK, every single patient was screened if they came through an accident and emergency department—I had to investigate a trust in England that was doing that, and, as a consequence, the whole system was starting to fall apart.

2.10 p.m.

[128] We looked at the Department of Health guidance on screening, particularly for MRSA, that was produced in 2006. Our experts decided that this was built on limited evidence. So, we thought that there was merit to screening, but that we would be much more focused about the people we would screen—the people whom we believed, on evidence, would be at the highest risk; that was implemented. As we go through our list of infections, we will take advice from the experts on whether additional screening programmes are important.

[129] There is a great deal of anecdotal evidence of people coming in from the community colonised. I hope that our community infection control strategy will start to manage some of those people in their home contexts, so that they do not become people who then have to be transferred into hospital in order for us to manage the colonisation—that they will be able to be maintained in their own environments. There is a great deal of anecdotal evidence of many people coming in to hospitals from nursing homes who have infections. We are unpicking the data that we are getting from the trusts to enable our experts to advise us whether additional screening programmes would be necessary for them. At the moment, with regard to MRSA, they are included, but there must be a risk assessment against each individual, particularly those going in for vascular and orthopaedic surgery, for example.

[130] In Wales, we have again taken the view that we should screen for those who will be at high risk, so that we can manage them optimally in our hospitals and in the community, but that universal screening might not actually improve the situation.

[131] **Dr Simmons:** When we questioned the Department of Health on the basis of the guidance that it issued, the only evidence that it cited was the Scottish health technology assessment, which has been published only recently. Therefore, it put its advice out when that was only in draft format. Scotland has announced that it is contemplating going down a universal screening route, and it is now recognising that the data it is basing this on are not robust. In fact, one of my colleagues was suggesting that some of the data that it was basing

its mathematical model on had been rejected by the Cochrane Collaboration, which is an evidence-based organisation. I gather that the Cochrane Collaboration said that there is no sound evidence for universal screening and rejected it. We have been looking at different structures across the world; we have been getting data from the Americas to try to tease out whether there is any information to back this up. Therefore, because Scotland recognises and is concerned about the fact that its model is not robust, it is investing millions of pounds—I cannot remember how many—in a pilot scheme. The rest of the UK should look to that data; it would be unwise for us to change our stance now and move away from local decisions about what the appropriate screening approach is for each patch, bearing in mind the variations with MRSA and so on that we talked about.

[132] As a microbiologist, the other difficulty that I have with a universal approach is that screening should be for the benefit of the individual; we screen for cervical and prostate cancers, and so on, because it is of benefit to the individual. I know that I am carrying *Staphylococcus aureus* up my nose, and therefore, if I get a big cut, I might somehow colonise that—if I pick my nose and transfer the organism to the cut. That is why people get infected, which is an earlier question that we did not answer; people get infected because we carry most of the organisms that we become infected with. Yes, we can acquire them in hospitals, but why screen for just one organism? To pick up the example of your mother; she will have organisms on her skin, so if I were an orthopaedic surgeon and I were going to screen her, should I not screen for coagulase-negative *Staphylococcus*, methicillin-sensitive *Staphylococcus aureus*, whether she has gram-negative organisms present and so on, in order to better inform the decisions that I will take about the antibiotic prophylaxis I will give her before surgery?

[133] That is what screening should be about, rather than this idea that we must get the numbers down because it is a big issue. It is not a big issue; it is an important issue, but if you look at our prevalence data, fewer than 14 per cent of infections acquired in hospital are MRSA. Therefore, are we going to ignore 85 per cent of hospital-acquired infections? We are certainly not going to do so in Wales. That is not what we are doing—it is a much broader picture. Therefore, screen if it is appropriate, and screen for the organisms that are causing the problem in your unit, not just for MRSA. We used to screen for *Streptococci* in baby units when that was a problem—it is not any more, so we have stopped.

[134] **Lorraine Barrett:** I have a question for Paul Barnett. Would you welcome the Government's producing central guidance on screening?

[135] **Mr Barnett:** Yes, I would. Having said that, it is helpful that we are able to identify our own local targets and use various guidelines. As an example, we were just talking about MRSA screening; we use Hospital Infection Society guidelines, which inform what we do. We have an extensive MRSA screening programme in our trust. However, that is our situation. As I said earlier, we identified some years ago that that was a major target for us, and therefore we wanted to ensure that those results improved. As an example, we screen previous MRSA-positive patients, patients coming from other hospitals, hospital transfers, patients who have come from hospitals from abroad, cardiac care unit patients, and I have already mentioned elective orthopaedic patients. Therefore, from that point of view, we have an extensive programme, and that is left to us. However, if there is central guidance, I believe that that would further inform us and the rest of Wales.

