AUDITOR GENERAL

PERFORMANCE AUDIT

Hospital cleaning

EXECUTIVE SUMMARY

PREPARED BY AUDIT SCOTLAND

JANUARY 2003

Hospital cleaning

A report to the Scottish Parliament by the Auditor General for Scotland

Auditor General for Scotland

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Tricia Meldrum and John Simmons managed the review under the general direction of Barbara Hurst, Director of Performance Audit.

AGS/2003/2

Executive summary

Introduction

Audit Scotland published '*A clean bill of health*', a baseline review of hospital cleaning services, in April 2000. This made a number of recommendations aimed at improving the quality and effectiveness of hospital cleaning. Since the publication of that report hospital cleaning has been highlighted as an area of continuing concern to the Scottish Executive.

This follow-up review assesses progress against a number of the recommendations of the baseline review. It also includes a review of the levels of cleanliness observed in hospitals, providing the first national snapshot. The report investigates the reasons for variations in the levels of cleanliness, looking at issues identified in '*A clean bill of health*'. It considers frequency of cleaning tasks, staff time spent on cleaning and monitoring, recruitment and retention of staff, management arrangements and the application of policies and procedures. The review also incorporates a baseline assessment of compliance with standards for cleaning services issued by the Clinical Standards Board for Scotland (CSBS) in January 2002.

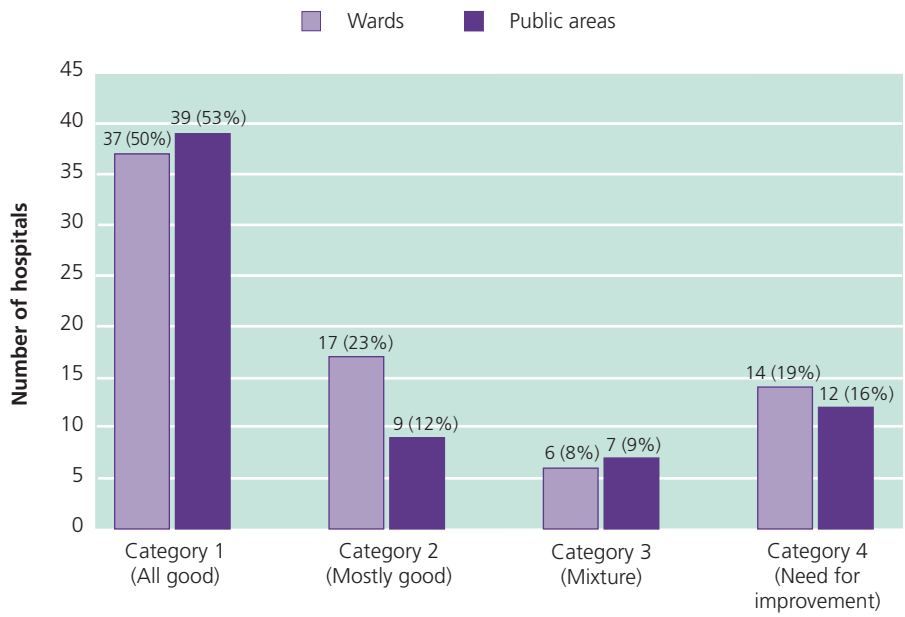
Level of cleanliness

We reviewed levels of cleanliness at 74 hospitals throughout Scotland between March and May 2002. Local auditors, together with domestic services managers acting as peer reviewers, inspected a sample of four wards and a number of public areas in each hospital. Reviews were conducted against a number of criteria relating to floors, internal glass, fixtures and fittings, sanitary ware, walls, curtains and screens and waste bins. Each area was rated as one of four categories: very good, acceptable, need for improvement or concern. This provided a snapshot of the levels of cleanliness in hospitals in Scotland.

