



OneTogether Assessment Toolkit

Infection prevention practice
across the surgical pathway



OneTogether's founding partners



The Association for Perioperative Practice is a registered charity working to enhance skills and knowledge within the perioperative arena. For more than 50 years they have promoted best practice and standards of care within this area and currently represent 6,500 theatre practitioners from across the UK and overseas.

www.afpp.org.uk



The Infection Prevention Society is a registered charity whose mission is to inform promote and sustain expert infection prevention policy and practice in the pursuit of patient or service user and staff safety wherever care is delivered. Its vision is that no person is harmed by a preventable infection.

www.ips.uk.net



The College of Operating Department Practitioners is the professional body for operating department practitioners (ODPs). It provides guidance on professional and educational issues to members of the profession, and advises a broad selection of national and local bodies on matters relating to operating department practice. It represents more than 5000 members throughout the UK and overseas, and hosts regular seminars and other public events.

www.codp.org.uk



The Royal College of Nursing is the UK's largest nursing professional body and trade union representing more than 430,000 nursing staff. Founded in 1916, the RCN has worked for more than 100 years to improve nursing education, develop and share good practice and promote nursing as a profession. The RCN Perioperative Forum and the Infection Prevention and Control Network support nursing staff working in settings where surgical care is given.

www.rcn.org.uk





oneTOGETHER
the power of small actions

Assessment: Infection prevention practice across the surgical pathway

HOSPITAL OR TRUST	
THEATRE SPECIALITY	
PERSONNEL CONDUCTING ASSESSMENT	
Name and job title	
Name and job title	
Name and job title	
Name and job title	
DATE(S) OF ASSESSMENT	

TIME to make a difference

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1 Introduction

OneTogether is a partnership between leading professional organisations with an interest in the prevention of surgical site infection (SSI). The partnership has been initiated as a quality improvement collaborative with the aim of promoting and supporting the adoption of best practice to prevent SSI throughout the patient's surgical journey.

MEMBERSHIP

The founding partners in OneTogether are:

- Association for Perioperative Practice (AfPP)
- Infection Prevention Society (IPS)
- College of Operating Department Practitioners (CODP)
- Royal College of Nursing (RCN)
- 3M Company

The OneTogether assessment tool has been designed to demonstrate infection prevention compliance across the surgical pathway. It supports staff in addressing challenges identified throughout the pre, intra and post-operative stages of surgery. The tool also acknowledges the difference in practice across differing specialities. The standards included in the assessment tool have been derived from national evidence-based guidelines or expert recommendations from professional bodies (see Appendix 1).

The assessment tool supports close collaboration between infection prevention teams and surgical teams. The exercise is proposed as quality improvement in practice, and the intention is to increase understanding of current infection prevention guidance and the challenges in implementation. Results from the assessment tool will support identification of areas for improvement, and in conjunction with a risk assessment, ensure resources are appropriately allocated.

2 Instructions for conducting the assessment

The tool assesses seven areas of care that are fundamental to best practice in minimising the risk of surgical site infection. After each section of the assessment there are notes providing further instructions on how to complete each element. Following these instructions will yield the best indication of performance and compliance.

- 1 Skin preparation
- 2 Prophylactic antibiotics
- 3 Patient warming
- 4 Maintaining asepsis
- 5 Surgical environment
- 6 Wound management
- 7 Surveillance of surgical site infection

The assessment ideally is conducted separately for each surgical speciality. The assessment process may be conducted over several visits to theatre/ward areas. Following a patient through their journey in a speciality is recommended where and when possible. At a minimum the assessment should be conducted by a Theatre Practitioner and an Infection Prevention Nurse. For a full and comprehensive

review of current practice efforts should be made to involve all staff involved within the patient's surgical journey.

For each section of the assessment policies should be reviewed in person to establish whether a policy (defined standard) is in place. To evaluate whether a standard is applied, practice should be observed and staff carefully questioned to establish whether practice is consistently applied. Where observation of practice is recommended, five observations of any element can be judged as a reasonable minimum. It is vital that guestimates of compliance are not recorded, as this will lead to inaccurate results.

This will help to evaluate whether:

- 1 The standard is defined. I.e. best practice is documented in local policy
- 2 The standard is applied. I.e. best practice is consistently performed

Staff involved in the area assessed should be made aware of the assessment and results fed back within an agreed time limit. All results should be reviewed through normal Governance platforms. Action planning following the assessment should be a multi-disciplinary activity in which theatre and infection prevention teams take actively participate.

SCORING

Compliance can be scored as yes, partial or no. There is space to add comments as required which is particularly useful to identify what constitutes partial compliance and areas for improvement.