[136] **David Melding:** You can add to that, but not amplify, Dr Simmons, as we have a fair number of questions to get through.

[137] **Dr Simmons:** We have been asked by the Welsh Assembly Government to try to bottom out some of this information, and to provide that to WAG, perhaps in a statement. However, that statement may well be that a local approach is appropriate.

[138] **Lorraine Barrett:** The first few paragraphs of part 3 of the report note the tension between the pressure to reach waiting-times targets for elective treatment, in particular, and patient safety issues and infection prevention. Could Ann say something about the extent to which there is a risk that the pursuit of Assembly Government targets could compromise patient safety, particularly with regard to infection prevention and control?

[139] **Ms Lloyd:** If that is all that trusts concentrated on, then it would be a risk. However, trusts have to concentrate on a range of issues, one of which is this important issue of hospital-acquired infections. As part of the annual operating framework, which is the guide to what we expect organisations to do, which includes the targets set by Ministers, local infection reductions targets are included.

[140] Therefore, organisations have to balance their whole business; they must ensure that they can meet the required targets in terms of waiting times, day-case rates, bed occupancy, and so on, but also, and importantly, they have to keep their eyes firmly fixed on the fact that they have to reduce the possibility of infections occurring in their organisations. Therefore, it is a balance. We went down that road because we did not, as we have said before, want to set up an absolute target for a particular infection being reduced. As you have seen from the many studies of this, that diverts management's attention away from the range of problems that are created by infections in their organisations.

[141] **Lorraine Barrett:** I have another question, which is for Paul Barnett. Does your trust experience the competing imperatives of performance targets and patient safety? If so, how do you manage those pressures, and do you feel that patient safety is ever compromised in pursuit of the targets?

[142] **Mr Barnett:** Certainly not. As I said at the beginning of my evidence, patient safety is the most important thing in what we do. There is a balance to be struck between the targets and some of the things that we do around infection control but, in reality, you can turn it round the other way. The more that we concentrate on patient safety, the more our ability to achieve the targets will improve. For instance, the length of stay comes down. If you get the basics right to start with, the other things will be easier to achieve.

2.20 p.m.

[143] **Irene James:** I would like to look at paragraph 3.6, which describes clinicians' compliance with hand hygiene requirements. Why does clinicians' compliance with those requirements vary? What can you do to improve that situation?

[144] **Mr Barnett:** This goes back to evidence that I have given previously. I do not believe that we should just concentrate on clinicians, by the way, as that is a bit invidious. Everybody involved in the ward has to take this very seriously and comply. That is why our training is not concentrated entirely on clinicians, but includes the whole of the ward staff, the departmental staff and anybody who comes into contact with patients. It is therefore important that when we regularly carry out audits of the training and the education that is given, we identify exactly what we need to do in the future. In our trust, each directorate has a training needs analysis each year and, as a result of that, we identify the programmes that are required. We have an induction programme for all staff but, in particular, there is a separate induction programme for medical staff. At that stage, we reinforce all the messages. Compliance does vary, and that goes back to the point that I was making about human nature, but the more that you reinforce the message, increase the training, and get their involvement, the more likely it is that you will deliver. I have described a situation where we have had multidisciplinary teams headed by doctors looking at various aspects of infection control and, as a result of their involvement, they have encouraged their juniors and so on to take this far

more seriously. We do lots of other things. For instance, we have been trialling something recently involving a motion-activated device that gives a message about washing your hands and using alcohol gel. That does not just apply to doctors; it applies to anybody who walks onto the ward. That is important and is a constant reminder not only for medical staff and other staff in the hospital but also for relatives and loved ones who come in to see patients.

[145] **Irene James:** I belong to an era when the saying was ‘cleanliness is next to godliness’. Perhaps we need to be promoting that. Ms Lloyd, what has the Assembly Government done to improve the engagement of everyone in this issue to ensure that there is effective infection prevention and control in practice everywhere?

[146] **Ms Lloyd:** We started the major Clean Your Hands campaign in 2004 and that has had a really good effect. Now, if you go into hospitals, you see visitors using hand gel and they are reminded by the staff not to sit on the beds and not to bring loads of stuff in with them. If you walk into a hospital now, there are all sorts of things that you are not allowed to do as a visitor that you could get away with before. We are constantly reinforcing the Clean Your Hands campaign because it is fundamental and instils in people visiting the ward the importance of maintaining as sterile an environment as possible. There are always people who will not comply and that is why the work that the Minister has initiated on who is in charge on a ward is so vital. The conclusions of that will be reported in the next few months. We have to be vigilant about it. There is loads of anecdotal evidence that leads us to think that we constantly have to keep up standards on the wards and that we must reinforce with visitors, carers, and the patients themselves, as well as our staff, that they must comply with the hygiene protocols in each of the clinical areas.