We found a very good or acceptable level of cleanliness in over 70% of wards and 80% of public areas reviewed. Hospitals have been split into four categories ranging from category 1, where all wards or public areas reviewed were rated as very good or acceptable, through to category 4, where at least one ward or public area is classified as being of concern or all wards/public areas show a need for improvement. Half of the hospitals fell into category 1. More than one in five showed a clear need for improvement with the remainder

in need of some minor improvement (Exhibit 1). We recommend that a rolling programme of peer review visits is introduced to assess and improve the level of cleanliness in hospitals.

Exhibit 1: Level of cleanliness in hospitals reviewed



Source: Audit Scotland snapshot review

Exhibit 2 names the hospitals in each category for the level of cleanliness of wards and Exhibit 3 names the hospitals in each category for public areas.

Exhibit 2: Profile of hospitals by levels of cleanliness in wards reviewed

Category 1	Category 2	Category 3	Category 4
All wards very good or acceptable (n=37)	**Wards mostly very good or acceptable with one need for improvement (n=17)**	**Wards a mix of very good, acceptable and more than one need for improvement (n=6)**	**At least one ward of concern or all wards need improvement (n=14)**
Aberdeen Children's	Ashludie Hospital	Coathill/Alexander	Bonnybridge
Aberdeen Maternity	Belford, Fort William	Kirklands Hospital	Caithness General
Aberdeen Royal	Gartnavel General	Ninewells	Dunoon General
Ailsa Hospital	Gilbert Bain	Victoria, Fife	Dykebar
Astley Ainslie	Hawkhead	Western Infirmary, Glasgow	Falkirk Royal
Ayr Hospital	Kelso Hospital	Whyteman's Brae	Glasgow Royal
Ayrshire Central	Leverndale		Hairmyres
Balfour Hospital	Mansionhouse Unit		Inverclyde Royal
Biggart	Merchiston		Monklands
Borders General	Perth Royal Infirmary		New Craigs, Inverness
Cameron Hospital	Raigmore		Ravenscraig
Campbeltown	Royal Edinburgh		Royal Alexandra
City Hospital, Aberdeen	Western General, Edinburgh		Stirling Royal
Crichton Royal	St John's Hospital		Victoria Infirmary, Glasgow
Crosshouse	Stobhill		
Dr Gray's, Elgin	Vale of Leven		
D&G Royal Infirmary	Wishaw General		
Edenhall			
Hartwoodhill Hospital			
Hay Lodge Hospital			
Ladysbridge			
Liberton Hospital			
Murray Royal			
Princess Royal Maternity			
Queen Margaret			
Royal Cornhill			
Royal Dundee Liff			
RHSC, Yorkhill			
RHSC, Edinburgh			
Royal Victoria, Lothian			
Royal Victoria, Tayside			
Southern General			
State Hospital			
Stracathro			
Strathmartine			
Sunnyside Royal			
Western Isles			

Source:Audit Scotland snapshot review

Exhibit 3: Profile of hospitals by levels of cleanliness in public areas

Category 1	Category 2	Category 3	Category 4
All areas very good or acceptable (n=39)	**Areas mostly very good or acceptable with no more than 25% of areas need for improvement (n=9)**	**Areas a mix of very good, acceptable and more than 25% of areas need for improvement (n=7)**	**At least one area of concern or all areas need improvement (n=12)**
Aberdeen Children's	Astley Ainslie	Bonnybridge	Aberdeen Royal
Aberdeen Maternity	Cameron Hospital	Borders General	Falkirk Royal
Ailsa Hospital	Kelso Hospital	Caithness General	Gartnavel General
Ashludie	Mansionhouse Unit	Inverclyde Royal	Hairmyres
Ayr Hospital	Ravenscraig	Liberton Hospital	Monklands
Ayrshire Central	Royal Edinburgh	Stirling Royal	New Craigs, Inverness
Balfour Hospital	Stracathro	Victoria, Fife	Southern General
Biggart	Western General, Edinburgh		State Hospital
Campbeltown	Wishaw General		Stobhill
Crichton Royal			Victoria Infirmary, Glasgow
Crosshouse			Western Infirmary, Glasgow
Dr Gray's, Elgin			Whyteman's Brae
D&G Royal Infirmary			
Dunoon General			
Dykebar			
Gilbert Bain			
Glasgow Royal Infirmary			
Hay Lodge Hospital			
Hawkhead			
Leverndale			
Merchiston			
Murray Royal			
Ninewells			
Perth Royal Infirmary			
Princess Royal Maternity			
Queen Margaret			
Raigmore			
Royal Alexandra			
Royal Cornhill			
Royal Dundee Liff			
RHSC, Edinburgh			
RHSC, Yorkhill			
Royal Victoria, Lothian			
Royal Victoria, Tayside			
St John's Hospital			
Strathmartine			
Sunnyside Royal			
Vale of Leven			
Western Isles			