Scoring a defined standard

- **Yes** – Score 2: Where you have found a component is present in a local policy.
- **Partial** – Score 1: If it is agreed as local practice but not written in a policy document this counts as 'partial'. Where you think a policy exists and the component may be represented, you should check the actual document.
- **No** – Score 0: Where a policy doesn't exist, or where you know the relevant component is not represented.

Scoring whether a standard is applied

- **Yes** – Score 2: Where you are confident that a component of this standard is applied consistently.
- **Partial** – Score 1: If it is applied intermittently or only for some procedures. Record the aspects of practice that vary from the standard.
- **No** – Score 0: Where you are certain that this component of the standard is not applied.

When assessing any standard of care, it is possible that the component/best practice is not defined within a local policy (score 0), however, it may be confidently applied in practice (score 2).



2 Instructions for conducting the assessment

SCORING EXAMPLE

STANDARD OF CARE	DEFINED STANDARD	STANDARD IS APPLIED
There is a defined skin disinfection process agreed by a multi-disciplinary team.	0 Rationale: There is a local policy for skin disinfection but it is very out of date and doesn't reflect NICE guidance. I am unsure how it was developed.	0 Rationale: This cannot be measured for each procedure, as there is no guide for different procedures.
All products for skin disinfection must have an associated management protocol. E.g. multi-dose bottles: date of opening and use by date.	0 Rationale: There is no protocol available.	1 Rationale: All multi-dose bottles viewed today are labelled with date of opening and use by date. But not all questioned could confirm this and thought they did not use multi-dose bottles.
	Sum of Scores = 0	Sum of scores = 1

CALCULATION

A simple formula is used to calculate the percentage compliance for each section completed. For both 'Defined Standard' and 'Standard is Applied' assessments both scores are calculated as:

% Compliance = (sum of scores/total possible score) x 100

To calculate the overall % compliance, the score is calculated as:

Overall % Compliance = (sum of all scores/sum of total possible score) x 100

In the above example, % compliance would be calculated as follows:

DEFINED STANDARD	STANDARD IS APPLIED	OVERALL % COMPLIANCE
Sum of scores = 0 (Sum of scores ÷ 4) x 100 = % (0 ÷ 4) x 100 = 0%	Sum of scores = 1 (Sum of scores ÷ 4) x 100 = % (1 ÷ 4) x 100 = 25%	Sum of all scores = 1 (Sum of all scores ÷ 8) x 100 = % (1 ÷ 8) x 100 = 12.5%

3 Assessment tool

The following section details the assessment tool and associated guidance.

SUMMARY OF INSTRUCTIONS

- The assessment ideally is conducted **separately for each surgical speciality.**
- The assessment process may be conducted over several visits to theatre/ward areas.
- Following a patient through their journey in a speciality is recommended where and when possible.
- At a minimum the assessment should be conducted by a Theatre Practitioner and an Infection Prevention Nurse.
- For a full and comprehensive review of current practice efforts should be made to involve all staff involved within the patient's surgical journey.
- To evaluate whether a standard is applied, practice should be observed and staff carefully questioned to establish whether practice is consistently applied.
- Where observation of practice is recommended, five observations of any element can be judged as a reasonable minimum.
- It is vital that guestimates of compliance are not recorded, as this will lead to inaccurate results.

3 Assessment tool: 1.1 Patient washing

1.1 PATIENT WASHING				
NICE recommends that patients should shower or have a bath (or be assisted to shower, bath or bed bath) using soap, either the day before, or on the day of surgery.		Defined standard Present in local policy N = 0; Partial = 1; Yes = 2	Standard is applied Evidence that element is performed N = 0; Partial = 1; Yes = 2	Comments If 'partial' – specify where non-compliant
1	Prior to elective admission: Patients are given verbal and written information on washing. This includes what they should do, why this is important and how to ask for help.			
2	There is a defined process to assist patients unable to wash by themselves.			
3	There is a defined process for assisting patients undergoing emergency procedures to wash wherever this is possible.			
4	The patient wash is recorded in the pre-operative checklist.			
		(Sum of scores ÷ 8) x 100 = %	(Sum of scores ÷ 8) x 100 = %	Overall % compliance (Sum of all scores ÷ 16) x 100 = %

GUIDANCE ON COMPLETING 1.1 PATIENT WASHING

- 1 a) Visit pre-assessment clinic to review process and what written and verbal information is given to patients.
b) Ask a few patients waiting for surgery if they were given advice about washing.
- 2 Check protocols and procedures for pre-operative washing in the surgical admission ward.
- 3 Check protocols and procedures for pre-operative washing in the surgical admission ward.
- 4 Check examples of the pre-operative surgical checklist for documentation of pre-operative wash.