[147] **David Melding:** There is a sense that there is some disengagement, I would say. The evidence is so strong in the report, and we have skated over the issue of clinicians, although I understand that the general issues are important. However, you would expect the clinicians to lead in this area, would you not? I cannot see how, anywhere, there is an excuse for not doing it.

[148] **Ms Lloyd:** There is no excuse at all.

[149] **Dr Simmons:** I will amplify that, if I may, in terms of what is happening with the Safer Patients initiative, and the trusts that are engaged in that. Of course, that also hooks into the save a thousand lives initiative. It is about behavioural modification, I think, in terms of how you get this message across—getting it across to all clinicians and healthcare workers is important. We had a report from the Gwent trust, which is one of the second-round trusts, which reported 100 per cent compliance on one ward, and 96 or 97 per cent on a second ward. The trust has got inside people’s heads, and that is what we must do with all of this.

[150] I would not like the committee to go away with the idea, because of what Mrs Lloyd said, that healthcare-associated infection is an issue for visitors. If visitors are visiting just one person, then they are not a threat. We must concentrate on our staff, and on professional visitors such as the clergy, or the tea lady, and so on—anybody that is moving from patient to patient. It is good to place warnings outside the ward, and it is good to encourage everybody to be clean—from the pandemic flu point of view, we want people to be aware of their own personal responsibilities around hygiene. Cleanliness is next to godliness, but managing healthcare-associated infection has to be about staff, and staff hands—that is very important.

[151] **David Melding:** That is very clear, thank you. Lorraine has question 14—she is working very hard this afternoon.

[152] **Lorraine Barrett:** As it has been mentioned twice, Chair, I must ask where we humanists stand with cleanliness being next to godliness—I reckon that it is next to humanity.

[153] Anyway, I will move on. I will not go back 40 years to when I was nursing, when everything seemed to be perfect. Looking back, there was a policy of two to a bed and no more, and visiting time was very restricted—

[154] **Dr Simmons:** Two to a bed—are you talking about patients? *[Laughter.]*

[155] **Lorraine Barrett:** No, no.

[156] **David Melding:** I do not know whether it would do much for health, but morale would improve. *[Laughter.]*

[157] **Lorraine Barrett:** I did not think that it would have this effect—I was just thinking about what you said about visitors coming in and not being allowed to sit on the bed. It was far more strict in my day, I must say. However, I do not know what the infection rates were 40 years ago. As nurses, we would stay on the ward—you had a housekeeper for that ward only, and would do all the cleaning, and the bits and bobs. As nurses, twice or three times a day we would do damp dusting, although I do not know how healthy that was, with a rag and disinfectant, and so on. There did not seem to be so much wandering around, and moving from ward to ward.

[158] I have a question about paragraphs 3.10 to 3.17 in the report, regarding the basic failings in housekeeping that were identified by the healthcare inspectorate. I just wondered whether you wanted to say, Paul, what you were doing in your trust, and what the association was between the general housekeeping failings as identified in those paragraphs, and the level of infections.

[159] **Mr Barnett:** You will not be surprised to hear me say that I am not sure that this applies to my particular trust. For instance, the report talks about making cleaning staff members of the ward team, and about identifying who actually manages the ward. In my trust, both measures are well established. The ward manager manages the ward and is responsible for what happens on it, and the ward cleaner, and the housekeeping staff, are very much part of that team, to the extent that, when the work programmes for the cleaning staff are identified, they are identified with the ward manager. Ward managers also receive training in auditing cleaning practices, and they work very much with the cleaning and housekeeping staff to ensure that those standards are maintained. We have regular audits, not only from the housekeeping managers, but from the link nurses, who work on each of the wards, and from the infection control departments. Those audits identify anything that is amiss and that needs to be put right, whether it is a training issue or an equipment issue and so on.

2.30 p.m.

[160] At the end of the day, we are vigilant at all times and ensure that when these audits take place, the visits are unannounced so that people are kept on their toes. Frankly, that is part of their *raison d'être*, but in addition to that, of course, it is important that they feel part of the team—that the cleaning staff identify with the ward and with their fellow professionals. Their training is regularly updated, and I mentioned the cleaning equipment earlier, which must be updated and improved all the time. I like to think that they have a very important role to play—they do have a very important role. We allocate resources from other parts of the hospital if someone is off sick—that is inevitable, but there is an identified resource for each of the wards and the ward manager is very much responsible for that.

