Infection Control Nurses Association

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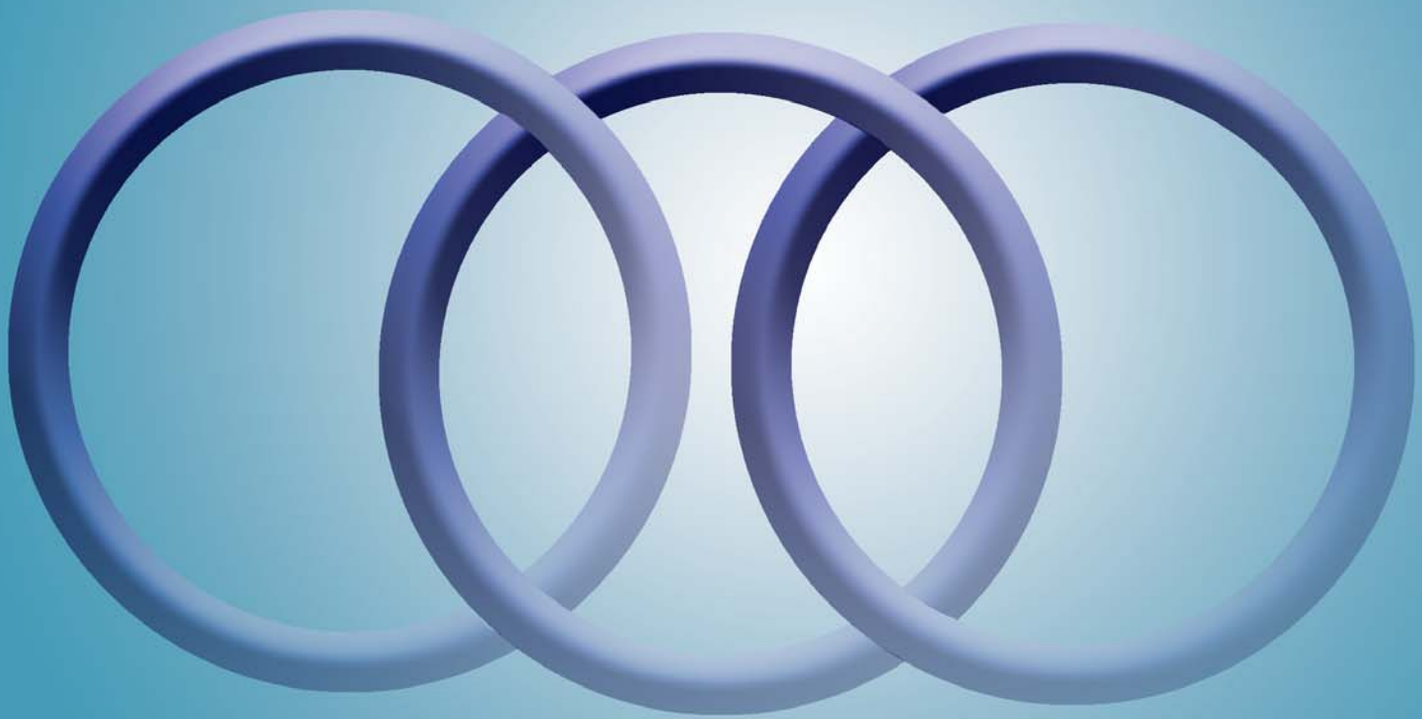


AUDIT TOOLS FOR MONITORING INFECTION CONTROL STANDARDS 2004

Department of Health

Working in partnership with the Department of Health

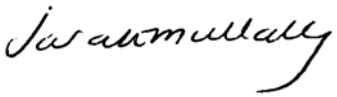
FOREWORD FROM THE CHIEF MEDICAL OFFICER AND CHIEF NURSING OFFICER ENGLAND.

As Winning Ways: Working together to reduce healthcare associated infection in England (December 2003) explains, that to bring about an improvement in infection control practice, it is important that measures known to be effective in reducing the risk of infection are rigorously and consistently applied.

This infection control audit tool provides acute Trusts with a standardised method for monitoring both clinical practice and the environment. Feeding back the audit results will enable staff to systematically identify where improvement is needed, to minimise infection risks and enhance the quality of patient care.

We welcome and commend the audit tool to the NHS as a means of helping healthcare practitioners to improve their performance.

Sir Liam Donaldson
Chief Medical Officer



Mrs Sarah Mullally
Chief Nursing Officer

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INTRODUCTION

The introduction of Clinical Governance (DH 1997, National Assembly for Wales 2000), Controls Assurance (1999) and the National Audit Office Report (2000) has placed increased emphasis on the use of audit to measure the implementation of policies and procedures relating to infection control. The requirement for key indicators to form part of the monitoring of hospital infection and standards of practice has also highlighted the value of audit tools.

The West Midlands Group of the Infection Control Nurses Association (ICNA) developed infection control audit tools for hospitals in 1992. Following this, speciality tools were developed for the community in 1995. The audit tools were piloted and evaluated (Millward et al. 1993). A further study was completed to evaluate the objectivity of the tools in 1994 (Millward et al. 1995). All tools were revised in 1998.

In line with changes in legislation and guidance relating to infection control, a national revision of the audit tools led by the ICNA has been undertaken in conjunction with key stakeholders. The new tools within this document relate to the principles of infection control and include: hand hygiene, decontamination of patient equipment, sharps, linen and waste handling, clinical practice, the environment and ward/dept kitchens. These tools can be used to focus on specific policies and procedures and practice. These tools are intended for use within the acute and intermediate care settings. It is anticipated that audit tools relating to primary care and specialist areas (e.g. operating theatres, endoscopy) will be released at a later date.

The criteria/standards for the audit tools have been developed using a consistent methodology. This has involved individual members of the group leading on specific tools. A literature review was undertaken which included a search for all relevant guidance and evidence. Expert opinion has been sought for many of the standards. A national consultation process was then undertaken and comments where appropriate were incorporated into the final version of the tools. The audit tools were then piloted across the UK, with 52 tools being tested.

The audit tools can be used to provide objective data on compliance to policies within an organisation. This data can then be used to direct the infection control annual programme in meeting the needs of the organisation in relation to infection control. Year-on-year data can assist in monitoring the effectiveness of infection control programmes and assist in strategic planning to meet long term infection control objectives.

In line with Department of Health (DH) initiatives (England) a compliance categorisation has been incorporated into the scoring system to provide a clear indication of compliance. The allocation of compliance levels is based on the scores obtained, which will automatically be allocated within the database. For the purpose of these audits the categories will be allocated as follows: minimal compliance 75% or less, partial compliance 76-84% and compliant 85% or above.

REFERENCES

Department of Health (1997) *A First Class Service*. London. The Stationery Office

Department of Health (1999) *Governance in the new NHS: Controls assurance Statements 1999/2000: Risk Management and Organisational Controls*. Health service Circular 1999/123 London: Department of Health.

Millward S. Barnett J. Thomlinson D. (1993) A Clinical Infection Control Audit programme: Evaluation of a Tool used by Infection Control Nurses to monitor and assess Infection Control Nurse Training. *Journal of Hospital Infection* **24**: 219-32

Millward S. Barnett J. Thomlinson D. (1995) Evaluation of the objectivity of an Infection Control Audit Tool *Journal of Hospital Infection* **31:** 229-233

National Assembly for Wales. (2000). *Corporate Governance in the NHS in Wales: Controls assurance statements 1999/2000: Risk Management and Organisational Controls*. Welsh Health Circular (2000) 13.

National Audit Office. (2000). *The Management and Control of Hospital Acquired Infection in Acute NHS Trusts in England*. London. The Stationery Office

INFECTION CONTROL AUDIT TOOLS

Guidelines for using the audit tools

The audit tools are intended for use by infection control teams, staff with a demonstrated interest in infection control (infection control link practitioners) and trained audit personnel. The use of these tools takes a different approach to previous tools.

Planning the audit programme

It is envisaged that the Infection Control Team (ICT) will plan and prioritise the use of the audit tools based on a review of specific policies or in response to clinical incidents. The revised tools are more in-depth than the previous audit tools. Therefore undertaking an audit in one area using **all** the tools simultaneously **is not advised.**

The use of the Specialist West Midlands Audit Tools is still advised where required (e.g. Laundry Services Tool).

Time required

The time required to complete a specific audit will vary according to the tool, the size of the clinical area, the type of procedures undertaken and the experience of the auditor.

Clinical practice audit

It is advised that the clinical practice audit should be completed over a period of time to allow for the observation of as many practice elements as possible. The assistance of link personnel and ward staff may be required to achieve this.

Scoring

All criteria should be marked either yes/no or non-applicable.