3 Assessment tool: 1.2 Hair removal

1.2 HAIR REMOVAL				
NICE recommends that razors should not be used for hair removal because they increase the risk of SSI. If hair must be removed, then clippers with disposable heads are recommended.		Defined standard Present in local policy N = 0; Partial = 1; Yes = 2	Standard is applied Evidence that element is performed N = 0; Partial = 1; Yes = 2	Comments If 'partial' – specify where non-compliant
1	Prior to elective admission: patients are given verbal and written information not to shave or remove hair from operative site. This includes why this is important and how to ask for help.			
2	Hair removal is only undertaken where it is necessary to visualise the operative site.			
3	Hair is removed as near to time of incision as possible.			
4	Hair is removed using clippers with single-use disposable head.			
5	Staff who are responsible for hair removal have been trained and are competent in performing the procedure.			
		(Sum of scores ÷ 10) x 100 = %	(Sum of scores ÷ 10) x 100 = %	Overall % compliance (Sum of all scores ÷ 20) x 100 = %

GUIDANCE ON COMPLETING 1.2 HAIR REMOVAL

- 1 a) Visit pre-assessment clinic to review process and what written and verbal information is given to patients.
b) Ask two patients waiting for surgery if they were given advice about hair removal.
- 2 a) Check if theatre protocols include a standard for hair removal.
b) Check how hair removal for a few patients on a list is managed; if removal is routine rather than patient specific then this does not comply with the standard.
- 3 a) Check if theatre protocol include this in the standard. b) Check how hair removal for a few patients on a list is managed.
- 4 a) Check if theatre protocol include this in the standard. b) Check how hair removal for a few patients on a list is managed.
- 5 Ask member staff who removes hair if they have received training and have had competency assessment.

3 Assessment tool: 1.3 Skin disinfection

1.3 SKIN DISINFECTION				
NICE recommends that the skin should be disinfected immediately prior to the incision with chlorhexidine or providence-iodine (alcoholic or aqueous)		Defined standard Present in local policy N = 0; Partial = 1; Yes = 2	Standard is applied Evidence that element is performed N = 0; Partial = 1; Yes = 2	Comments If 'partial' – specify where non-compliant
1	There is a defined skin disinfection process agreed by a multi-disciplinary team that states the specific agent, application method, timing and person responsible.			
2	All products used for skin disinfection are intended for use as a surgical skin disinfectant and must have an associated management protocol. E.g. multi-dose bottles: date of opening and use by date.			
		(Sum of scores ÷ 4) x 100 = %	(Sum of scores ÷ 4) x 100 = %	Overall % compliance (Sum of all scores ÷ 8) x 100 = %

GUIDANCE ON COMPLETING 1.3 SKIN DISINFECTION

1. a) Check if theatre protocols include a standard on skin disinfection that describes the specific agent, method of application (including timing in relation to draping and incision, allowing to dry), who is responsible etc.
b) Check how skin disinfection is conducted for a few patients on a list; if only some of the elements are adhered to then record compliance as partial; if most are not adhered to then record as zero.
2. a) Check if theatre protocols include a management protocol for the skin disinfectants that describes how solutions should be used, labeled, stored and discarded.
b) Check if the agents being used are recommended for skin disinfection prior to surgical procedures (i.e. licensed for this purpose). If multi-use bottles are in use, check the procedures for ensuring that the solutions are used appropriately, labeled with the date of opening and discarded correctly.

3 Assessment tool: 1.4 Preventing skin recolonisation

1.4 PREVENTING SKIN RECOLONISATION				
NICE recommends that if an incise drape is used, this should be iodophore impregnated unless the patient has an iodine allergy.		Defined standard Present in local policy N = 0; Partial = 1; Yes = 2	Standard is applied Evidence that element is performed N = 0; Partial = 1; Yes = 2	Comments If 'partial' – specify where non-compliant
1	For surgical procedures where an incise drape is required an iodophore impregnated drape is used (unless the patient has an iodine allergy).			
2	The manufacturers guidance on incise drape size selection and method of application is adhered to.			
		(Sum of scores ÷ 4) x 100 = %	(Sum of scores ÷ 4) x 100 = %	Overall % compliance (Sum of all scores ÷ 8) x 100 = %

GUIDANCE ON COMPLETING 1.4 PREVENTING SKIN RECOLONISATION

- 1 Check that the incise drapes in use are iodophore impregnated. If the patient has an iodine allergy then an incise drape should not be used (as non-impregnated ones are associated with an increased risk of SSI).
- 2 Observe the application of drapes for a few patients on the list to check if the manufacturer's instructions are adhered to.