[161] **Ms Lloyd:** When Healthcare Inspectorate Wales went onto wards, it found, for example, clutter, so how on earth can you clean around clutter? It also found medical equipment that had not been disposed of effectively, and the design of the wards is such that

there is inadequate storage space. That is probably due to the fact that back in the 1980s, there was a requirement for a new type of building and all the storage and the non-absolute patient areas were reduced by around 35 per cent. That has led to our staff trying to manage equipment. Consider how much equipment you find around patients' beds these days and the different types of mattresses. We are trying to manage all that as though we were dealing with a pre-1980s hospital and, mostly, we are not.

[162] So, there is a whole set of issues to tackle. We have the national cleanliness standards and the performance assessment toolkit as well as the 'Fundamentals of Care' guidance. The community health councils are helpful in going around and assessing the application of the fundamentals of care for us every year. However, there is clutter everywhere, which means that you get horror stories of dust collecting in corners and things not being cleaned sufficiently frequently. We have to take the opportunity in the capital building programme administered by the Minister to set right some of these things or look much more creatively at the management of equipment and not believe, for example, that you have to hang on to everything that has ever entered your ward or that you have to hide it in case someone nicks it—which happens—but that you have to go back into the past. When I was trained, we had a central store that was effective and equipment was cleaned properly by someone trained to do it properly. I agree that the housekeeping team must be an integral part of the ward team and, as you know, again, the Minister has commissioned work on that because that is certainly how she wants things to develop.

[163] **David Melding:** There are a couple of supplementary questions. Darren Millar is first.

[164] **Darren Millar:** Earlier, Paul, when you were telling us about the improvements made in your trust, and clearly there have been significant improvements, you referred to deep cleaning as being one of the key drivers of the improvements. Obviously, the extra bed capacity in your trust allows you to vacate certain areas so that the cleaning can take place. However, what exactly is a 'deep clean' and are you instructed to do those deep cleans by the Welsh Assembly Government or is that a local policy that you have taken forward?

[165] **Mr Barnett:** We have taken it forward as a trust, and we have been doing deep cleans as one-offs for years. However, in the last 18 months, we have established a regular programme that means that each ward is deep cleaned as part of the rolling programme. It is also part of the refurbishment programme that we have for each ward. The deep clean basically involves the wards being cleaned from top to bottom. Every surface is cleaned thoroughly and disinfected to ensure that when patients return to the ward, we start off on the right level.

[166] **Darren Millar:** In terms of those hospital trusts that do not have the capacity to vacate a ward to enable a deep clean to take place, how can they manage to regularly deep clean wards in order to eliminate the opportunity for dust and dirt to build up?

[167] **Dr Simmons:** Most trusts have a policy on this. I am going to sound daft now, because I have just realised what I have said. I used to work for Paul's trust in the dim and distance past, but my understanding has always been that most trusts have a policy of deep cleaning, particularly in areas where they have had outbreaks and isolated patients. Before you put patients back in a ward or bed area, you go through a deep-clean process. Paul's trust now has a regular programme, which is perhaps different, but I cannot comment on other trusts in that respect.

[168] **Ms Lloyd:** There will always be some flexibility. Paul has wards that can be moved around, but there will always be some flexibility within organisations. They can either reduce the workload at particular times of the week to allow wards to be deep cleaned or shut wards

over the weekend for a deep clean to take place. If there has been an infection outbreak, it is a requirement that there is a deep clean and that patients should not be put back in a ward without that taking place.

[169] It is not just the deep clean that is important; the constant cleaning is also important. The big problem is getting rid of all the clutter. These things must all go together, and that is the focus of trusts' work on improving cleaning and the environment at the moment.

[170] **Bethan Jenkins:** I have a brief question on the cleanliness aspect. I know that some trusts outsource cleaning contracts to private agencies. How would that potentially have an effect on cleaning staff working with other members of staff? In the new hospital in Port Talbot, there were some issues regarding the type of cleaning products that were used.

[171] **Ms Lloyd:** There are only three small hospitals that outsource their cleaning. Basically, whether or not it is outsourced should not matter in terms of the quality, because you have a standard for cleaning and standard products. It is important to maintain the supervision of those contracts.

[172] **David Melding:** We will have to move on as the tyranny of the clock is against us.

[173] **Eleanor Burnham:** I am delighted to hear what Ms Lloyd just said, because my mother was a nurse in the 1930s, and she was taught to clean lavatories—this was before Lorraine's time. At that time, they had autoclaving and so on. It was just incredible.