It is not acceptable to enter a non-applicable response where an improvement in a standard may be achieved. For example where a national standard is not being met a non-applicable must not be used:

(a)	Hand hygiene	Yes	No	N/A	Comments
4	Soft absorbent paper towels are available at all hand washing sinks				

In the example above it is not appropriate to mark non-applicable where soft absorbent towels are not in use as the national standard is to use them. Therefore if they are not in use a no score must be allocated. The action plan will then reflect the change in practice required.

Whereas if a standard is not achievable because a facility is absent or a practice not undertaken, the use of a non-applicable is acceptable. For example in a clinical area, which does not have isolation facilities the following standard would be not applicable:

(a)	Hand hygiene	Yes	No	N/A	Comments
36	Hands are decontaminated after leaving an isolation room			X	

Comments should be written on the form for each of the criteria at the time of the audit clearly identifying any issues of concern and areas of good practice. These comments can then be incorporated into the final report.

Whilst it is not essential to issue scores to managers, it is useful for them to be recorded for annual comparison of compliance to policies. Partial compliance is not included in the scoring because partial compliance equates to non-compliance. However comments made can indicate where some compliance has been observed e.g. eight out of ten sharps boxes are labelled.

Manual scoring can be carried out as follows: -

Add the total number of yes answers and divide by the total number of questions answered (including all yes and no answers) excluding the non-applicables; multiply by 100 to get the percentage.

Formula

$$\frac{\text{total number of yes answers}}{\text{total number of yes and no responses}} \times 100 = \%$$

(a)	Hand hygiene	Yes	No	N/A	Comments
1	Liquid soap is available at all hand washing sinks	✔			
2	Liquid soap must be single use cartridge dispensers	✔			
3	Dispenser nozzles are visibly clean		✔		Dispenser nozzles were blocked with soap residue

The score for the above table would be calculated as follows: $\frac{2 \times 100}{3} = 66.6 = 67\%$

If more than one tool has been used in an individual ward or department then each of the overall scores can be added, then divide by the number of tools used. This will provide an overall audit percentage score.

Level of compliance

Percentage scores can be allocated a level of compliance using the compliance categories below. This process will be undertaken automatically by the database. The categories are allocated as follows:

Compliant	85% or above
Partial compliance	76 to 84%
Minimal compliance	75% or below

Allocation of a compliance level for more than one audit score

- A compliance level can be allocated to an individual clinical area based on the overall scores of several audit tools used *(Table 1)*
- A compliance level can also be allocated to one standard across a Trust e.g. sharps. *(Table 2)*

  The overall level of compliance in these instances can only be compliant **if all overall scores** are 85% or above.

Ward A; Audit of Infection Control Standards	
Environment	86%
Waste	91%
Sharps	80%
Linen	87%
Hand hygiene	91%
Total	435 divided by 5 = 87%

- Overall rating will be PARTIAL COMPLIANCE due to one standard falling below 85%, this being the minimum score for compliant

Table 1. Allocating a level of compliance when using more than one tool in an individual clinical area

Audit of Sharps Standards across Surgical Directorate	
Ward A	85%
Ward B	91%
Ward C	90%
Ward D	96%
Ward E	98%
Total	460 divided by 5 = 92%

- Overall rating would be COMPLIANT as all areas scored above 85%

Table 2. Allocating a level of compliance for audits of sharps standards across a directorate

Weighting criteria

Millward et al (1993) reported that weighting of the criteria did not significantly influence overall scores. Therefore, weighting of criteria has not been attempted.

Feedback of information and report findings

It is advised that the auditor should verbally report any areas of concern and of good practice to the clinician in charge of the area being audited prior to leaving.

A written report should also be developed by the auditor and should be given to the relevant clinical area and manager for action. The report should clearly identify areas requiring action. The manager is responsible for developing an action plan to address the issues identified within a given timescale.

The team may decide to reaudit the ward/department if there are concerns or a minimal compliance rating is observed. A system of feedback to the Infection Control Team on the action taken by wards/departments should be in place. This may involve feedback meetings or the return of completed action plans to the Infection Control Nurse.

INFECTION CONTROL AUDIT TOOLS

Guidelines for using the database

The Audit Tool database can be used to record the data from the audits and calculate scores. Reports can then be generated from this data using preset templates.

Guidelines for the database are available in a separate document accessed from the CD Rom or Infection Control Nurses Association website.

INFECTION CONTROL AUDIT TOOLS

Environment

Standard: The environment will be maintained appropriately to reduce the risk of cross infection

Date..... **Ward**..... **Auditor**.....

(a)	General environment	Yes	No	N/A	Comments
1	Adequate facilities for hand hygiene are available in accordance with national guidance (refer to hand hygiene audit tool for details)				
2	Bed frames are clean and free from dust				
	The following are free of splashes, soil, film, dust, fingerprints, and spillage:				
3a	Lockers				
3b	Chairs and stools				
3c	Tables				
	The following pieces of equipment are in a good state of repair:				
4a	Lockers				
4b	Chairs				
4c	Tables				
5	All chairs and stools in clinical areas are covered in an impermeable material e.g. vinyl				
6	Floors including edges and corners are free of dust and grit.				
7	All high and low surfaces are free from dust and cobwebs				
8	Curtains and blinds are free from stains, dust and cobwebs				
9	There is evidence of an effective pre-planned programme for curtain changes				
10	Fans are clean and free from dust				
11	Air vents are clean and free from excessive dust				
12	Patient call bells are clean and free from debris				
13	Ear phone pads are single use and changed between patients				

	Ward environment cont.	Yes	No	N/A	Comments
14	Reusable ear phones are cleaned between patients				
15	Patient audio visual systems are clean and free of dust and marks				
16	Work station equipment in clinical areas are visibly clean e.g. phones, computer keyboards				
(b)	**Clinical room/clean store**				
17	There is an identified area for the storage of clean and sterile equipment				
18	The area is clean and there are no inappropriate items of equipment				
19	Hand hygiene facilities are available in the clinical room/clean store				
20	Floors including edges and corners are free of dust and grit.				
21	All high and low surfaces are free from dust and cobwebs				
22	Shelves, bench tops and cupboards are clean inside and out, and are free of dust and spillage				
23	All products are stored above floor level				
(c)	**Bathrooms/washrooms**				
24	Bathrooms/washrooms are clean				
25	There is no evidence of inappropriate storage of communal items e.g. single use creams, talcum powder				
26	Bathrooms are not used for equipment storage				
27	Baths, sinks and accessories are clean				
28	Wall tiles and wall fixtures (including soap dispensers and towel holders) are clean and free from mould				
29	Shower curtains and bath mats are free from mould, clean and dry				
30	There is evidence that baths, showers and sinks taken out of use have planned provision for running the water weekly				
31	Appropriate cleaning materials are available for staff to clean the bath between use (and there is information regarding its whereabouts)				
32	Floors including edges and corners are free of dust and grit.				

(d)	Ward environment cont. Toilets	Yes	No	N/A	Comments
33	The toilet, hand wash sink, handrails and surrounding area is clean and free from extraneous items				
34	Floors including edges and corners are free of dust and grit				
35	Hand washing facilities are available including soap and paper towels				
36	There is a facility for sanitary waste disposal				
(e)	**Dirty utility**				
37	A dirty utility is available				
38	A separate sink is available for decontamination of patient equipment				
39	A sluice hopper is available for the disposal of body fluids				
40	The integrity of fixtures and fittings are intact				
41	Separate hand washing facilities are available including soap and paper towels				
42	The room is clean and free from inappropriate items				
43	The floor is clean and free from spillage				
44	Floors including edges and corners are free of dust and grit				
45	Cleaning equipment is colour coded				
46	Mops and buckets are stored according to the local policy				
47	Mop heads are laundered daily or are disposable (single use)				
48	Macerators and bed pan washers are clean and in working order				
49	Shelves and cupboards are clean inside and out and free of dust, litter or stains				
(f)	**Domestic's room**				
50	Floors including edges and corners are free of dust and grit				
51	Equipment used by the domestic staff is clean, well maintained and stored in a locked area				

	Ward environment cont.	Yes	No	N/A	Comments
52	Machines used for floor cleaning are clean and dry				
53	No inappropriate materials or equipment are stored in the domestic's room				
54	Products used for cleaning and disinfection comply with policy and are used at the correct dilution				
55	Diluted products are discarded after 24 hours				
56	Personal protective clothing is available and appropriately used				
57	Information on the colour coding system in use is available in the domestic's room				
58	Hand hygiene facilities are available for domestic use				

INFECTION CONTROL AUDIT TOOLS

Ward /departmental kitchens

Standard: Kitchens will be maintained to reduce the risk of cross infection in accordance with legislation

Date ..... Ward..... Auditor.....