DO NOT COMPLETE THIS SECTION IF INCISE DRAPES ARE NOT USED IN THIS SPECIALITY

3 Assessment tool: 2 Prophylactic antibiotics

2 PROPHYLACTIC ANTIBIOTICS				
Antibiotics are given as indicated to minimise the risk of infection and reduce the emergence of antibiotic resistance.		Defined standard Present in local policy N = 0; Partial = 1; Yes = 2	Standard is applied Evidence that element is performed N = 0; Partial = 1; Yes = 2	Comments If 'partial' – specify where non-compliant
1	There is a defined list of surgical procedures where prophylactic antibiotics may be required.			
2	For surgical procedures where prophylactic antibiotics are indicated the recommended agents and dose and are administered.			
3	Prophylactic antibiotics are administered within 60 minutes before the incision.			
4	A single dose of prophylactic antibiotics is administered unless surgery is prolonged or there is another specific indication for a repeat dose.			
		(Sum of scores ÷ 8) x 100 = %	(Sum of scores ÷ 8) x 100 = %	Overall % compliance (Sum of all scores ÷ 16) x 100 = %

GUIDANCE ON COMPLETING 2 PROPHYLACTIC ANTIBIOTICS

- 1 Check that guidance on prophylactic antibiotics is written in a local hospital (antimicrobial policy and/or theatre) policy.
- 2 Check the prescription chart for a few patients on the list to identify if the recommended agent and dose is given.
- 3 Check the prescription and operation records for a few patients on the list to identify the timing of prophylactic antibiotic administration.
- 4 Check the prescription and operation records for a few patients on the list to identify if any inappropriate repeat doses were given. b) Follow up a few patients on the surgical ward to check if prophylactic antibiotics were given post-operatively.

3 Assessment tool: 3.1 Warming intravenous and irrigation fluids

3.1 WARMING INTRAVENOUS AND IRRIGATION FLUIDS				
Intravenous fluids (500 ml or more) and blood products should be warmed to 37°C using a fluid warming device following manufacturer's instructions. All irrigation fluids used intra-operatively should be warmed in a thermostatically controlled cabinet to a temperature of 38–40°C.		Defined standard Present in local policy N = 0; Partial = 1; Yes = 2	Standard is applied Evidence that element is performed N = 0; Partial = 1; Yes = 2	Comments If 'partial' – specify where non-compliant
1	All intravenous fluids (500 ml or more) and blood products are warmed during operative procedures.			
2	All irrigation fluids used intra-operatively should be warmed in a thermostatically controlled cabinet to a temperature of 38–40°C.			
3	There is sufficient and the appropriate equipment available for warming intravenous and irrigation fluids.			
4	The temperature of warmed irrigation fluids is measured to ensure the temperature is within the recommended temperature range 38-40°C.			
5	Staff are trained in the use of fluid warming devices.			
		(Sum of scores ÷ 10) x 100 = %	(Sum of scores ÷ 10) x 100 = %	Overall % compliance (Sum of all scores ÷ 20) x 100 = %

GUIDANCE ON COMPLETING 3.1 PERIOPERATIVE WARMING, WARMING OF INTRAVENOUS AND IRRIGATION FLUID

- 1 a) Check if theatre protocols include this standard. b) Observe a few patients on a list to establish if the standard is adhered to.
- 2 a) Check if theatre protocols include this standard.
b) Check the thermostatic cabinet and if the warming is done according to the manufacturer's instructions and/or conduct a test to determine if fluid is placed in the cabinet according to local protocols it reaches the required temperature.
- 3 a) Check if suitable equipment is available to warm fluids. b) Query theatre staff to establish if there is sufficient equipment to do this when required.
- 4 a) Check if theatre protocols include this standard.
b) Observe a few patients on a list to establish if the irrigation fluid is used immediately it is removed from the warming cabinet.
c) Check if there are systems in place to test the temperature of the irrigation fluid (i.e. with a sterile temperature probe) immediately prior to placing in the patient body cavity.
- 5 Check with theatre staff if they receive training about warming irrigation fluids and the manufacturer's instructions for warming cabinets.