[174] **Ms Lloyd:** Even I remember that. [*Laughter.*]

[175] **Eleanor Burnham:** We live in a different era, and I am concerned about general hygiene. In addition to providing staff and patients with sufficient information, do you think that we as Assembly Members should press for hygiene education to be on the curriculum in schools? How many of us have used general facilities and seen people coming out of loos and not washing their hands? It is a general malaise, is it not? Is that the kind of information that you are disseminating?

[176] **David Melding:** Do hospital visitors receive a leaflet?

[177] **Ms Lloyd:** Yes, there is a 'Teach germs a lesson!' leaflet. To say that our staff are not taking this seriously enough is a very sweeping statement because there has been such a huge improvement. However, we are talking to the postgraduate deans and training colleges to ensure that this topic is placed on the curriculum and reinforced at every stage.

[178] **Dr Simmons:** I may have misunderstood, but were you referring to the schools' point of view?

[179] **Eleanor Burnham:** I was thinking about what happens outside hospitals.

[180] **Dr Simmons:** We are drilling down. As the result of the E. coli outbreak, the leaflet 'Teach germs a lesson!' has been produced—there is a leaflet for junior and primary schools. We have had a clean hands campaign in schools, which was sponsored by one of the companies concerned. We are doing the same thing with pandemic flu for the general population. There is a huge amount of emphasis.

2.40 p.m.

[181] **David Melding:** Paul, does your trust engage with the general public and potential visitors at all?

[182] **Mr Barnett:** Picking up on the information provided, we work very closely with the community health council and patient groups to prepare a range of leaflets. For instance, we currently have leaflets on MRSA, C. difficile, ESBLs, norovirus, hand hygiene—

[183] **Dr Simmons:** People may not know what ESBLs are.

[184] **Mr Barnett:** No, but they will be coming, and trusts are having to manage them now.

[185] All those leaflets have been prepared with the CHC and with various patient groups. We have a reader panel in Carmarthenshire, which reads them to ensure that we have filtered out the jargon and the long words so that we can get the messages across. We have worked closely with the local media, with newspapers and radio stations, to get across not just the good news stories, but educational stories that will hopefully catch the imagination.

[186] **Eleanor Burnham:** That is heartening, because in our area it is slightly different, and I wish that I could come to Carmarthenshire if I ever need treatment.

[187] **Darren Millar:** The NHS has finite resources and those resources are extremely important. An issue picked up by the auditor, in paragraph 3.52, and which goes on to paragraph 3.61, was the cost associated with healthcare-associated infections in Wales, which is estimated at around £50 million. The report goes on to say that it is difficult to put a proper cost on these infections and that the way in which trusts record information on the costs of healthcare-associated infections is a bit patchy and inconsistent. Do you think that it would be helpful, Ann and Mike, to have some common methodology for capturing the costs associated with these infections?

[188] **Ms Lloyd:** We have asked Mike's group to look at the issue of cost and bed days and to report those, to see whether or not we can capture explicitly the costs of infection. We know how much we invest in infection control, but we have asked the group for advice on this.

[189] **Dr Simmons:** This goes back to the clipboard issue. I would prefer a surrogate for all of this if I could have it; I would rather have infection control personnel engaged in the process and not trying to work out how much it costs. However, I understand where the point comes from, because it is important to know what it costs. There is never any spare money, of course, but identifying the costs would allow increased efficiency and throughput. So, the money would still be spent and we would not save anything, but we would spend it better.

[190] Scotland conducted a comprehensive economic study alongside its prevalence study to try to capture that data. What we are planning to do, across the five nations—including the Republic of Ireland—is to see whether we could use those data to plug into our prevalence data on an all-Wales basis. Therefore, because the data are available—as you will know from the website or from the Wales Audit Office website—individual trusts will be able to drill down into their prevalence. If that works, we will be able to get an accurate handle at trust level on what the costs are to Carmarthen, to Ceredigion, and all of the others. It is important, but I would hate it if staff were to get sidetracked too heavily into this, and I would like to find a surrogate way of doing it.

[191] **Darren Millar:** Paul, in terms of your trust, do you have a handle on the cost to your trust of healthcare-acquired infections, and, if you do, do you report that information to the trust management?

[192] **Mr Barnett:** About two and a half years ago, we had a series of outbreaks in one part of one of our hospitals, and, naturally, I was concerned about the issue of patient safety, while

I also realised the costs involved. At that time, I asked my finance director to give me an estimate of the amount of money that it was costing in terms of length of stay and drug costs, and that sort of thing. It was only an estimate, as has been said, because you cannot give an entirely accurate picture because not all the people who have an infection go on to develop the symptoms and stay longer in hospital. However, that estimate was pretty scary and, as a result of that and the various other Welsh Assembly Government programmes that came out subsequently, we were keen to pick up the cudgels, as it were, and do something about this area.