	Ward kitchens	Yes	No	N/A	Comments
1	The floor is free of dust, grit, litter, marks, water or other liquids				
2	Inaccessible areas (edges, corners and around furniture) are free of dust, grit, lint and spots				
3	There are no inappropriate items or equipment in the kitchen				
4	There is no evidence of infestation or animals in the kitchen				
5	Fly screens are in place where required				
6	There is a policy regarding patient and visitor access to the kitchen				
7	Cleaning materials used in the kitchen are identifiable (e.g. colour coded) and are stored separately to other ward cleaning equipment and away from food				
8	Hand wash sink, liquid soap and disposable paper towels are available				
9	Hands are decontaminated and a clean plastic apron is worn to serve patient meals and drinks				
10	Fixtures and fittings are in a good state of repair				
11	Fixtures, surfaces and appliances are free of grease, dirt, dust, deposits, marks, stains and cobwebs				
12	Shelves, cupboards and drawers are clean inside and out and are free from damage, dust litter or stains and in a good state of repair				
13	Kitchen trolleys are clean and in a good state of repair				
14	Refrigerators/freezers are clean and free of ice build up				
15	There is a thermometer in the fridge and freezer				

	Ward kitchens	Yes	No	N/A	Comments
16	There is evidence that daily temperatures are recorded and appropriate action is taken if standards are not met (refrigerator temperature must be less than 8°c or as local policy Freezer temperature –18°c)				
17	Patient and staff food in the fridge is labelled with name and date				
18	There are no drugs/blood for transfusion or pathology specimens in the fridge				
19	Microwaves are visibly clean				
20	Where local policy allows a microwave to be used to heat patient food a temperature probe is used to ensure correct temperature has been reached				
21	Toasters are visibly clean				
22	Milk coolers are visibly clean				
23	Bread is stored in a clean bread bin				
24	All food products are within their expiry date				
25	All opened food is covered or stored in containers				
26	Milk is stored under refrigerator conditions				
27	Water coolers and ice machines for patient use are mains supplied				
28	Water coolers are visibly clean and on a pre-planned maintenance programme				
29	Ice machines are visibly clean and on a pre-planned maintenance programme and cleaning schedule is in place				
30	Scoop used for ice is stored outside of the machine in a lidded container				
31	There is a satisfactory system for cleaning crockery and cutlery such as central wash-up or dishwasher, achieving disinfection temperatures evidenced by a maintenance programme				
32	Disposable paper roll is available for drying equipment and surfaces				
33	Waste bins are foot operated and in good working order				
34	Waste bins are clean and labelled 'for general waste'				

INFECTION CONTROL AUDIT TOOLS

Handling & disposal of linen

Standard: Linen is managed and handled appropriately to prevent cross infection

Date ..... Ward..... Auditor.....

	Ward management of linen	Yes	No	N/A	Comments
1	Clean linen is stored in a clean designated area separate from used linen (not in the sluice or bathroom)				
2	Clean linen is free from stains (randomly check linen)				
3	Clean linen store is clean and free from dust				
4	Clean linen store is free from inappropriate items				
5	Linen is segregated in appropriate colour coded bags according to policy				
6	Bags are less than 2/3 full and are capable of being secured				
7	Bags are stored correctly prior to disposal				
8	Linen skips and the appropriate bags are taken to the area required. (Staff are not carrying soiled linen or leaving it on the floor)				
9	Gloves and apron are worn when handling contaminated linen				
10	Ward based washing machines are only used with the agreement of Infection Control				
11	A washing machine if used is situated in an appropriate designated area				
12	There is written guidance regarding the use of the washing machine				
13	There is evidence that the guidelines are being adhered to (question staff and observe use)				
14	If a washing machine is in use a tumble dryer is also available which is externally exhausted				
15	There is evidence that the washing machine and tumble dryer are on a pre-planned maintenance programme				
16	Hand washing facilities are available in the laundry room				

INFECTION CONTROL AUDIT TOOLS

Waste management

The Waste Officer should complete this management section of the audit tool. However the Infection Control Team may find it of value when problems are identified which require review.

Standard: Waste is disposed of safely without the risk of contamination or injury and in accordance with legislation

Date ..... Ward..... Auditor.....

	Management Contractual arrangements and Documentation	Yes	No	N/A	Comments
1	There is evidence that the waste contractor is registered with a valid licence (check records)				
2	There is an appropriately designated Waste Officer who has undergone training within the last two years (check Job Description and training record)				
3	There are completed transfer notes detailing final disposal details for waste collection over the last 12 months				
4	Completed consignment notes for special/hazardous waste detailing final incineration details for waste collection over the last 12 months are available				
5	There is annual audit monitoring of the contractor. Check for evidence which includes an audit trail of waste from the site to the incinerator				
6	All clinical waste must be transported in UN approved rigid containers				
7	There is a dedicated compound for the safe storage of clinical waste, which is under cover from the elements and free from pests and vermin				
8	All wards/depts should have a clinical waste storage area away from the public				
9	Waste containers are locked and inaccessible to the public				
10	The compound is locked and inaccessible to public				
11	The compound has appropriate signs in the area				
12	Returned containers are clean				
13	Containers are in a good state of repair				

	Waste management cont.	Yes	No	N/A	Comments
14	Special waste is stored separate to other waste				
15	Special waste storage area is clearly labelled				
16	Special waste storage area/ bin is kept locked				
17	Sharps boxes are correctly sealed				
18	Sharps boxes are correctly labelled				
19	Sharps boxes are safely stored				
20	Biological agents are made safe by autoclaving before leaving the laboratory for final disposal				
21	There are no inappropriate items in the household or recycling bins				
22	Spill kit & heavy duty gloves or alternative are available				
23	There is no storage of inappropriate items in the waste compound				
24	The area is clean and tidy (there are cleaning facilities)				
25	Clinical waste sacks are labelled and secured before leaving the ward/dept				
26	A record is kept of the coded tags used for each hospital/ward/practice				
27	There is no storage of waste in corridors, inside/outside the hospital whilst awaiting collection				
28	There is a system for transporting the waste through the hospital (i.e. which avoids manual handling of waste)				
29	Clinical waste is segregated from other waste for transportation				
30	All waste containers used for transport are clean				
31	All waste containers are in a good state of repair				
32	Supplies of mattress bags are available and are used for contaminated mattresses ready for disposal				

INFECTION CONTROL AUDIT TOOLS

Departmental waste handling & disposal

Standard: Waste is disposed of safely without the risk of contamination or injury

Date ..... Ward..... Auditor.....

	Waste handling	Yes	No	N/A	Comments
1	Clinical waste posters and/or a waste policy identifying waste segregation are available in all areas				
2	All bags are tied, labelled and secured before leaving the place of generation (e.g. ward)				
3	All waste bins are enclosed to minimise the risk of injury				
4	All waste bins in the area are foot operated, lidded and in good working order				
5	All waste bins are visibly clean				
6	Supplies of bins labelled as "Clinical", "Household", "Hazardous" or "Glass and Aerosol" are available				
7	Nursing staff are aware of waste segregation procedures (Randomly question a Nurse)				
8	Medical staff are aware of waste segregation procedures (Randomly question a Doctor)				
9	Allied Health Care Professionals (AHP) are aware of waste segregation procedures (Randomly question an AHP)				
10	Ancillary staff are aware of waste segregation procedures (Randomly question an Ancillary Staff member)				
11	Staff are using correct waste bags for household, glass, aerosols, batteries and clinical/hazardous waste (Visibly check bin contents)				
12	All prescription only medicines must be disposed of as hazardous/special waste and the bin labelled accordingly				
13	Glass and aerosol boxes are not used for prescription only medicine bottles				
14	Waste bags are removed at least daily				
15	There is no transfer of clinical waste from one bag to another				

	Waste handling cont.	Yes	No	N/A	Comments
16	There are no overfilled bags. Bags are no more than 2/3 full				
17	Waste bags are not tied onto containers/trolleys				
18	Suction waste must be disposed of in a manner which prevents spillage e.g. canisters/liners are disposed of into rigid leak-proof containers or suction waste has been solidified with a gelling agent				
19	UN approved rigid burn bins are available for disposal of body parts, equipment etc				
20	Staff have attended a training session which includes the correct and safe disposal of clinical waste				
21	Internal storage is inaccessible to the public or locked				
22	Bags are not observed in corridors. They are stored in an appropriate holding area				

INFECTION CONTROL AUDIT TOOLS

Safe handling & disposal of sharps

Standard: Sharps will be handled safely to prevent the risk of needlestick injury

Date ..... Ward..... Auditor.....