3 Assessment tool: 3.2 Perioperative warming, pre-operative

3.2 PRE-OPERATIVE PATIENT WARMING				
NICE recommends that the patient's temperature should be 36°C or above before they are transferred to the operating department, unless there is a need to expedite surgery. Patients should be assessed for their risk of perioperative hypothermia and potential adverse consequences before they are transferred to the operating theatre.		Defined standard Present in local policy N = 0; Partial = 1; Yes = 2	Standard is applied Evidence that element is performed N = 0; Partial = 1; Yes = 2	Comments If 'partial' – specify where non-compliant
1	Prior to elective admission: Patients are given verbal and written information on the importance of keeping warm. This includes what they should do, why this is important and how to ask for help.			
2	The patients' risk of hypothermia is assessed pre-operatively and recorded.			
3	The patient's core temperature is measured and recorded within 1 hour before transfer to theatre.			
4	Patients with a core temperature less than 36°C are warmed on the ward or emergency department with forced air warming, unless there is a need to expedite surgery.			
5	All patients are kept warm and comfortable before and during transfer to theatre.			
6	Staff (pre-operative) are trained in the use of temperature warming devices.			
		(Sum of scores ÷ 12) x 100 = %	(Sum of scores ÷ 12) x 100 = %	Overall % compliance (Sum of all scores ÷ 24) x 100 = %

GUIDANCE ON COMPLETING 3.2 PERIOPERATIVE WARMING, PRE-OPERATIVE

- 1 a) Check what written and verbal information patients are given at pre-assessment clinic. This should include informing patients about the consequences of perioperative hypothermia and that remaining adequately covered and staying warm will reduce these risks.
b) Ask a few patients waiting for surgery if they were given advice about keeping warm.
- 2 a) Check if theatre/pre-assessment clinic/ward protocols include this standard.
b) Review a few patient records to check that risk of hypothermia is assessed and documented at pre-assessment clinic and/or anesthetic assessment.
[The presence of two or more of the following factors increases the risk of perioperative hypothermia and indicates need for forced air warming: ASA grade 2 – 5 (higher grade > risk); undergoing combined general and regional anaesthesia; major or intermediate surgery; risk of cardiovascular complications].
- 3 a) Check if ward protocols include procedures for checking a patient's temperature pre-operatively warming.
b) Query ward staff to establish if the patient's temperature is taken within an hour of surgery and what they do if patient's temperature below 36°C.
- 4 a) Check if ward protocols include procedures for warming patients pre-operatively when indicated by risk assessment.
b) Query ward staff to establish what they do if patient's temperature below 36°C and if they have the appropriate equipment to deliver forced air warming.
- 5 Query the ward staff about how they ensure that patients are kept warm prior to going to theatre. For example: blankets are provided and patients use dressing gown/slippers if walking.
- 6 Check with ward staff if they receive training about perioperative warming and how to deliver forced air warming.

3 Assessment tool 3.3 Perioperative warming, intra-operative

3.3 INTRA-OPERATIVE PATIENT WARMING				
NICE recommends that the patient's temperature should be 36°C or above before induction of anaesthesia, unless there is a need to expedite surgery. All patients who are having anaesthesia for longer than 30 minutes, should be warmed from induction using forced-air warming. Patients at higher risk of perioperative hypothermia and having anaesthesia for less than 30 minutes, should be warmed from induction using forced-air warming.		Defined standard Present in local policy N = 0; Partial = 1; Yes = 2	Standard is applied Evidence that element is performed N = 0; Partial = 1; Yes = 2	Comments If 'partial' – specify where non-compliant
1	The patient should be adequately covered to conserve heat and only exposed during surgical preparation.			
2	There is sufficient and appropriate equipment readily available to measure patient's core temperature perioperatively.			
3	The patient's core temperature should be measured and recorded before induction of anaesthesia. If less than 36°C, then anaesthesia should not commence, unless there is a need to expedite surgery.			
4	Patients having anaesthesia for longer than 30 minutes, or are at a higher risk of perioperative hypothermia, are warmed from induction using forced-air warming.			
5	There is sufficient and appropriate equipment to administer forced-air warming within the theatre.			
6	The patient's core temperature is measured and recorded every 30 minutes during surgery and maintained at a normothermic level.			
7	Staff (intra-operative) are trained in the use of temperature warming devices.			
		(Sum of scores ÷ 14) x 100 = %	(Sum of scores ÷ 14) x 100 = %	Overall % compliance (Sum of all scores ÷ 28) x 100 = %

GUIDANCE ON COMPLETING 3.3 PERIOPERATIVE WARMING, INTRA-OPERATIVE

- 1 a) Check if theatre protocols include this standard procedures.
b) Observe a few patients on a list to establish if the standard is adhered to.
- 2 a) Check if suitable equipment is available to measure patient temperature.
b) Query theatre staff to establish if there is sufficient equipment to do this when required.
- 3 a) Check if theatre protocols include this standard procedures.
b) Observe a few patients on a list to establish if the standard is adhered to.
- 4 a) Check if theatre protocols include this standard procedures.
b) Observe a few patients on a list to establish if the standard is adhered to.
- 5 a) Check if suitable equipment is available to deliver forced air warming.
b) Query theatre staff to establish if there is sufficient equipment to do this when required.
- 6 a) Check if theatre protocols include this standard procedures.
b) Observe a few patients on a list to establish if the standard is adhered to.
- 7 Check with theatre staff if they receive training about perioperative warming, temperature monitoring and how to deliver forced air warming.