[193] I asked our infection control staff to work up a business case with the finance staff based on the amounts that we are currently spending and the money we are losing, and to identify what could be saved by justifying additional staff in various areas. Mike is right. When you have infection control expertise, it is best used at ward level in all the various tasks undertaken. I have already alluded to one post that we managed to recruit as a result of this business case, the anti-microbial pharmacist, but we have also recruited an infection control co-ordinator, who has worked closely with the surveillance programmes that we described earlier. We continue to performance-manage and monitor the situation, but the facts and figures that we were presented with as a trust management team two years ago meant that we were looking at a cost, based on the Plowman's model, of £72,000, which is about equal to that of the two posts. The important thing is that, in addition to the savings that we feel we are likely to make on the length of stay, it is a quality issue and we are improving the quality of care given. So, in many ways, this has been a no-brainer for us. Two years later, we have seen the results and the improvements.

[194] **David Melding:** That is encouraging.

[195] **Chris Franks:** I will refer to paragraph 3.71, Mrs Lloyd. We have heard that Carmarthenshire can make use of isolation facilities, but I suspect that that is not the case everywhere. What are you doing to help trusts to create isolation units?

[196] **Ms Lloyd:** We undertook a survey of isolation facilities in 2003. Given our concern, we then asked Welsh Health Estates to undertake a far more in-depth study of the isolation facilities and of whether they complied with the building standards note. You can see from the results in the WAO report that many did not. The progress is patchy and, therefore, we have asked Welsh Health Estates to undertake a second review. As it says here, we issued additional information in 2006 to see the extent to which they are enabled to comply. Many of the organisations have taken action in turning areas of their wards into more single rooms, some with reverse pressure and in full compliance to isolation. However, in some instances, merely being able to isolate individuals in a single room will help to control the infection. You do not need to have a fully blown isolation suite to ameliorate some of the effects of infection.

[197] We should have this report in the very near future. We will then ensure again, through the capital programme, that there is a facility for those individual organisations that are still unable to comply with the norm to be able to comply. They can do it through their discretionary capital as well as through any major capital scheme. However, we would certainly be looking at major capital schemes to ensure that the design complies with modern practice on patient isolation and the more flexible management of patients.

[198] **Chris Franks:** Okay. Will the reconfiguration process take people's eyes off this ball?

[199] **Ms Lloyd:** No.

[200] **David Melding:** We are drifting.

[201] **Chris Franks:** I like to drift.

[202] **David Melding:** It is something that we need to cover, so you may deal with it.

[203] **Ms Lloyd:** Do you mean trust reconfiguration?

[204] **Chris Franks:** Yes.

[205] **Ms Lloyd:** In that case, my answer is 'No, not at all'. Trust reconfiguration is an administrative process. The trust reconfigurations that are under way at the moment have been very much vested in improving patient care. The schemes that are ongoing, and the reviews that are already taking place will help to enhance the decision-making on the plans that are already going ahead in some of these merging trusts, to take the next step forward in improving the patient's environment.

2.50 p.m.

[206] **Lorraine Barrett:** Paragraphs 3.76 to 3.81 show that the ratio of infection control nurses to beds is lower than that suggested by the American benchmarks. Could Ann Lloyd tell us how she plans to develop capacity in infection control teams?

[207] **Ms Lloyd:** At one point, the report asks why we did not issue definitive guidance. I have asked the workforce development teams to look at the American guidance, which, as you can see, has changed over the past couple of years, to see what would be the ideal infection control multidisciplinary team, given the needs and local targets in each organisation. Do we have enough trained staff in the system? Do we need to alter the education commissions? What are we doing about microbiologists for the future? What is their age profile, and so on? That is to ensure that there is sufficient expertise in each organisation and each geographic area, particularly those affecting the community, to be able to ensure that the strategy can be implemented as we wish it to be. That is ongoing work, to be taken forward this year in readiness for the workforce development proposals coming out about October.

[208] **Dr Simmons:** May I give a bit of a trite answer to that, in one sense? I think that the ratio of infection control nurses to beds should be 1:1 and that is effectively what our strategy says, because infection control is everybody's business. I am sure that what will come out of this is that these questions—of how many specialists are needed and how many people are needed in other areas—are really matters that trusts have to determine. We want every member of staff to understand what their infection control and prevention responsibilities are. Therefore, the ratio should probably be 1:1 and the American model is possibly not really relevant to anybody.

[209] **David Melding:** However, we are way off that culture, are we not?