(a)	All sharps bin	Yes	No	N/A	Comments
1	The bins in use comply with national standards (UN 3291, BS 7320)				
2	Bins have not been filled above the fill line				
3	Bins are free from protruding sharps				
4	All bins have been assembled correctly				
5	All sharps bins are labelled and signed according to hospital policy				
6	Sharps bins are stored safely, away from the public and out of reach of children				
7	Bins are stored appropriately off the floor				
8	Sharps bins are used in accordance with ergonomic manual handling principles i.e. using brackets				
9	The temporary closure mechanism is used when bins are not in use				
10	Once full the bin aperture is locked				
11	Sealed and locked bins are stored in a locked room, cupboard or container, away from public access				
(b)	**Safe practice**				
12	An empty sharps bin is available on the cardiac arrest trolley				
13	The sharps bin on the cardiac arrest trolley is stored safely				
14	Sharps trays with integral sharps bins are available for use				
15	Sharps trays are compatible with the sharps bins in use				
16	Sharps trays in use are visibly clean				
17	Sharps are disposed of directly into a sharps bin at the point of use (i.e. medicine trolleys and laboratory equipment)				

		Yes	No	N/A	Comments
18	Inappropriate re-sheathing of needles does not occur. Observe or question a member of staff.				
19	Needles and syringes are discarded into a sharps bin as one unit				
(c)	**Policy awareness**				
20	Nurse/clinical manager in charge is aware of the action required following an inoculation injury. They should include immediate first aid, informing the manager, occupational health or A&E, completion of an incident form and describe the action for high risk injuries involving blood borne viruses (Question the nurse/clinical manager in charge)				
21	Medical staff are aware of the action required following an inoculation injury as above (Question a member of medical staff)				
22	Allied Health Care Professionals are aware of the first aid action required following an inoculation injury (Question a member of AHP staff)				
23	Ancillary staff are aware of the first aid action required following an inoculation injury (Question a member of Ancillary staff)				
24	Students are aware of the action required following an inoculation injury. (Question a member of staff)				
25	Staff can identify where the safe handling of sharps policy is located				
26	There is a policy and or poster available for the management of an inoculation injury				

INFECTION CONTROL AUDIT TOOLS

Management of patient equipment (general)

Standard: There is a system in place that ensures as far as reasonably practicable that all reusable equipment is properly decontaminated prior to use and that the risks associated with decontamination facilities and processes are adequately managed
All decontamination must be undertaken in accordance with local policy and manufacturers' instructions

Date ..... Ward..... Auditor.....

	Knowledge of decontamination	Yes	No	N/A	Comments
1	A written comprehensive decontamination policy, approved by the ICT/ICC is available to all staff				
2	Staff are aware of the need to contact infection control for advice when purchasing new equipment				
3	Manufacturers' instructions are available for the decontamination of newly purchased equipment				
4	Staff can state the procedure for decontamination of commonly used patient care equipment e.g. commodes, mattresses, IV stands				
5	Staff can describe the symbol used to indicate single use items				
6	Staff are aware of the need for decontamination and a certificate before equipment is maintained/serviced/ repaired whether within the area or transferred from the area				
7	Local decontamination of reusable surgical instruments is not undertaken in clinical areas. (Check if bench top autoclaves are used. If they are in use refer to the NHS Estates Decontamination Audit Tools.)				
8	Used instruments are safely stored in an appropriate container prior to collection for decontamination in CSSD				
9	The responsibility for the cleaning of dedicated patient equipment is clearly defined, e.g., bed frames, IV stands, commodes				

	The following general equipment is visibly clean, check:	Yes	No	N/A	Comments
10a	IV stands				
10b	IV pumps/syringe drivers				
10c	Cardiac monitors				
10d	Near patient testing equipment e.g. blood gas machines				
10e	Dressing trolleys				
10f	Blood pressure cuffs				
10g	Pillows				
10h	Mattresses				
10i	Cot sides				
10j	Wheelchairs and cushions				
10k	Oxygen saturation probes				
11	Patient wash bowls are decontaminated appropriately between patients and are stored clean dry and inverted				
12	Standard mattress covers are in a good state of repair (Select a bed at random and undertake a mattress test[1])				
13	Pressure relieving mattresses covers are visibly clean (open mattress cover and observe for any staining with bodily fluids, perform mattress test [1])				
14	Pressure relieving mattresses with removable cells are decontaminated between patient uses according to manufacturers' instructions. Infection control must verify that external companies provide appropriate decontamination				
15	Disposable paper towel on couches/trolleys is changed between each patient use				
	Manual handling equipment is managed according to local policy and is visibly clean, check:				
16a	Hoists (check underside)				
16b	Pat slides				
16c	Easy slides				
16d	Hoist slings				
16e	Stand aids				
16f	Handling belts				

	Resuscitation equipment	Yes	No	N/A	Comments
17	Items on the resuscitation trolley/resuscitaire are in date and visibly clean (free from dust and body fluids)				
18	Single use ambu bags are used or filters to ambu bags are changed between patient use				
19	Laryngoscope covers or blades are single use alternatively the blades are sent back to CSSD for decontamination between each patient use				
20	Laryngoscope handles if not disposable are decontaminated following each use				
	Oxygen and suction equipment				
21	Suction equipment is clean and dry (including canister)				
22	Catheter is not attached (clean cover acceptable in some emergency situations)				
23	Disposable suction liners are used and changed between patient use				
	Respiratory equipment is changed according to local policy and manufacturers' instructions, check				
24a	Oxygen masks/nasal cannulae				
24b	Wall humidifiers				
24c	Nebulisers				
	Ventilator equipment				
25	Humidifiers are managed according to manufacturers' instructions and local policy				
26	Ventilator tubing is protected by filters – expiratory				
27	Ventilator is protected by a filter – inspiratory				
28	Ventilator equipment is on a pre- planned maintenance programme				
29	Ventilator equipment is visibly clean				
	Sanitary equipment				
30	Catheter stands are available clean and in a good state of repair				
31	Appropriate facilities are available and in working order, to ensure correct disposal (or disinfection) of bedpans and urinals e.g. macerator or washer disinfector				
32	Washer/disinfectors are tested according to HTM 2030 standards (check results with estates)				
33	Bedpans/potties, slipper pans/bedpan holders/urinals are visibly clean				

		Yes	No	N/A	Comments
34	Bedpans/bedpan holders/urinals are stored inverted on racks				
35	Disposable liners are used in all bedpan bases (including slipper pans) where macerators are in use				
36	If reusable jugs are in use for emptying catheter bags (i.e. during irrigation) appropriate washing and disinfection facilities are available				
37	Raised toilet seats are clean and ready for use				
38	Commodes are clean and ready for use (check underside)				
39	Commodes are in a good state of repair				

[1] Mattress Test: examine the mattress – there should be no staining visible and the mattress should be impermeable to fluids. (Place paper beneath cover and press down for 10 seconds. Pour 30mls of water onto area and press for 30 seconds. Remove and examine paper towel for signs of leakage beneath cover)

INFECTION CONTROL AUDIT TOOLS

Management of patient equipment (specialist areas)

Standard: There is a system in place that ensures as far as reasonably practicable that all reusable patient equipment is properly decontaminated prior to use and that the risks associated with decontamination facilities and processes are adequately managed

All decontamination must be undertaken in accordance with local policy and manufacturers' instructions

Date ..... Ward..... Auditor.....

	Physiotherapy	Yes	No	N/A	Comments
1	Tilt tables are cleaned between each patient use				
2	Cricket bat splints are laundered centrally between each patient use				
3	Bradford slings are single patient use or centrally laundered between each patient use				
4	Supporting straps for Continuous Passive Movement (CPM) machines are visibly clean				
5	CPM Support straps are wipeable or returned to be laundered centrally				
	Reusable physiotherapy equipment is decontaminated between each use check:				
6a	Cryo cuffs and canisters				
6b	Ultra sonic probes				
6c	Electrode pads for Trans Electronic Nerve Stimulator (TENS) machine (or single use products are used)				
	Gym equipment is visibly clean check:				
7a	Wobble boards				
7b	Inner range quad blocks				
7c	Balls				
7d	Exercise bikes				
7e	Pulleys				
7f	Hoops				
7g	Theraband				
7h	Other				

	Single use respiratory equipment is not reused, check:	Yes	No	N/A	Comments
8a	Respiratory flutter exerciser				
8b	Bird circuit				
8c	Positive and Expiratory Pressure (PEP) masks				
8d	Non-Invasive Positive Pressure Ventilation (NIPV) masks				
8e	Vitalograph mouthpieces				
8f	Peak flow meter mouthpieces				
	Respiratory equipment is visibly clean check:				
9a	Head straps for NIPV				
9b	Vitalograph machines				
10	Vitalograph is on an annual maintenance programme				
	Continence aids				
11	Periform electrodes are single patient use				
12	Written instructions are provided for patients for cleaning the equipment within their own home				
	The following continence equipment is single use or reusable and centrally decontaminated				
13a	Electro Muscle Graph electrodes				
13b	Vaginal pressure electrodes				
13c	Perineometers				
13d	All probes				
	Occupational therapy				
14	Guidelines for exclusion of patients are available for use of the wax bath				
15	Wax is heated in a separate boiler to ensure decontamination prior to it's return to the wax bath				
16	Patients' hands are washed prior to use of wax bath				
17	The wax bath is on a six monthly maintenance programme				
18	The water from the splint bath is drained daily				
19	The splint bath is cleaned and dried daily				
20	The splint bath is on a six monthly maintenance programme				