3 Assessment tool: 3.4 Perioperative warming, post-operative

3.4 POST-OPERATIVE PATIENT WARMING				
The postoperative period is defined as 24 hours after the patient enters the recovery area. The patient's temperature should be monitored and documented every 15 minutes in recovery. The patient should not be transferred to the ward, until their temperature is 36°C or above.		Defined standard Present in local policy N = 0; Partial = 1; Yes = 2	Standard is applied Evidence that element is performed N = 0; Partial = 1; Yes = 2	Comments If 'partial' – specify where non-compliant
1	The patient's core temperature is measured and recorded every 15 minutes in recovery.			
2	Patients with a temperature less than 36°C are warmed with forced air warming, until their temperature reaches a normothermic level.			
3	Patients are only returned to the ward when their temperature is normothermic.			
4	There is sufficient and appropriate equipment to administer forced air warming within recovery if required.			
5	Staff (post-operative) are trained in the use of temperature warming devices.			
		(Sum of scores ÷ 10) x 100 = %	(Sum of scores ÷ 10) x 100 = %	Overall % compliance (Sum of all scores ÷ 20) x 100 = %

GUIDANCE ON COMPLETING 3.4 PERIOPERATIVE WARMING, POST-OPERATIVE

- 1 a) Check if recovery protocols include this standard procedures.
b) Observe a few patients in recovery to establish if the standard is adhered to.
- 2 a) Check if recovery protocols include this standard procedures.
b) Observe a few patients in recovery to establish if the standard is adhered to.
- 3 a) Check if recovery protocols include this standard procedures.
b) Observe a few patients in recovery to establish if the standard is adhered to.
- 4 a) Check if suitable equipment is available to deliver forced air warming.
b) Query theatre staff to establish if there is sufficient equipment to do this when required.
- 5 Check with recovery staff if they receive training about perioperative warming, temperature monitoring and how to deliver forced air warming.

3 Assessment tool: 4.1 Maintaining asepsis – surgical practice

4.1 MAINTAINING ASEPSIS – SURGICAL PRACTICE				
The principles of aseptic technique must be adhered to by staff involved in the surgical procedure.		Defined standard Present in local policy N = 0; Partial = 1; Yes = 2	Standard is applied Evidence that element is performed N = 0; Partial = 1; Yes = 2	Comments If 'partial' – specify where non-compliant
1	Operating staff are trained and assessed as competent in performing surgical hand antisepsis, gowning and gloving scrub.			
2	Operating staff performing surgical hand antisepsis, gowning and gloving correctly immediately prior to commencing surgery.			
3	Operating staff are trained and assessed as competent in the maintenance and management of the sterile field.			
4	Operating staff maintain and manage sterile field correctly.			
		(Sum of scores ÷ 8) x 100 = %	(Sum of scores ÷ 8) x 100 = %	Overall % compliance (Sum of all scores ÷ 16) x 100 = %

GUIDANCE ON COMPLETING 4.1 MAINTAINING ASEPSIS-SURGICAL PRACTICE

- 1
 - a) Check if theatre protocols include this standard.
 - b) Query different grade/types of staff involved in operating to determine if/how they have been trained and assessed as competent.
 - c) Review theatre held competency assessment records.
- 2 Observe different grade/types of staff prior to commencing a few operative procedures to determine if hand antisepsis, gowning and gloving is performed correctly.
- 3
 - a) Check if theatre protocols include this standard.
 - b) Query different grade/types of staff involved in operating to determine if/how they have been trained and assessed as competent.
 - c) Review theatre held competency assessment records.
- 4 Observe different grade/types of staff during a few operative procedures to determine the sterile field is maintained and managed correctly.