Note: This exhibit excludes four hospitals in three primary care trusts where a small number of public areas were reviewed. All public areas were scored as very good or acceptable in three of these hospitals, and in the other hospital one area was scored as need for improvement. In three hospitals no public areas were reviewed.

Source:Audit Scotland snapshot review

The review found that responsibilities for cleaning clinical equipment[1] are not clearly specified in some hospitals. The levels of cleanliness of some items was found to be unacceptable in 10% of wards reviewed. This requires co-ordination between domestic services and nursing staff and the development of operational policies which detail explicit responsibilities.

The appearance of wards and public areas varies, and this is not always related to the level of cleanliness. Poor maintenance of buildings and fabric, the need for redecoration and dirty windows all contribute to a public perception that standards of cleanliness are poor. In some cases, poor maintenance and decoration can make it more difficult for areas to be cleaned effectively. There is a need for better co-ordination of domestic services and estates management to identify and manage areas of risk.

Ward staff interviewed as part of the review were generally aware of areas of concern about levels of cleanliness and felt these were mostly related to insufficient staff hours or cleaning frequencies.

In addition to presenting a snapshot indication of the level of cleanliness in hospitals throughout Scotland, this review investigates the reasons for the variation observed. It considers a number of factors that may relate to level of cleanliness:

- staff time available for cleaning, supervision and monitoring
- staff recruitment, retention and absence
- management arrangements
- the application of comprehensive policies and procedures.

Inputs to cleaning, supervision and monitoring

One key risk to the quality of cleaning is the staff time available. This review examines how often a task should be carried out (cleaning frequency) and how many staff hours are spent on cleaning tasks and monitoring. It also looks at risks to maintaining the required level of staffing, particularly staff turnover, sickness absence and recruitment difficulties.

The majority of hospitals have put in place planned cleaning frequencies that are in line with national guidance. In most wards actual frequencies are in line with planned. However, we found shortfalls in the staff hours spent on cleaning, supervising and monitoring. The staff time available for cleaning fell below planned levels in a quarter of wards and the time for monitoring was below planned levels in a third of wards (Exhibit 4).

[1] Items such as hoists, drip stands and commodes.

Exhibit 4: Variation between planned and actual input hours (weekdays)

	Cleaning	Supervising	Monitoring
Actual equal to planned	184 (66%)	207 (81%)	140 (61%)
Actual less than planned	71 (25%)	35 (14%)	77 (33%)
Actual more than planned	26 (9%)	13 (5%)	15 (6%)

Source: Audit Scotland

These shortfalls mean that tasks are carried out as often as planned but with less staff time. The quality of cleaning may be compromised because of a lack of time, cover provided by relief staff unfamiliar with the area or supervisors undertaking cleaning tasks at the expense of supervising and monitoring. Almost a quarter of hospitals reported that on occasion staff shortages meant that monitoring was not taking place as planned.

Rates of staff turnover and sickness absence continue to be a problem in many hospitals. Almost half reported difficulties attracting and retaining staff, citing the availability of other job opportunities offering higher rates of pay as one of the main problems. Basic hourly rates of pay in hospitals ranged from £4.10 to £4.86, with an average of £4.25. There was little difference between the average rate paid by in-house providers or external contractors. Rates at all hospitals are below the basic hourly rate of £5.02[2] offered by local authorities, one of the main competitors for staff.