	Manual dexterity	Yes	No	N/A	Comments
21	A disposable cover is used with the Continuous Passive Movement machine or reusable covers are laundered (check if visibly clean)				
	Patients' hands are washed and lesions are covered prior to handling items to assess manual dexterity. Check practices with:				
22a	Therapeutic putty				
22b	Lentils, velcro				
23	Equipment for strength is visibly clean				
	Loan equipment				
24	There is a policy for the decontamination of loan equipment in-line with manufacturers instructions				
	Equipment for loan is visibly clean, check:				
25a	Toilet frames				
25b	Commodes				
25c	Bath equipment				
25d	Helping hands				
26	There are separate storage areas for clean and dirty equipment				
27	During transportation clean and dirty equipment are segregated				
	Dermatology				
28	Biopsy sets are sterilised centrally				
	Single use dermatology equipment is not reused, check:				
29a	Scalpel blades				
29b	Punch biopsies				
29c	Curettes				
29d	Hyphenator tips				
29e	Cautering probes				
29f	UV shields				
	Reusable equipment is visibly clean and decontaminated between each use. Check the following:				
30a	Cautering probe handles				
30b	Cryotherapy canisters				
30c	UV machines				

		Yes	No	N/A	Comments
31	Disposable towel is used to protect foot of UV machine and is changed between each patient				
32	Iointophoresis machine is emptied and decontaminated in accordance with local policy and manufacturers' instructions between each patient use				
33	Creams are single patient use or dispensed in a manner to avoid contamination				
	Imaging				
34	Ultra sonic probes are decontaminated according to local policy and manufacturers' instructions between each patient use				
35	Gels are single patient use or dispensed in a manner to avoid contamination				
36	Sand bags are intact and covered				
37	Sand bags are visibly clean				
38	Foam supports are covered with wipeable covers				
39	X-ray cassettes are decontaminated according to local policy and manufacturers' instructions between patient use				
40	Mobile X-ray machines are visibly clean				
41	Scanners are visibly clean				
	Outpatient urodynamics **Single use urodynamic equipment is not reused, check:**				
42a	Transducers				
42b	Mediplus set guard				
42c	Cystometry extension tubing				
42d	Domes for transducers				
42e	Rectal lines				
42f	Intravisceral lines				
43	Infusion fluid is changed between each use				

INFECTION CONTROL AUDIT TOOLS

Hand hygiene

Standard: Hands will be decontaminated correctly and in a timely manner using a cleansing agent, at the facilities available to reduce the risk of cross infection

Date ..... Ward..... Auditor.....

		Yes	No	N/A	Comments
1	Liquid soap is available at all hand washing sinks				
2	Liquid soap must be single use cartridge dispensers				
3	Dispenser nozzles are visibly clean				
4	Soft absorbent paper towels are available at all hand washing sinks				
5	Wall mounted or pump dispenser hand cream is available for use				
6	Antibacterial solutions/scrubs are not used for social hand washing				
7	Antibacterial solutions are used for invasive procedures and surgical scrubs				
8	There are no nail brushes on hand wash sinks in clinical areas				
9	The hand wash sinks are free from used equipment and inappropriate items				
10	Hand wash sinks are dedicated for that purpose				
11	Hand wash sinks conform to HBN 95. Check that they do not have plugs, overflows or that the water jet does not flow directly into the plughole				
12	There are sufficient numbers of hand wash sinks available in accordance with national and local guidance (e.g. one sink per four beds in acute care settings)				
13	Access to hand wash sinks is clear				
14	Hand washing facilities are clean and intact. (Check sinks, taps, splash backs)				
15	There is appropriate temperature control to provide suitable hand wash water at all sinks				
16	Elbow operated or automated taps are available in hand wash sinks in clinical areas				

	Alcohol hand rub is available for use throughout clinical areas, check:	Yes	No	N/A	Comments
17a	Entrance/exits to wards and departments				
17b	Directly accessible at the point of care (e.g. one dispenser per bed/per four beds as per local and national standards)				
17c	Portable for clinical procedures				
18	No wrist watches/stoned rings or other wrist jewellery are worn by staff carrying out patient care				
19	Staff nails are short, clean and free from nail varnish				
20	Posters promoting hand decontamination are available and displayed in areas visible to staff before and after patient contact				
21	Staff have received training in hand hygiene procedures within the last year. (Ask a member of medical, nursing, ancillary and AHP staff)				
22	Patients' are offered hand hygiene facilities after using the toilet/commode/bedpan e.g. hand wipe				
23	Patients' are offered hand hygiene facilities prior to meals				
	Observational audit				
24	Nursing staff use the correct procedure for decontaminating hands (observe practice)				
25	Medical staff use the correct procedure for decontaminating hands (observe practice)				
26	Allied Health Care Professionals use the correct procedure for decontam-inating hands (observe practice)				
27	Ancillary staff use the correct procedure for decontaminating hands (observe practice)				
28	Nursing staff can indicate when it is appropriate to use alcohol rub				
29	Medical staff can indicate when it is appropriate to use alcohol rub				
30	Allied Health Care Professionals can indicate when it is appropriate to use alcohol rub				
31	Ancillary Staff can indicate when it is appropriate to use alcohol rub				

	Hand hygiene is performed in the following circumstances: (observe practices)	Yes	No	N/A	Comments
32a	Following patient contact				
32b	After removal of gloves				
32c	Prior to clinical procedures				
32d	After a clinical procedure				
32e	Prior to handling food				
32f	After handling contaminated items				
32g	After leaving an isolation room				

INFECTION CONTROL AUDIT TOOLS

Clinical practices

The use of personal protective equipment

Standard: Clinical practices will be based on best practice and reflect infection control guidance to reduce the risk of cross infection to patients' whilst providing appropriate protection to staff

NB: This section should be undertaken over a period of time to allow for the observation of as many practice elements as possible

Date ..... Ward..... Auditor.....

		Yes	No	N/A	Comments
1	Sterile and non-sterile gloves (powder free) conforming to European Community (EC) standards and are fit for purpose (no splitting etc) are available in all clinical areas				
2	Alternatives to natural rubber latex (NRL) gloves are available for use by practitioners and patients with NRL sensitivity				
3	Powdered or polythene gloves are not in use in clinical areas				
	Gloves are observed to be worn for:				
4a	Invasive procedures				
4b	Contact with sterile sites				
4c	Contact with mucous membranes				
4d	All activities that have been assessed as carrying a risk of exposure to body fluids				
5	Gloves are worn as single use items				
6	Gloves are worn immediately before an episode of patient contact or treatment, when appropriate, and removed as soon as the activity is completed				
7	Hands are decontaminated following the removal of gloves				
8	Disposable plastic aprons are worn when there is a risk that clothing or uniform may become exposed to body fluids or become wet				
9	Plastic aprons are worn as single-use items for each clinical procedure or episode of patient care				

		Yes	No	N/A	Comments
10	Full body, fluid repellent gowns are worn where there is a risk of extensive splashing of body fluids onto the skin of health care practitioners				
11	Facemasks and eye protection are worn where there is a risk of any body fluids splashing into the face and eyes				
12	Respiratory protective equipment is available for use when clinically indicated e.g. particulate filtration masks for open pulmonary tuberculosis				

INFECTION CONTROL AUDIT TOOLS

Clinical practices

Short term urethral catheter management

Standard: Clinical practices will be based on best practice and reflect infection control guidance to reduce the risk of cross infection to patients' whilst providing appropriate protection to staff

NB: This section should be undertaken over a period of time to allow for the observation of as many practice elements as possible

Date ..... Ward..... Auditor.....