3 Assessment tool: 4.2 Maintaining asepsis – instrument management

4.2 MAINTAINING ASEPSIS – INSTRUMENT MANAGEMENT				
All instrumentation should be suitably decontaminated and sterilised prior to surgical use.		Defined standard Present in local policy N = 0; Partial = 1; Yes = 2	Standard is applied Evidence that element is performed N = 0; Partial = 1; Yes = 2	Comments If 'partial' – specify where non-compliant
1	Instruments should be decontaminated and sterilised in a credited central sterilisation unit which is compliant to quality management systems.			
2	An instrument traceability system is in use.			
3	There are defined mechanisms in place for recognising sterile integrity of instrumentation.			
4	Sterile instruments are stored in a clean, dry, dust free environment.			
5	All sterile items have an identifiable event related shelf-life.			
6	All perioperative staff are competent in the handling of sterile instruments.			
7	Instrumentation is set up immediately prior to surgical use.			
8	There is a defined process to change instruments if contamination is identified.			
		(Sum of scores ÷ 16) x 100 = %	(Sum of scores ÷ 16) x 100 = %	Overall % compliance (Sum of all scores ÷ 32) x 100 = %

GUIDANCE ON COMPLETING 4.2 MAINTAINING ASEPSIS-INSTRUMENT MANAGEMENT

- 1 a) Check if theatre protocols include this standard.
b) Query staff to establish if standard is met.
- 2 a) Check if theatre protocols include this standard.
b) Query staff to establish if standard is met.
- 3 a) Check if theatre protocols include this standard.
b) Query staff to establish if standard is met.
- 4 a) Check if theatre protocols include this standard.
b) Query staff to establish if standard is met.
- 5 a) Check if theatre protocols include this standard.
b) Query staff to establish if standard is met.
- 6 a) Check if theatre protocols include this standard.
b) Query staff to determine if/how they have been trained and assessed as competent.
c) Review theatre held competency assessment records.
- 7 a) Check if theatre protocols include this standard.
b) Query staff to establish how this standard is met.
c) Observe preparation for a few operative procedures to determine whether instruments are set up immediately prior to use.
- 8 a) Check if theatre protocols include this standard.
b) Query staff to establish if standard is met.

3 Assessment tool: 5 Surgical environment

5 SURGICAL ENVIRONMENT				
Ensuring that the risk of airborne contamination entering the operative site is kept to a minimum.		Defined standard Present in local policy N = 0; Partial = 1; Yes = 2	Standard is applied Evidence that element is performed N = 0; Partial = 1; Yes = 2	Comments If 'partial' – specify where non-compliant
1	The required air pressure and ventilation systems across the operating theatre (including anaesthetic and scrub rooms) is defined.			
2	There is a defined process to ensure that the doors to the operating theatre remain closed while an operation is in progress.			
3	There is a defined number of staff that may be present within the operating theatre for each procedure.			
4	There is a defined process to monitor traffic in and out of the operating theatre to ensure it is kept within agreed limits.			
5	There is a defined process to ensure that equipment is cleaned to remove all dust prior to it being brought into the operating theatre.			
		(Sum of scores ÷ 10) x 100 = %	(Sum of scores ÷ 10) x 100 = %	Overall % compliance (Sum of all scores ÷ 20) x 100 = %

GUIDANCE ON COMPLETING 5 SURGICAL ENVIRONMENT

- 1 a) Check if theatre protocols include this standard. b) Query staff to establish how they ensure the standard is met.
- 2 a) Check if theatre protocols include this standard. b) Query staff to establish if standard is met. c) Observe a few operative procedures to determine if doors remain closed.
- 3 a) Check if theatre protocols include this standard. b) Query staff to establish if standard is met.
c) Observe a few operative procedures to determine how many people in theatre during procedure and if this meets defined standard.
- 4 a) Check if theatre protocols include this standard.
b) Query staff to establish if standard is met.
c) Observe a few operative procedures to determine how many people go in and out of theatre during procedure, and if this meets defined standard e.g. was the movement essential.
- 5 a) Check if theatre protocols include this standard. b) Query staff to establish if standard is met.
c) Observe a few operative procedures to determine if equipment is cleaned prior to being brought into the theatre.

3 Assessment tool: 6 Wound management

6 WOUND MANAGEMENT				
NICE recommends that surgical incisions should be covered with an appropriate interactive dressing at the end of the operation.		Defined standard Present in local policy N = 0; Partial = 1; Yes = 2	Standard is applied Evidence that element is performed N = 0; Partial = 1; Yes = 2	Comments If 'partial' – specify where non-compliant
1	There is a defined range of interactive wound dressings available for all procedures.			
2	There is a surgical wound management plan for all procedures that includes the use of any wound drain.			
3	Wound management information is provided to the patient verbally and in written form. This includes information on how to look after their wound, what to expect and how and when to ask for help.			
4	There is access to a tissue viability expert for all in-patients with surgical wounds.			
		(Sum of scores ÷ 8) x 100 = %	(Sum of scores ÷ 8) x 100 = %	Overall % compliance (Sum of all scores ÷ 16) x 100 = %

GUIDANCE ON COMPLETION 6 WOUND MANAGEMENT

- 1 a) Check if theatre protocols include this standard. b) Check with tissue viability nurse that the recommended wound dressings meet the required standard for post-operative wound dressings.
- 2 Check the post-operative management instructions in the case records of a few patients to determine if there are clear instructions on wound management.
- 3 a) Check with ward staff what verbal or written information is given to patients on discharge.
b) Ask a few patients ready for discharge what they have been told about managing their wound and where to get advice.
- 4 Check what tissue viability service is available in the hospital for surgical patients.