Given the risks to levels of cleanliness of under-staffing, '*A clean bill of health*' recommended that trusts should agree performance indicators and targets for staffing indicators such as sickness absence, turnover and vacancies. However, half of the trusts did not have these in place.

[2] Personal communication. Convention of Scottish Local Authorities (COSLA). Rate at 1 April 2002.

Compliance with CSBS standards for cleaning services

CSBS issued standards for cleaning services in pre-publication form in January 2002. The standards relate to 14 elements covering policies and procedures for managing cleaning services. Many of the standards focus on the processes in place to manage risk. We carried out a baseline indication of compliance with the standards.

Significant work to implement the standards is taking place in many trusts. The elements of the standards that are most developed are management structures and cleaning services specifications, while risk management structures and quality control systems are least developed (Exhibit 5). We also found that while some trusts have identified key performance indicators, few have agreed performance targets in place.

As part of the reports produced by local auditors, each trust has received a detailed breakdown on its compliance with the standards, and has agreed an action plan to work towards full implementation.

Management of cleaning services

Both the CSBS standards and '*A clean bill of health*' identify the importance of close links with infection control teams, clear service specifications, and adequate monitoring to achieve clean hospitals. We followed up these issues in more depth.

Domestic services managers generally work closely with Infection Control Teams (ICTs). However, some trusts do not yet have these links in place and we found the cleaning specification had still not been approved by the ICT in one in six hospitals, in spite of this being a recommendation in '*A clean bill of health*'. Infection control training is provided to domestic staff in almost all hospitals, albeit with further development required in some hospitals. A number of hospitals have put in place formal and comprehensive training programmes for staff, in some cases working with local colleges to develop formal courses and qualifications. Infection control training for domestic staff is included in the training programme in two-thirds of trusts.

External contractors provided cleaning services in one in five hospitals at the time of the review. While many hospitals reported no difficulties with the terms of external contracts, some hospitals identified particular problems. Contracts with external providers are not always specific enough to ensure acceptable levels of cleanliness

Exhibit 5: Compliance with CSBS standards (number of trusts in each category)

Standard	Complies fully	Complies mostly	Complies partially	Mostly does not comply	Does not comply at all
1 Responsibility for cleanliness in healthcare premises is clearly defined and there are clear lines of accountability throughout the organisation, leading to the trust management team.	14	10	6	2	0
2 A suitably qualified person has been designated to manage the cleanliness of the healthcare facility.	19	7	3	3	0
3 The trust management team endorses the specification for the provision of cleaning services throughout the organisation.	3	13	13	3	0
4 Operational elements of the cleaning services specifications are in place and up-to-date.	2	16	10	4	0
5 An annual review is undertaken to assess whether the service specification is being achieved and reflects current requirements.	4	3	9	14	2
6 The cleaning plan and associated risk is managed systematically.	10	13	7	1	1
7 All cleaning management issues are evaluated, considered, and dealt with to achieve optimum user satisfaction.	12	6	8	4	2
8 A risk management process is applied to healthcare cleaning services.	4	8	7	13	0
9 The organisation has access to up-to-date legislation and guidance relating to healthcare cleaning services.	32	0	0	0	0
10 The competency and performance of cleaning personnel are monitored and evaluated to ensure standards are maintained.	12	7	8	4	1
11 Cleaning services staff receive training and instruction on the safe operating practices and cleaning of healthcare facilities.	4	12	13	3	0
12 Key indicators are a component of the performance assessment of cleaning services.	2	8	9	6	7
13 The system in place for healthcare facilities cleaning services is monitored and reviewed by management in order to make improvements to the system.	4	10	7	7	4
14 The trust internal auditor carries out periodic audits to provide assurance that a system of managing healthcare facilities cleaning services is in place that conforms to the requirements of these standards.	3	0	5	2	22

Source: Audit Scotland/CSBS review

and may allow for repeated non-compliance with targets for levels of cleanliness.