		Yes	No	N/A	Comments
1.	Urinary catheters and drainage bags are stored in an appropriate area (not in the sluice)				
2	Indwelling urethral catheters are only inserted after considering alternative methods of management (reason for insertion should be documented)				
3	There is evidence that the patient's clinical need for continuing catheterisation is reviewed and documented				
4	Catheterisation is performed aseptically (ask a member of staff to describe the procedure)				
5	A single-use anaesthetic lubricant is used for insertion for male and females				
6	Indwelling urethral catheters are connected to a sterile closed urinary drainage system				
7	Catheter bags are positioned below the level of the bladder but above floor level				
8	Catheters are secured to prevent trauma				
9	The connection between the catheter and the urinary drainage system is not broken except for good clinical reasons, e.g., changing the bag in line with the manufacturers' recommendations				
10	Hand hygiene is performed before manipulating a patient's catheter				
11	When emptying the urinary drainage bag clean non-sterile disposable gloves and a plastic apron are worn				
12	Hand hygiene is performed after removal of gloves				

			Yes	No	N/A	Comments
13	When emptying the urinary drainage bag, a separate and clean container is used for each patient and contact between the urinary drainage tap and container is avoided					
14	Night bags are single-use					
15	Meatal cleanliness is maintained only as part of routine personal hygiene					
16	Catheter specimens of urine (CSU) are only taken when clinically indicated (e.g. patient systemically unwell), or for screening for antimicrobial resistant organisms if part of local protocol					
17	CSU specimens are taken aseptically					
18	Bladder irrigation, instillation and washout are not used for the prevention or treatment of catheter-associated infection					

INFECTION CONTROL AUDIT TOOL

Clinical practices

Enteral feeding

Standard: Clinical practices will be based on best practice and reflect infection control guidance to reduce the risk of cross infection to patients' whilst providing appropriate protection to staff

NB: This section should be undertaken over a period of time to allow for the observation of as many practice elements as possible

Date ..... Ward..... Auditor.....

		Yes	No	N/A	Comments
1	The feed is stored according to manufacturers' instruction				
2	Hand hygiene is performed prior to preparing the feed and/or any manipulation of the enteral feeding system				
3	A non-touch technique is used when connecting the giving set to the enteral tube				
4	The feeding tube is flushed with sterile water				
5	30mls of sterile water is used to flush the tube prior and post administration of drugs and following discontinuation of the feed (unless contraindicated)				
6	Sterile water is single patient use				
7	The sterile water is labelled with patient details, the time and date opened and is discarded after 24 hours				
8	A sterile syringe is used each time water is withdrawn				
9	Sterile ready to use feeds are used whenever possible				
10	Single pre-packaged feeds are discontinued within 24 hours				
11	Single feeds that are not pre-packaged are discontinued within four hours				
12	The feed is within expiry date				
13	The feed is labelled with patient details, the time and date opened				
14	Administration sets are changed as per manufacturers' guidelines or within 24 hours				

		Yes	No	N/A	Comments
15	Single use equipment including syringes are not reused				
16	Aseptic technique is used for the care of the insertion site of PEGs for the first 48 hours				
17	Sterile dressings are used for PEG sites for the first 48 hours				

INFECTION CONTROL AUDIT TOOLS

Clinical practices

Care of peripheral intravenous lines

Standard: Clinical practices will be based on best practice and reflect infection control guidance to reduce the risk of cross infection to patients' whilst providing appropriate protection to staff

NB: This section should be undertaken over a period of time to allow for the observation of as many practice elements as possible

Date ..... Ward..... Auditor.....

			Yes	No	N/A	Comments
1	Insertion of intravascular devices is performed aseptically with hand decontamination undertaken on all occasions					
2	Before insertion of a device the skin is disinfected with a suitable preparation (e.g. alcohol) and is allowed to dry					
3	Cannulae dressings are changed when they become damp, loose or soiled					
4	Insertion details relating to the cannulae have been documented					
5	Sterile dressings are applied to cover cannulae sites					
6	Cannulae and lines should be labelled with a date or a suitable documentation system is in place to enable intravenous tubing and associated connections to be replaced according to local policy (e.g. 72 hours)					
7	Injection ports and catheter hubs are disinfected according to local policy and manufacturers' instructions before and after using them to access the system					
8	If blood or lipid emulsions are administered, sets are changed every 24 hours					
9	Hands are decontaminated prior to handling or manipulating intravenous lines					
10	Intravenous fluid bags are single patient use					
11	Intravenous giving set lines used for intermittent infusions are discarded once disconnected					

INFECTION CONTROL AUDIT TOOLS

Clinical practices

Care of short term non-tunnelled central venous catheters

Standard: Clinical practices will be based on best practice and reflect infection control guidance to reduce the risk of cross infection to patients' whilst providing appropriate protection to staff

NB: This section should be undertaken over a period of time to allow for the observation of as many practice elements as possible

Date ..... Ward..... Auditor.....

		Yes	No	N/A	Comments
1	Sterile gloves, gowns and a large sterile drape are used for the insertion of central venous catheters				
2	Prior to insertion an alcoholic chlorhexidine gluconate solution is used to disinfect the skin and is allowed to dry				
3	Insertion details relating to the catheter have been documented				
4	Daily inspections of the catheter site are undertaken and documented				
5	A single-lumen catheter is used unless multiple ports are essential for the management of the patient				
6	A single-lumen catheter or a dedicated lumen of a multi-lumen catheter is used only for total parenteral nutrition when administered				
7	Injection ports and catheter hubs are disinfected according to local policy and manufacturers' instructions before and after using them to access the system				
8	Skin disinfection is used for cleaning the catheter site during dressing changes in-line with local policy and national guidelines				
9	A sterile transparent dressing or sterile gauze is used to cover the catheter insertion site. If used, gauze is replaced whenever the dressing becomes damp, loosened, soiled, or when inspection of the insertion line is necessary				
10	Lines should be labelled with a date or a suitable documentation system is in place to enable intravenous tubing and associated connections to be replaced according to local policy (e.g. 72 hours)				

		Yes	No	N/A	Comments
11	Intravenous tubing used to administer blood, blood products, or lipid emulsions are replaced at the end of the infusion or within 24 hours of initiating the infusion				

INFECTION CONTROL AUDIT TOOLS

Clinical practices

Isolation precautions

Standard: Clinical practices will be based on best practice and reflect infection control guidance to reduce the risk of cross infection to patients' whilst providing appropriate protection to staff
NB: This section should be undertaken over a period of time to allow for the observation of as many practice elements as possible

Date ..... Ward..... Auditor.....

		Yes	No	N/A	Comments
1	Isolation facilities are available in inpatient areas				
2	Patients requiring isolation facilities due to infection have access to them				
3	Where a patient is being isolated for infection control reasons, the precautions are appropriate and according to local policy				
4	Protective clothing is readily available upon entering the isolation room				
5	Hand hygiene facilities are available, accessible and clean within the room				
6	No inappropriate or unnecessary items are stored in the isolation room				
7	Where a patient is being isolated for infection control reasons, the patient is aware of the need or rationale for this				
8	Clear instructions for staff and visitors are in place when a patient is in isolation. (e.g. confidential notice on the door)				
9	Appropriate information leaflets are available to patients for common infections e.g. MRSA, *C.difficile*				
10	Visitors are advised that they do not routinely need to wear protective clothing				
11	Reusable equipment which may become readily contaminated is dedicated for the patients use only (e.g. commode, hoist, sling)				
12	Used linen, waste and crockery have been removed from the room in a timely manner				

		Yes	No	N/A	Comments
13	Housekeeping staff are aware of the local policy and procedures for cleaning isolation rooms				
14	Separate colour coded cleaning equipment is in use for isolation facilities				
15	Isolation precautions are discontinued when no longer necessary				

AUDIT OF INFECTION CONTROL STANDARDS

Summary feedback report

Sheet one

HOSPITAL		**DATE**	
WARD/DEPT		**AUDITOR/S**	
Audit tool			
Standard audited		**% Score for compliance**	
Level of compliance			

Evidence of quality care and best practice

Summary of areas of non-compliance

INFECTION CONTROL AUDIT

Feedback report to departmental staff

Sheet two

DATE	DEPARTMENT	LEVEL OF COMPLIANCE
AUDIT TOOL		

Areas of non-compliance The following criteria were not met and a negative score was recorded	Target date for review	Action taken	Signed
1.			
2.			
3.			
4.			
5.			

REPORT TEMPLATE

Single audit tool report for several areas

1.0 Introduction
(Free text)

2.0 Overall score and level of compliance for the audits undertaken
(Data available from the database)

Figure 1 Overall compliance to the standard per ward/clinical area
(This is optional for a user generated chart)

3.0 Percentage compliance to each of the criteria scoring 85% (adjustable) or above
(Data available from the database)

4.0 Percentage compliance to each of the criteria scoring below 85%
(adjustable)

5.0 Main findings
(free text)

6.0 Recommendations for action
(free text)

7.0 Conclusions
(free text)

REPORT TEMPLATE

All audits completed in a given time period

1.0 Introduction
(Free text)

2.0 Overall score for each of the audit tools used
(data available from the database)

Figure one Overall compliance to each of the standards (audit tools)
(This is optional for a user-generated chart)

3.0 Main findings
(free text)

4.0 Recommendations for action
(free text)

5.0 Conclusions
(Free Text)

6.1 Ward environment

Ayliffe, G.A.J. Collins, B.J. Taylor, L.J. (1990) *Hospital Acquired Infection – Principles and Prevention*. (2nd Edition) Wright, London.