[210] **Dr Simmons:** We are not; I think that we are in a really exciting phase. I think that we had a step change in March last year when we invited the chief executives to an infection control committee, rather than the infection control teams. Paul was there. Ten of our 14 chief executives were present, and that was really impressive. They seemed to recognise where it is at. We also have the Safer Patients initiative, and all those sorts of things. I think that, because of all of those things, we are seeing a sudden change in what is going on. So, we are not there yet, but I think that we will get there very fast.

[211] **Darren Millar:** I would just like to explore this further. One thing that the report says is that clinicians are not necessarily attending the training that is being provided for them on

infection control. We have already talked about clinicians not washing their hands, or not using the alcohol gel that is available to wash their hands, to reduce the chances of infection. We are told the action that is being taken in paragraphs 3.8 to 3.9, especially on the training front, and that indicates that training is poorly attended, especially by clinicians. Given that, are staff really taking this issue seriously, Mike? You have painted quite a glowing picture, but I do not think that it is quite as good as that.

[212] **Dr Simmons:** I do not disagree with the statements. I am very pleased with this report; I think that it is a very valuable source document and audit. It is a really good audit for us, to help us to move things on from an infection control point of view in Wales. However, what I am trying to highlight is that we have found that you can train and train staff, but it will not necessarily work. I have been on training courses for x, y and z and have come away thinking, 'That was good; I had a nice beer in the bar and did this, that and the other', but it did not actually change my practices; I am sure that we have all done that, if we are honest. I have been impressed by the Assembly's move towards the quality agenda and all of the initiatives surrounding that, because we are now beginning to get inside everybody's head on this. It is about behavioural change and about the population's behavioural change. You can throw training programmes at people until you are blue in the face, and you can make them mandatory, but people will not necessarily listen or change their practice. You somehow have to influence behavioural change, and I think that we are beginning to see a real change in all of this. Everybody suddenly clicked and thought, 'Blimey, this is important stuff'.

[213] **Darren Millar:** You think that it is working even though clinicians are not washing their hands.

[214] **Dr Simmons:** No, my illustration is that clinicians are washing their hands in this new framework that we are beginning to see. That is why I highlighted Gwent: 100 per cent compliance means that all the doctors are washing their hands as well.

[215] **Darren Millar:** Do you not think that making annual training mandatory, as with fire training and similar types of training, would necessarily be a good thing?

[216] **Dr Simmons:** All training or education should be needs-based. That was what was drummed into me as a postgraduate organiser, when I was in Paul's trust before he was there. Education should be needs-based, so you must target it appropriately. If we are not careful, 'mandatory' becomes the mantra. Well, perhaps not the mantra or we would all be doing it, but you will just be going through the motions, which is not helpful.

[217] **David Melding:** The trouble is that the doctors who do not wash their hands do not think that they need the training; is that not the issue?

[218] **Dr Simmons:** The point is that you must get inside their heads, and that is what we are trying to do.

[219] **Darren Millar:** What is the situation in Carmarthen, Paul? Do the clinicians take it seriously there? It would seem that they do, given the improvements that you have seen.

[220] **Mr Barnett:** It goes back to the point that I made before: you must be vigilant, keep up the pressure, keep trying to get messages across, and demonstrate the outcomes that you get from good practice. I will briefly mention a training tool that we are currently rolling out and using more, which is the Assembly Government's e-learning programme on healthcare-associated infections. The aim is to facilitate training for senior staff who go through a programme of about 18 to 20 hours, which can be done anywhere, so you do not have to be in a training room or a postgraduate room, because you can do it at the board level or in your home. This training programme will give you all the necessary skills, and it is done in an

environment in which you control the time taken to use the training, and so on. It may well facilitate and encourage senior clinical staff to take advantage of that, and to develop in the right way.

[221] **Darren Millar:** In that case, a very high proportion of your clinical staff must engage in the training, whether it is through e-learning or attendance on a course for a day, where they can also have a beer.

[222] **Mr Barnett:** We certainly do not ask them that. We are currently rolling out the e-learning programme, and we have 16 senior people going through the programme in April. The general training is variable, if I am being honest. Some are very keen and insist that their junior colleagues and others take the appropriate action. The level of compliance is going up, however.

[223] **Darren Millar:** Would it be useful to make the training mandatory?

[224] **Mr Barnett:** It is difficult to make it mandatory because, as Mike has said, you must get inside people's heads. It is all very well to attend a training programme for an hour and to put a tick in the box to say that someone was there, but you must replicate that training in practice.

[225] **David Melding:** Okay, I think that we understand the point that you make. I want to move to the last question, but I will let Eleanor in quickly.

[226] **Eleanor Burnham:** Is there any truth in the story that clinicians should become tie-less? If so, do you foresee tie-less trusts? Apparently, ties carry germs.

