

Benchmark No. 8

Infection Prevention and Control of Surgical Wound Sites (3rd Edition)

**British Association of
Neuroscience Nurses**



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(3rd Edition)

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History

The Neuroscience Nursing Benchmarking Group (NNBG) was established in the 1990`s as a result of increasing concerns over inconsistencies in practices as part of a subsidiary of BANN. The group aims to improve on the quality of care by comparing and sharing practice with each other, and set explicit standards for comparison of current practice against the ideal standard. The group is committed to searching for the best evidence related to specific areas of neuroscience practice. Membership of the group consists of representatives from neuroscience units within the UK and Ireland, together with educational colleagues from both the NHS/HSC and Higher Educational Institutes. The group is further subdivided into regions and this benchmark was developed by the Northeast group of the NNBG in 2007.

In 2016, the NNBG consolidated back into BANN and further information about NNBG can be found on the BANN website www.BANN.org.uk .

BANN would like to acknowledge the leadership and significant contribution made by the NNBG, and all its contributors, to neuroscience nursing over the years.

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Key Points

- Surgical site infection (SSI) is the most common postoperative incisional complication and comprises approximately 20% of all healthcare associated infection (HCAIs). “At least 5% of patients undergoing a surgical procedure develop a surgical site infection” The majority of surgical site infections are regarded as preventable.
- Postoperative surgical site infection following neurosurgery is associated with increased morbidity and mortality and severely affects the patient’s quality of life.
- Most surgical site infections are caused by contamination of an incision with microorganisms from the patient’s own body during surgery.
- Preoperatively, patients should be screened for MRSA according to local guidelines Staphylococcus aureus is responsible for the majority of SSIs.
- All staff must apply infection control measures to minimise the personnel and environmental risks of cross infection.
- All staff must have knowledge of the risk factors that increase the possibility of acquiring a wound infection.
- People with, or at risk of SSI’s, should have the opportunity to make informed decisions about their care, in partnership with healthcare professionals.

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FACTOR 1 – Documentation

STATEMENT OF BEST PRACTICE		EVIDENCE & REFERENCES	ACHIEVED	NOT ACHIEVED	VARIABLES
1.0	<p>Patients are screened on admission for risk factors associated with surgical site infections, these include: -</p> <ul style="list-style-type: none"> • poor nutritional status, obesity, smoking/living with a smoker. • conditions such as diabetes, rheumatoid arthritis • medications – e.g., steroids, immunosuppressant's. 	National Institute for Health and Care Excellence (NICE), 2017			
1.1	<p>A wound care tool to reduce the incidence of SSI is available to ensure patients receive Informed best practice and should incorporate all aspects identified in the National and local quality indicators: -</p> <ul style="list-style-type: none"> • Patient information • Pre-operative screening • Antibiotic guidance • Maintaining homeostasis • Surgical Incision • Wound cleansing • Choice of dressing • Treatment of SSI's 	<p>Loveday <i>et al.</i>, 2014</p> <p>CQC, 2018 (regulation 12)</p> <p>NICE, 2017 NHS England, 2025</p>			

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FACTOR 2 – Protocol

	STATEMENT OF BEST PRACTICE	EVIDENCE & REFERENCES	ACHIEVED	NOT ACHIEVED	VARIABLES
2.0	The patient receives appropriate wound care information at pre-operative assessment or on admission to hospital.	NICE, 2017 Irene <i>et al.</i> , 2015			
2.1	Patients are screened for MRSA pre-operatively.	NICE 2017			
2.2	Patients receive instruction to shower/bath, wash and dry hair using a locally agreed product (e.g., chlorhexidine, soap), pre-surgery.	NICE 2017			
2.3	A minimal area is shaved around the wound site to ensure that the dressing remains intact.	Lord <i>et al.</i> , 2019			
2.4	Prophylactic antibiotics are not routinely prescribed for elective non-prosthetic surgery.	Kingsley <i>et al.</i> , 2018 Fattahi <i>et al.</i> , 2018 NHS England, 2025			
2.5	If a surgical site infection (SSI) is suspected antibiotics are prescribed and administered following consultation with microbiology (based on local resistance patterns and likely causative organism).	BNF, 2025 NHS England, 2025			
2.6	Aseptic non-touch technique is used for removing surgical wound drains or in the event of wound inspection following excessive leakage.	NICE 2017			
2.7	In the event of suspected or actual signs of SSI (i.e., haemoserous fluid, blood, CSF, purulent fluid), the wound is inspected, and swabs obtained for culture and sensitivity.	Loveday <i>et al.</i> , (Epic 3), 2014 Irene <i>et al.</i> , 2015			

	STATEMENT OF BEST PRACTICE	EVIDENCE & REFERENCES	ACHIEVED	NOT ACHIEVED	VARIABLES
2.8	A local tissue viability nurse or clinical expert is available to advise on complex wound management concerns.	NICE 2017			

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FACTOR 3 – Education

	STATEMENT OF BEST PRACTICE	EVIDENCE & REFERENCES	ACHIEVED	NOT ACHIEVED	VARIABLES
3.0	<p>Patients and carers receive information in relation to optimal wound care including:</p> <ul style="list-style-type: none"> • Signs and symptoms of wound infection • Recognition of healing concerns • Escalation process in the event of potential or actual SSI 	<p>RCN, 2017 NHS England, 2025</p>			
3.1	<p>Staff receive education and guidance in relation to: -</p> <ul style="list-style-type: none"> • Infection control measures including hand washing, aseptic non-touch technique. • Wound care management including incisional wounds, lumbar drains, external ventricular drains, post-operative drains. • Maintaining normothermia. 	<p>Loveday <i>et al.</i>, (Epic 3), 2014</p>			
3.2	<p>The choice of dressings are continually reviewed based on new products and informed best practice.</p>	<p>Loveday <i>et al.</i>, (Epic 3), 2014</p>			