Chadwick, C. Oppenheim, B.A. (1996) Cleaning as a cost effective method of infection control. Lancet. **347**: 1176.

Dancer, S.J. (1999) Mopping up hospital infection. *Journal of Hospital Infection*. **43**: 85–100.

Hempshall, P, Thomson, M. (1998) Grime watch. *Nursing Times*. **(94)** 16: 37, 66–69.

Infection Control Nurses Association/Association of Domestic Management (1999) *Standards for Environmental Cleanliness in Hospitals*. ICNA, Bathgate, West Lothian. UK

National Audit Office (1999) *The Management and Control of Hospital-Acquired Infection in Acute NHS Trusts in England*. HC 230 Session (1999–00). The Stationery Office, London.

NHS Estates (2001) *National standards of cleanliness for the NHS*. NHS Estates, Leeds. UK

NHS Estates (2002) *Guidelines on infection control and the built environment*. NHS Estates, Leeds. UK

NHS Estates (2002) *Standards for environmental cleanliness in hospitals*. The Stationery Office, London.

Pratt, R.J. Pellowe, C. Loveday, H.P. Robinson, N. Smith, G.W. and the *epic* guideline development team (2001) The epic Project: Developing National Evidence-based Guidelines for Preventing Hospital associated Infections. Department of Health. *Journal of Hospital Infection*. 47, Supplement. S1-S82.

Welsh Assembly Government (2003). *National Standards of Cleanliness for the NHS in Wales*. Welsh Assembly Government, Cardiff. UK

Wilson, J. (2001) *Infection Control in Clinical Practice*. (2nd Edition) Bailliere Tindall, London.

6.2 Ward/department kitchen

Barrie, D. (1996) The provision of food and catering services in hospital. *Journal of Hospital Infection*. **33**:13-33.

Department of Health 1990 *National Food safety Act* (1990) HMSO London

Department of Health (1994) *Management of Food Services and Food Hygiene in the National Health Service*. National Health Service Management Executive. HMSO, London.

NHS Executive (1996a) *Hospital Catering: Delivering a Quality Service*. Department of Health, Wetherby. UK

NHS Executive (1996b) *Management of Food Hygiene and Food Services in the National Health Service*. HSG (96)20. Department of Health, Wetherby. UK

NHS Executive (1999) *Control Assurance Standard: Catering and Food Hygiene*. Department of Health, Wetherby. UK

6.3 Handling & disposal of linen

Department of Health (1991) *Decontamination of equipment, linen or other surfaces contaminated with Hepatitis B and/or human immunodeficiency viruses*. Microbiology Advisory Committee HC (91) 33. Department of Health, London.

Department of Health NHS Executive (1995) *Hospital Laundry Arrangements for Used and Infected Linen*. HSG (95) 18. Department of Health, Wetherby. UK

6.4 Waste management, handling & disposal

Department of the Environment (1990) *Environmental Protection Act*. HMSO, London.

Department of the Environment (1991) *Waste Management – a code of practice - Duty of Care Regulations*. HMSO, London.

Department of the Environment (1994) *Waste Management Licensing Regulations* HMSO, London.

Department of Health Safety Action Bulletin (1993) *Use and Management of Sharps Containers*. (SAB) (93) 53. Department of Health, Wetherby UK

European Waste Catalogue *EWC 2002 Commission Decision* 2000/532/EC, amended Commission Decision 2001/118/EC, 2001/119/EC, 2001/573/EC

Health and Safety Executive (1974) *Health and Safety at Work Act* HMSO, London.

Health and Safety Executive (1991) *Safe working and the prevention of Infection in Clinical Laboratories*. Health Service Advisory Committee HMSO, London.

Health and Safety Executive (1996) *The Carriage of Dangerous Goods (Classification, Packaging and Labelling) and use of transportable pressure receptacles Regulations* HMSO, London.

Health and Safety Executive (1999) *Safe Disposal of Clinical Waste*. Health Services Advisory Commission HSE Books Sudbury. UK

NHS Estates (1995) *Safe Disposal of Clinical Waste*. Health Service Guidance notes Whole Hospital Policy Guidance HMSO London

NHS Executive Health Service guidance (1994): *Clinical Waste Management (HSG (94) 50)* Heywood, UK

The Hazardous Waste Directive *HWD Council Directive* 91/689/EC

UK Health Departments (1998) *Guidance for Clinical Health Care Workers: Protection against Infection with Blood-Borne viruses. Recommendations of the Expert Advisory Group on AIDS and Hepatitis*. Department of Health, Wetherby. UK

6.5 Safe handling & disposal of sharps

Department of the Environment (1990) *Environmental Protection Act* HMSO, London.

Department of the Environment (1991) *Environmental Protection Act Duty of Care Regulations*. HMSO, London.

Department of the Environment (1994) *Waste Management Licensing Regulations* HMSO, London.

Department of the Environment (1996 Amended 2001) *Special Waste Regulations* Health and Safety Advisory Committee The Stationery Office, London.

Department of Health Safety Action Bulletin (1993) *Use and Management of Sharps Containers*. (SAB) (93) 53. Department of Health, Wetherby, UK

Department of Health (1997) *Healthcare waste management – Segregation of waste*. Health Technical Memorandum. (HTM 2065). Department of Health, London

Health and Safety Executive (1974) *Health and Safety at Work Act* HMSO, London.

Health and Safety Executive (1991) *Safe working and the prevention of Infection in Clinical Laboratories*. Health Services Advisory Committee HMSO, London.

Health and Safety Executive *The Carriage of Dangerous Goods (Classification, Packaging and Labelling) and use of transportable pressure receptacles Regulations* (1996) HMSO, London.

Health and Safety Executive (1999) *Safe Disposal of Clinical Waste*. Health Services Advisory Commission HSE Books Sudbury. UK

Health and Safety Executive *Safe Disposal of Clinical Waste* Health and Safety Advisory Committee (1999) The Stationery Office, Norwich, UK

Infection Control Nurses Association (2003) *Reducing Sharps Injury Prevention and Risk Management*. ICNA, Bathgate, West Lothian. UK

Medical Device Agency (2001a) NHS Management Executive *The Safe Use and Disposal of Sharps*. MDA SN 2001 (19) MDA. London

Pratt, R.J. Pellowe, C. Loveday, H.P. Robinson, N. Smith, G.W. and the epic guideline development team (2001) The epic Project: Developing National Evidence-based Guidelines for Preventing Hospital associated Infections. Department of Health. *Journal of Hospital Infection*. 47, Supplement. S1-S82.

UK Health Departments (1998) *Guidance for Clinical Health Care Workers: Protection against Infection with blood-borne viruses. Recommendations of the Expert Advisory Group on AIDS and Hepatitis*. The Stationery Office, London.

6.6 Decontamination

Adams, D. (2000) Rigid Sigmoidoscope Insufflator bulbs: a risk of infection? *British Journal of Infection Control*. **1**(4): 11-12.

Association of Anaesthetists of Great Britain and Northern Ireland (2002) *Infection Control in Anaesthesia*. London.

Ayliffe, G.A.J. Coates, D. Hoffman, P.N. (1995) *Chemical disinfection in hospitals*. (2nd Edition). Public Health Laboratory Service, London.

Ayliffe, G.A.J. Lowbury, E.J.L. Geddes, A.M. Williams, J.D. (2000). *Control of Hospital Infection*. (4th Edition). Arnold, London.

Barnett, J. Thomlinson, D. Perry, C. Marshall, R. MacGowan, A.P. (1999) An audit of the use of manual handling equipment and their microbiological flora - implications for infection control. *Journal of Hospital Infection*. **43**: 309-313.

Boden, M. (1999) Contamination in Moving and Handling equipment. *Professional Nurse*. **14**(7): 484-487.

British Standard Institution (2002) *Graphical symbols for use in labelling devices* BS EN980 BSI London

Cottenden, A.N. Moore, K.N. Fader, M. Cremer, A.W.F. (1999) Is there a risk of cross-infection from laundered reusable bedpans? *British Journal of Nursing*. **8**(17): 1161-1163.

Creamer, E. (1993) Decontamination quality: suction equipment. *Journal of Infection Control Nursing Times* **89**, 65-68.

Department of Health (1993) *Sterilization, Disinfection and Cleaning of medical equipment: Guidance on decontamination* from the Microbiology Advisory Committee to the Department of Health Medical Devices Directorate Part 1&2 London. Department of Health, London.

Department of Health (2001) *Decontamination Programme Technical Manual*. NHS Estates, Leeds. UK

Dodd, M.E. (1996) Nebuliser therapy: what nurses and patients need to know. Nursing Standard . **10 31** 39-42.