[227] **Dr Simmons:** Oh, tie-less. I thought that you said 'tireless'.

[228] **David Melding:** I think that there is also an issue with clinicians being bare below the elbows. You may want to respond to that briefly.

[229] **Dr Simmons:** I think that the Minister has the chief nursing officer running a task-and-finish group on uniforms and what they might include, which is important. There is a whole issue in this regard, and, again, the Wales Audit Office picks it up. If staff are required to change their clothes, you must have all the facilities in place. There are many things that can act as fomites and the best one is hands. It is fingers that do the touching and so hand hygiene should be at the forefront of our minds.

[230] **David Melding:** The final question is from our interrogator-in-chief, Lorraine. Perhaps she can ask the question in more positive terms.

[231] **Lorraine Barrett:** Are we looking at question 20?

[232] **David Melding:** Yes. Chris touched upon it, but in a negative way about its being a barrier rather than an opportunity.

[233] **Lorraine Barrett:** Okay. Paragraphs 3.90 to 3.93 show that systems of prevention and management of healthcare-associated infections will need to adapt to changing circumstances, such as the configuration of hospitals and the services, which Chris Franks mentioned earlier. Will Ann Lloyd say something about the implications of reconfiguration for infection prevention and control, both in terms of opportunities and risks?

[234] **Ms Lloyd:** Many opportunities present themselves as you redesign services to meet healthcare standards and to implement these new clinical practices described in paragraphs

3.94 and paragraph 3.95. You are looking at a scheme that sets out to save, in Wales, 50,000 episodes of avoidable harm and 1,000 lives.

3.00 p.m.

[235] This is an initiative from the States, which seems to have worked very well. We have looked at the pilot schemes from Northern Ireland. Staff have described the different ways in which they start to think through problems affecting patients as a result of this scheme. It started off in intensive care units. It has worked extremely well, and care bundles have been developed throughout Wales over the past couple of years.

[236] We need to turn the question away from the reorganisation of services to setting out the standards of care for every individual in our community and hospital services, whatever is wrong with them, and to saying, 'This is how people will be cared for, because these are the outcomes that we need you, as trusts and community services, to achieve'. Therefore, reorganisation would probably provide an opportunity for a greater body of general clinical staff to discuss the best ways to achieve the healthcare standards and for us to monitor the trust chief executives and others on the ways in which they are facilitating those achievements within their organisations. However, the real focus must be on improving patient safety and achieving standardisation of care, so that there is a reduction of inequalities and so that patients and carers know exactly what they are going to get, particularly with elective care, when they enter a community or hospital service. So, we should focus on the standards and achieving those, rather than any reorganisation, although reorganisation, as it has been described so far, must be to improve the standard of patient care; we must focus on that, because that is what is important.

[237] **David Melding:** Thank you. That brings us to the end of the evidence session. It has been very thorough and, at times, strangely entertaining. [*Laughter.*] I thank all the witnesses. This is an important subject, and we have had a candid discussion about the range of issues. A transcript will be sent to you in due course, and if you think that there are any gross errors with regard to what was said you may indicate those. Thank you all for your attendance.

3.02 p.m.

**Ystyried Ymateb Llywodraeth Cynulliad Cymru i Adroddiad y Pwyllgor
Archwilio, 'Diogelu Arian Cyhoeddus ym Mhrosiectau LG, Casnewydd'
Consideration of the Welsh Assembly Government's Response to the Audit
Committee Report, 'Protecting Public Money in the LG Projects, Newport'**

[238] **David Melding:** The papers on this have been circulated; Members will have seen Ieuan Wyn's letter and the enclosure. Jeremy, do you have any comments?

[239] **Mr Colman:** I wish to say only that I am quite unsurprised and pleased to report that the Assembly Government has accepted all the recommendations of the committee and all those in my report. I am not surprised, because the witnesses, as you may recall, said repeatedly in their evidence that they would not do things today the way that they did them then. The response confirms that that is the Government's policy.

[240] **David Melding:** Are we content? I see that we are.

3.03 p.m.

**Cofnodion y Cyfarfod Diwethaf
Minutes of the Previous Meeting**

[241] **David Melding:** Are we happy to accept these minutes? I see that we are.

**Cynnig Trefniadol
Procedural Motion**

[242] **David Melding:** I propose that

the committee resolves to exclude the public from the remainder of the meeting in accordance with Standing Order No. 10.37(vi).

[243] I see that there are no objections. Therefore, please switch off the broadcasting system and clear the public galleries.

*Daeth rhan gyhoeddus y cyfarfod i ben am 3.04 p.m.
The public part of the meeting ended at 3.04 p.m.*