3 Assessment tool: 7 Surveillance of Surgical Site Infection (SSI)

7 SURVEILLANCE OF SURGICAL SITE INFECTION (SSI)				
SSI is monitored using a standardised surveillance methodology to provide feedback to surgeons and the surgical team about the quality of infection prevention in the operating theatre, and to provide patients with accurate information about the risk of SSI associated with the operation.		Defined standard Present in local policy N = 0; Partial = 1; Yes = 2	Standard is applied Evidence that element is performed N = 0; Partial = 1; Yes = 2	Comments If 'partial' – specify where non-compliant
1	Patients are provided with verbal and written information about the risks of SSI associated with their operation. This includes how and when they should report problems with their wound.			
2	There is a planned programme of SSI surveillance that covers major surgery over a defined period, e.g. 5 years.			
3	There is a robust process for data collection to assess rates of SSI based on a standardised surveillance methodology.			
4	There is a system in place to capture data on SSI that develop after the patient has been discharged from hospital. E.g. detection of patients readmitted with SSI and/or post-discharge patient review or questionnaire.			
5	Results of surveillance are reviewed by the surgical teams, theatre staff and hospital Governance structures.			
6	High or increased rates (or unusually low rates) are investigated and appropriate action taken to address any problems identified.			
		(Sum of scores ÷ 12) x 100 = %	(Sum of scores ÷ 12) x 100 = %	Overall % compliance (Sum of all scores ÷ 24) x 100 = %

GUIDANCE ON COMPLETING 7 SURVEILLANCE OF SURGICAL SITE INFECTION (SSI)

- 1
 - a) Check if theatre protocols include this standard.
 - b) Check with pre-assessment/ward staff about verbal and written information given to patients about risk of SSI and what to do when they have problems with their wound.
 - c) Ask a few patients ready for discharge what they were told about the risk of SSI, and what they have been told about reporting problems with their wound.
- 2
 - a) Check local policies/standards to determine if there is an agreed/planned programme of surveillance for SSI following major procedures (within this specialty).
 - b) Check surveillance data records to determine if data collected according to the planned programme (over last 2-5 years).
- 3
 - a) Check protocols used for surveillance comply with a standard methodology.
 - b) Review methods (e.g. by discussion with staff responsible for surveillance) used to capture denominator (operation data) and numerator data (follow up of all patients to detect SSI) to determine that they comply with the surveillance protocol and reliably detect all operations and SSI.
- 4
 - a) Check protocols used for post-discharge surveillance (PDS) comply with a standard methodology.
 - b) Review methods (e.g. by discussion with staff responsible for surveillance) used to capture PDS data to determine that they comply with the surveillance protocol and reliably detect SSI.
- 5
 - a) Check who is expected to review the results of surveillance and how often this is done.
 - b) Check that results are received by surgical team and theatre staff in addition to hospital Governance committee.
- 6
 - a) Check what action is expected to be taken by whom in response to results of surveillance.
 - b) Check if there are clear systems in place to review the results and take action if problems are identified.
 - c) Review previous surveillance results – if rates unusually high or increasing, or unusually low (i.e. there may be a problem with the accuracy of the surveillance data capture systems) check what action was taken in response and determine if this was sufficient to address the problem.

4 Interpreting the assessment results

The results from the assessment provide guidance into the level of compliance within each area. As a guide OneTogether recommends the following categorisation of compliance.

% range	Compliance
80–100	High
50–79	Medium
0–49	Low

Please note: Although a score of 80% compliance is categorised a high compliance score, further improvements can still be implemented to achieve 100% wherever possible.

5 Prioritising actions for improvement

There are a number of ways in which a team may prioritise actions for improvement:

- Areas of practice with the lowest compliance scores
- Speed with which action can be taken to address compliance
- Risk associated with non-compliance

OneTogether recommends that the results from the assessment, action planning and prioritisation should be reviewed and approved by a local multi-disciplinary team. Local systems of governance and action planning should be adhered to with regards to a review of any assessment.

Appendix 1 Reference list

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