FACTOR 4 – Patient Information

	STATEMENT OF BEST PRACTICE	EVIDENCE & REFERENCES	ACHIEVED	NOT ACHIEVED	VARIABLES
4.0	<p>Patients/carers are given wound care information on admission and discharge to ensure consistent information and advice throughout all stages of their care including: -</p> <ul style="list-style-type: none"> • Hand washing principles • Recognition of SSI (Pain, red or swollen, hot, leakage, unpleasant odour). • The process for the removal of suture or staples • Contact details to address concerns. 	<p>NICE, 2017</p> <p>Schipmann <i>et al.</i>, 2016</p> <p>NHS England, 2025</p>			
4.1	<p>Patients are advised of the risk factors that adversely affect wound healing; these include these include:</p> <ul style="list-style-type: none"> • poor nutrition • obesity • smoking • pre-morbid medical conditions – diabetes • medication – e.g., steroids, immunosuppressant's 	<p>Fang <i>et al.</i>, 2017</p>			

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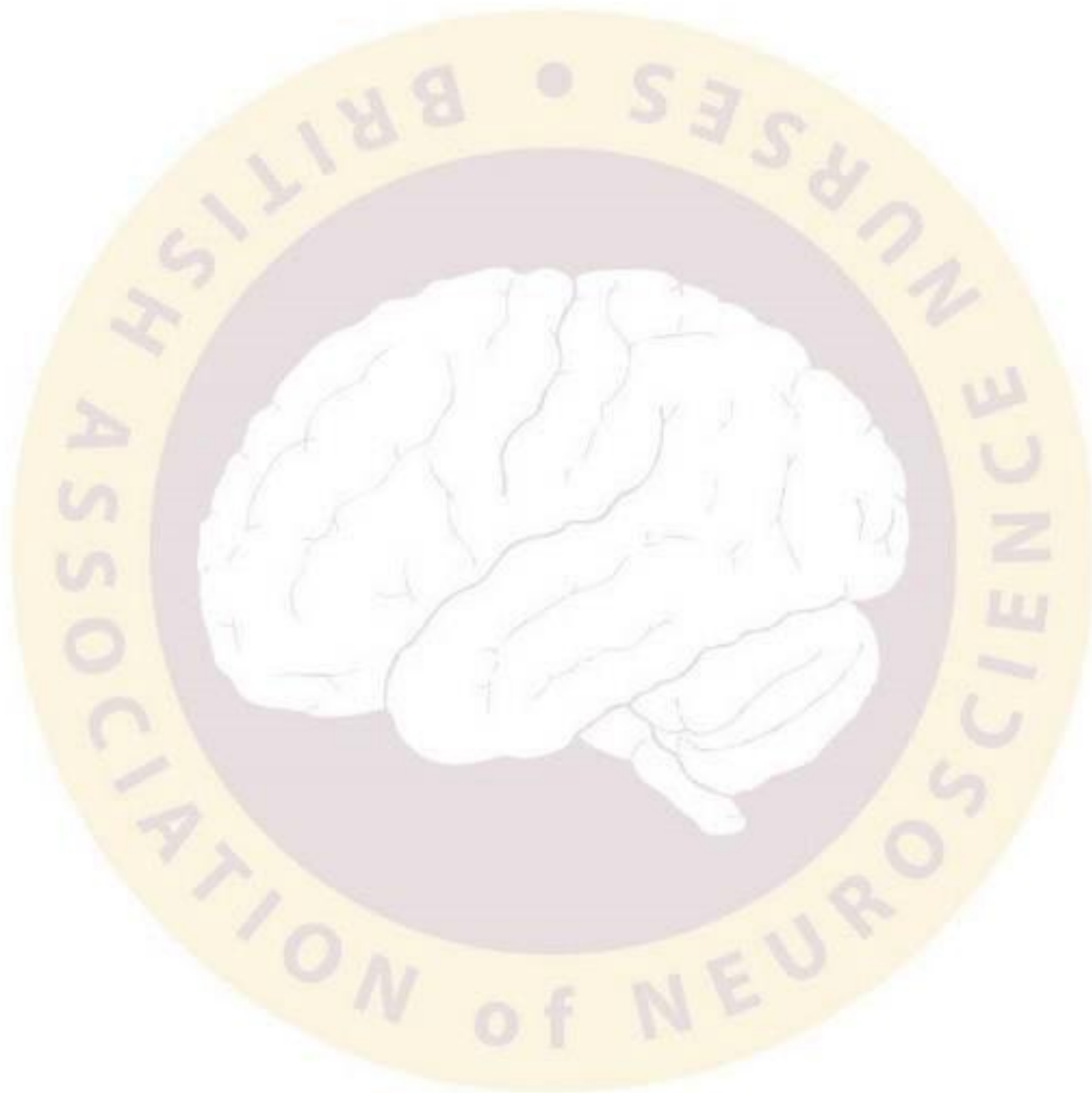
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