Edwards, A. (2001) Decontamination of nebulisers. *Nursing Times Plus*. **97**:7.

Finn, L. (2000). In McCulloch, J. (2000) *Decontamination in Infection Control Science management and practice*. Whurr Publishers, London.

King, S. (1998) Decontamination of equipment and the environment. *Nursing Standard*. **12**(52): 57-60, 63-64.

King, T.A. Cooke, R.P.D. (2001) Developing an infection control policy for anaesthetic equipment. *Journal of Hospital Infection*. **47**: 257-261.

Medical Devices Agency (1995a) *The Re-use of Medical Devices: for Single Use Only*. MDA DB 9501. Department of Health, London.

Medical Devices Agency (1995c) *Symbols used on medical devices and their packaging*. MDA DB 9505. Department of Health, London.

Medical Devices Agency (1996) *Need for decontamination of blood gas analysers used in near-patient testing*. Safety notice MDA SN 9612. Department of Health, London.

Medical Devices Agency (1996) *Sterilization, disinfection and cleaning of medical devices and equipment*. Guidance on decontamination from the Microbiology Advisory Committee to Department of Health, London.

Medical Devices Agency (1999) *Single patient use of opthalmic medical devices: implications for clinical practice*. MDA AN (04). Department of Health, London.

Medical Devices Agency (2000) *Single-use Medical Devices: Implications and Consequences of re-use*. MDA DB2000 (04). Department of Health, London.

Medical Devices Agency (2000) *Medical Devices and equipment management and maintenance provision*. MDA DB (02). Department of Health, London.

Medical Devices Agency (2003) *Management of medical devices prior to repair, service and investigation* MDA DB (05) Department of Health, London.

NHS Estates (2001) *A protocol for the local decontamination of surgical instruments*. The Stationery Office, Leeds, UK

NHS Estates (1997) *Washer Disinfectors: design considerations*. Health Technical Memorandum 2030. NHS Estates, Norwich. UK

NHS Executive (1999) *Variant Creutzfeldt-Jakob Disease: Minimising the risk of transmission*. (HSC) 1999/178. Department of Health, London.

NHS Executive (1999b) Controls Assurance in Infection Control. Decontamination of medical devices. (HSC) 1999/179. Department of Health, London.

O'Connor, H. (2000) Decontaminating beds and mattresses. *Nursing Times Plus*. **96**: 16.

Rutala, W. (1996) APIC guidelines for selection and use of disinfectants. *American Journal of Infection Control*. **2**4(4): 311-342.

Safety Action Bulletin (1994b) *Instruments and appliances used in the vagina and cervix: recommended methods for decontamination*. SAB (94) 22 Department of Health, London.

Satter, S.A. Tetro, J. Springthorpe, V.S. Giulivi, A. (2001) Preventing the spread of hepatitis B and C viruses: Where are germicides relevant? *American Journal of Infection Control*. **29**(3):187-197.

Wilson, J. (2001) *Infection Control in Clinical Practice*. (2nd Edition). Baillière Tindall, Edinburgh. UK

Wright, I.M.R. Orr, H. Porter, C. (1995) Stethoscope contamination in neonatal intensive care unit. *Journal of Hospital Infection*. **29:** 65-68.

Yardy, G.W. Cox, R.A. (2001) An outbreak of Pseudomonas aeruginosa infection associated with contaminated urodynamic equipment. *Journal of Hospital Infection*. **47**: 60-63.

6.7 Hand hygiene

Bissett, L. (2002) Can alcohol hand rubs increase compliance with hand hygiene? *British Journal of Nursing*. **11**(16): 1072-1077.

Boyce, J.M. Pittet, D. (2002) Guidelines for Hand Hygiene in Health Care Settings: Recommendations of the Health Care Infection Control Practitioners Advisory Committee and the HICPAC/SHEA/APIC/IDSA H Hygiene Task Force. *Morbidity and Mortality Weekly Report*. **51**: 1-44.

Colombo, C. Giger, H. Grote, J. Deplazes, C. Pletscher, W. Luthi, R. Ruef C (2002) Impact of teaching interventions on nurse compliance with hand disinfection. *Journal of Hospital Infection*. **51**: 69-72.

Girou, E. Loyeau, S. Legrand, P. Oppein, F. Brun-Buisson C (2002) Efficacy of handrubbing with alcohol based solution versus standard hand washing with antiseptic soap: randomised clinical trial. *British Medical Journal*. **325**: 362.

Gould, D. (2000) Hand hygiene research: past achievements and future challenges. *British Journal of Infection Control*. **1**(3): 17-22.

Gould, D. (2000) Hand decontamination. *Nursing Standard*. **15** (6): 5-50.

Gould, D. (2002) Hand decontamination. *Nursing Times*. **98**(46): 48-49.

Gould, D. (2002) Preventing cross-infection. *Nursing Times*. **98**(46): 50-51.

Gould, D. (2002) Health-related infection and hand hygiene. Part 1. *Nursing Times*. **98**(38): 48-51.

Harris, A.D. Samore, M.H. Nafziger, R. Di Rosario, K. Roghmann, M.C. Carmeli, Y. (2000) A survey on hand washing practices and opinions of healthcare workers *Journal of Hospital Infection*. **45**: 318-321.

Infection Control Nurses Association (2002) *Hand Decontamination Guidelines*. ICNA, Bathgate, West Lothian. UK

Jeanes, A. (2003) Improving hand hygiene compliance. *Nursing Times*. **99**(7): 47-49.

Kerr, J. (1998) Handwashing. *Nursing Standard*. **12**(51): 35-39.

Larson, E.L. (1995) APIC Guidelines for Hand washing and Hand Antisepsis in Health care settings. *American Journal of Infection Control*. **23**: 251-269.

Lucet, J-C. Rigaud, M-P. Mentre, F. Kassis, N. Deblangy, C. Andremont, A. Bouvet, E. (2002) Hand contamination before and after different hand hygiene techniques: a randomised clinical trial. *Journal of Hospital Infection*. **50**: 276-280.

Paulson, D.S. Fendler, E. Dolan, M. Williams, R.A. (1999) A close look at alcohol gel as an antimicrobial sanitising agent. *American Journal of Infection Control*. **27**(4): 332-338.

Pittet, D. (2001) Compliance with hand disinfection and its impact on hospital acquired infections. *Journal of Hospital Infection*. **48** Supplement A, S40-S46.

Pratt, R.J. Pellowe, C. Loveday, H.P. Robinson, N. Smith, G.W. and the epic guideline development team (2001) The epic Project: Developing National Evidence-based Guidelines for Preventing Healthcare associated Infections. *Journal of Hospital Infection*. **47**, Supplement. S1-S82.

Naikoba, S. Hayward, A. (2001) The effectiveness of interventions aimed at increasing hand washing in health care workers – a systematic review. *Journal of Hospital Infection*. **47**: 173-180.

National Audit Office (2000) *The Management and Control of Hospital Acquired Infections in Acute NHS Trusts In England*. The Stationery Office, London.

NHS Executive (1999) *Controls Assurance Standard Infection Control*. Department of Health, Leeds. UK

Ward, V. Wilson, J. Taylor, L. Cookson, B Glynn, A (1997) *Preventing Hospital-Acquired Infection*. Clinical Guidelines Public Health Laboratory Services, London.

Widmer, A.F. (2000) Replace hand washing with use of a Waterless alcohol hand rub? *Clinical Infectious Diseases,* **31**: 136-143.

6.8 Clinical practices

Hospital Infection Society (2001) *Review of Hospital Isolation and Infection Control Related Precautions: Report of the Joint Working Group*. Hospital Infection Society.

Infection Control Nurses Association (2001) *Guidelines for Preventing Intravascular Catheter-related Infection*. ICNA, Bathgate, West Lothian, UK

Infection Control Nurses Association (2002) *Protective Clothing – Principles and Guidance*. ICNA, Bathgate, West Lothian. UK

Infection Control Nurses Association (2002) A Comprehensive Gloves Choice. ICNA, Bathgate, West Lothian. UK

Infection Control Nurses Association (2002) Hand Decontamination Guidelines. 2nd Edition. ICNA, Fitwise, Bathgate. West Lothian. UK

Infection Control Nurses Association (2003) *Enteral feeding Infection control Guidelines*. ICNA, Bathgate, West Lothian. UK

Infection Control Nurses Association (2003) Asepsis: Preventing Healthcare Associated Infection. ICNA, Bathgate, West Lothian, UK

Pratt, R.J. Pellowe, C. Loveday, H.P. Robinson, N. Smith, G.W. and the *epic* guideline development team (2001) The *epic* Project: Developing National Evidence-based Guidelines for Preventing Healthcare associated Infections. *Journal of Hospital Infection*. **47**, Supplement.

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Institute of Sterile Services Managers (ISSM)

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