A higher proportion of hospitals with in-house providers fell into category 1 for the wards reviewed - category 1 indicates that all wards were very good or acceptable (Exhibit 6). However, this difference is not statistically significant. The review of public areas showed a similar finding, but, again, did not show a significant difference.

Exhibit 6: Results of snapshot review of wards by provider

Snapshot provider	Category 1	Category 2	Category 3	Category 4	Total
In-house	31 (53%)	14 (24%)	5 (9%)	8 (14%)	58
External	5 (31%)	4 (25%)	1 (6%)	6 (38%)	16
Total	36 (49%)	18 (24%)	6 (8%)	14 (19%)	74

* Pearson $\chi 2 = 5.09$, 3 df; p=0.166.

Source: Audit Scotland snapshot survey

Specifications for cleaning services are mostly based on recognised national guidance for minimum cleaning frequencies, with adjustment for local needs. In our previous report we identified the importance of reviewing the specification on a regular basis to ensure that it is kept up to date with national best practice guidance and local needs, based on a risk assessment. Over half of hospitals have reviewed their specification recently, but over a quarter have not undertaken a formal review since the publication of '*A clean bill of health*'.

Whilst almost 80% of trusts have a formal policy for monitoring levels of cleanliness, we found that actual monitoring arrangements are insufficient in just over 40% of hospitals. A number of hospitals have appropriate monitoring policies in place but these are not always put into practice because of staff shortages and workload pressures. Ward and departmental staff are often not involved in monitoring, and staff do not always have information on the inputs and level of cleanliness that should be achieved in their areas.

Conclusions

A snapshot review found very good or acceptable levels of cleanliness in over 70% of wards and 80% of public areas reviewed at hospitals throughout Scotland. Half of the hospitals were rated as very good or acceptable in all areas reviewed, over 20% showed a need for improvement in either some of the wards or public areas, and the remainder were considered to be in need of some minor improvement.

This review aimed to investigate the reasons for the variation in levels of cleanliness. It considered how often areas are cleaned (cleaning frequencies), staff time available for cleaning and monitoring, recruitment and retention of staff, management arrangements and the application of policies and procedures. While we found no clear association between levels of cleanliness and any of these factors individually, a number of themes emerged as to factors that appear to make it more difficult for hospitals to achieve acceptable levels of cleanliness. These are summarised below:

- Hospitals mainly work to and achieve cleaning frequencies that are in line with or above national minimum recommendations. However, staff time available for cleaning is often below planned levels, meaning that tasks are carried out as often as planned but with less staff time. As a result, quality of cleaning may be compromised due to lack of time, cover may be provided by relief staff unfamiliar with the wards/public areas, or supervisors may have to undertake cleaning tasks at the expense of supervising and monitoring.

- Rates of staff turnover and sickness absence remain high in many hospitals. Many hospitals report difficulties attracting and retaining staff, particularly as a result of the availability of alternative employment opportunities offering higher rates of pay. Basic rates of pay in all hospitals are below the hourly rate offered by local authorities, one of the main competitors for staff.

- Terms of contracts with external providers are not always specific enough and the specification of outcomes (cleanliness) is not always high enough to ensure acceptable levels of cleanliness. Terms of contracts may also allow for repeated non-compliance with achieving targets for standards of cleanliness.

- Links with ICTs are in place in most trusts. However some cleaning specifications have not been approved by the ICT and may be insufficient to ensure appropriate levels of cleanliness and infection control.

- Monitoring arrangements are insufficient in some hospitals, particularly hospitals with ad hoc arrangements and a lack of detailed monitoring and audit policies. In some instances, appropriate monitoring policies are in place but are not always put into practice because of staff shortages and workload pressures. Ward and departmental staff are often not involved in monitoring, and in a number of hospitals these staff do not have information on the staff inputs and levels of cleanliness that should be achieved in their areas.

The review also incorporates a baseline indication of compliance with the CSBS standards for cleaning services which were issued to trusts in pre-publication form in January 2002. We found that significant work to implement the standards is taking place in many trusts. The elements of the standards that are most developed are management structures and cleaning services specifications, while risk management structures and quality control systems are least developed. All trusts have received a detailed report on their compliance with the standards and are expected to work towards full implementation.

Our review assessed the extent to which trusts had implemented a number of the recommendations in '*A clean bill of health*'. We found considerable progress against a number of the recommendations. Exhibit 7 identifies the areas that have been progressed in most trusts and the areas where most development is required.

Exhibit 7: Progress against recommendations in *A clean bill of health*

Most developed	More development required
Effective links with ICTs	Proactively seeking patients' views on levels of cleanliness
Minimum frequencies specified in specifications and at ward level	Agreeing and monitoring staffing indicators
Widening remit of domestic staff	Joint monitoring by domestic services and ward staff
Levels of cleaning to be expected are communicated to ward staff	Documented policies for covering under-staffed shifts
Infection control training provided to domestic staff	Monitoring results reported to management

Source: Audit Scotland

Our recommendations are outlined overleaf. In some cases they re-state recommendations from '*A clean bill of health*', and in others they focus on issues identified through this follow-up review.

Summary of recommendations

Standards of cleanliness

- Trusts should ensure that operational policies specify responsibility for cleaning clinical equipment and that all staff are made aware of their responsibilities. The cleanliness of clinical equipment should be included in routine monitoring.
- Domestic services management should work with estates to agree a cleaning programme for areas inaccessible to domestic staff. Trusts should ensure that regular maintenance and redecoration programmes are in place.
- An ongoing programme of peer review of standards of cleanliness or similar quality assurance mechanism should be introduced.

Staffing inputs

- Trusts should identify and agree key performance indicators and targets for staffing, and share best practice through involvement in benchmarking.
- Trusts should ensure that they have in place and have appropriately resourced contingency plans to deal with significant vacancies or sickness absence.
- Trusts should ensure that they have a clear policy for managing and monitoring under-staffed shifts.
- Trusts should investigate the reasons for high levels of absence, turnover and vacancies, and consider what action needs to be taken to improve these indicators. This may include reviewing rates of pay and other working conditions, such as flexible hours and family-friendly policies.

Clinical Standards Board standards

- Trusts should work towards full compliance with all cleaning services standards.

Management arrangements

- Trusts should support opportunities for close working between domestic services and infection control teams (ICTs).
- Risk registers and risk management processes should include all risks associated with cleaning rather than health and safety risks only.

External contracts

- Trusts should ensure clarity in the terms of contract, standards expected, monitoring arrangements, information to be reported to the trust and the trust's right of access to information to investigate deficiencies.

Specification

- Cleaning specifications should specify both minimum frequencies of tasks and expected outcomes in terms of levels of cleanliness.
- Cleaning frequencies should be based on national recommendations produced by SCOTMEG or the Association of Domestic Management (ADM), adjusted for local needs.
- Adjustment to the frequencies should be based on a formal risk assessment with reasons for variation documented.
- Cleaning specifications should be reviewed annually, in line with CSBS standards.
- Cleaning specifications should be approved by the ICT.

Monitoring

- Trusts should monitor both cleaning inputs and outputs.
- Ward staff should either be involved in joint monitoring arrangements or have a formal opportunity to comment on cleaning inputs and outputs.
- Ward staff should have explicit information on the level of cleanliness expected in their wards.
- All trusts should put in place formal monitoring procedures, including relevant documentation and reporting arrangements.
- In addition to monitoring by external providers, all trusts should undertake monitoring using NHS staff.
- When monitoring identifies poor performance, the reasons should be established and remedial action taken. If monitoring repeatedly highlights similar failings, this should be reported to the board.

Training

- Infection control should be part of the training programme for domestic staff.

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