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VOLKSGEZONDHEID

INSTITUT SCIENTIFIQUE  
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## **Nationale Surveillance van Postoperatieve Wondinfecties**

### **Protocol NSIH-PWI**

#### **Bijlage 1: Referentielijsten**



## 1 Aanbevolen NHSN-operatiecategorieën

NNIS Code	Category	Description
CBGB	Coronaire bypass met thorax- en donorplaatsincisie	Open thoraxoperatie voor directe myocard-revascularisatie, inclusief het vrijmaken van de te enten perifere vene
CBGC	Coronaire bypass met uitsluitend thoraxincisie	als hierboven, maar zonder bijkomende perifere incisie en met gebruik van bv. <i>A.mammaria interna</i>
CHOL	Galblaasoperatie	Verwijdering van de galblaas; omvat procedures waarbij gebruikt wordt gemaakt van laparoscopie
COLO	Colonheelkunde	Incisie, resectie of anastomose van de dikke darm; omvat ook de anastomosen tussen dunne en dikke darm
CSEC	Keizersnede	Verloskunde door middel van keizersnede
HPRO	Heupprothese	Arthroplastie van de heup
KPRO	Knieprothese	Arthroplastie van de knie
LAM	Laminectomie	Exploratie of decompressie van spinale zenuwwortel via excisie van wervelstructuren; excisie of destructie van discus intervertebralis

## 2 ICD-9-CM procedure codes

Deze procedure codes horen bij de bovenvermelde lijst van NHSN operatiecategorieën.

NNIS Code	ICD-9-CM code	Beschrijving (engels)
CBGB	36.10	AORTOCORONARY BYPASS FOR HEART REVASCULARIZATION, NOS
CBGB	36.11	AORTOCORONARY BYPASS OF ONE CORONARY ARTERY
CBGB	36.12	AORTOCORONARY BYPASS OF TWO CORONARY ARTERIES
CBGB	36.13	AORTOCORONARY BYPASS OF THREE CORONARY ARTERIES
CBGB	36.14	AORTOCORONARY BYPASS OF FOUR OR MORE CORONARY ARTERIES
CBGB	36.19	OTHER BYPASS ANASTOMOSIS FOR HEART REVASCULARIZATION
CBGC	36.15	SINGLE INTERNAL MAMMARY-CORONARY ARTERY BYPASS
CBGC	36.16	DOUBLE INTERNAL MAMMARY-CORONARY ARTERY BYPASS
CBGC	36.17	ABDOMINAL-CORONARY ARTERY BYPASS
CBGC	36.2	HEART REVASCULARIZATION BY ARTERIAL IMPLANT
CHOL	51.03	OTHER CHOLECYSTOSTOMY
CHOL	51.04	OTHER CHOLECYSTOTOMY
CHOL	51.13	OPEN BIOPSY OF GALLBLADDER OR BILE DUCTS
CHOL	51.21	PARTIAL CHOLECYSTECTOMY
CHOL	51.22	TOTAL CHOLECYSTECTOMY
CHOL	51.23	LAPAROSCOPIC CHOLECYSTECTOMY
CHOL	51.24	LAPAROSCOPIC PARTIAL CHOLECYSTECTOMY
COLO	17.31	LAPAROSCOPIC MULTIPLE SEGMENTAL RESECTION OF LARGE INTESTINE
COLO	17.32	LAPAROSCOPIC CECECTOMY
COLO	17.33	LAPAROSCOPIC RIGHT HEMICOLECTOMY



NNIS Code	ICD-9-CM code	Beschrijving (engels)
COLO	17.34	LAPAROSCOPIC RESECTION OF TRANSVERSE COLON
COLO	17.35	LAPAROSCOPIC LEFT HEMICOLECTOMY
COLO	17.36	LAPAROSCOPIC SIGMOIDECTOMY
COLO	17.39	OTHER LAPAROSCOPIC PARTIAL EXCISION OF LARGE INTESTINE
COLO	45.03	INCISION OF LARGE INTESTINE
COLO	45.26	OPEN BIOPSY OF LARGE INTESTINE
COLO	45.41	EXCISION OF LESION OR TISSUE OF LARGE INTESTINE
COLO	45.49	OTHER DESTRUCTION OF LESION OF LARGE INTESTINE
COLO	45.71	MULTIPLE SEGMENTAL RESECTION OF LARGE INTESTINE
COLO	45.72	CECECTOMY
COLO	45.73	RIGHT HEMICOLECTOMY
COLO	45.74	RESECTION OF TRANSVERSE COLON
COLO	45.75	LEFT HEMICOLECTOMY
COLO	45.76	SIGMOIDECTOMY
COLO	45.79	OTHER PARTIAL EXCISION OF LARGE INTESTINE
COLO	45.81	LAPAROSCOPIC TOTAL INTRA-ABDOMINAL COLECTOMY
COLO	45.82	OPEN TOTAL INTRA-ABDOMINAL COLECTOMY
COLO	45.83	OTHER AND UNSPECIFIED TOTAL INTRA-ABDOMINAL COLECTOMY
COLO	45.92	ANASTOMOSIS OF SMALL INTESTINE TO RECTAL STUMP
COLO	45.93	OTHER SMALL-TO-LARGE INTESTINAL ANASTOMOSIS
COLO	45.94	LARGE-TO-LARGE INTESTINAL ANASTOMOSIS
COLO	45.95	ANASTOMOSIS OF SMALL INTESTINE TO ANUS
COLO	46.03	EXTERIORIZATION OF LARGE INTESTINE
COLO	46.04	RESECTION OF EXTERIORIZED SEGMENT OF LARGE INTESTINE
COLO	46.10	COLOSTOMY, NOT OTHERWISE SPECIFIED
COLO	46.11	TEMPORARY COLOSTOMY
COLO	46.13	PERMANENT COLOSTOMY
COLO	46.14	DELAYED OPENING OF COLOSTOMY
COLO	46.43	OTHER REVISION OF STOMA OF LARGE INTESTINE
COLO	46.52	CLOSURE OF STOMA OF LARGE INTESTINE
COLO	46.75	SUTURE OF LACERATION OF LARGE INTESTINE
COLO	46.76	CLOSURE OF FISTULA OF LARGE INTESTINE
COLO	46.94	REVISION OF ANASTOMOSIS OF LARGE INTESTINE
CSEC	74.0	CLASSICAL CESAREAN SECTION
CSEC	74.1	LOW CERVICAL CESAREAN SECTION
CSEC	74.2	EXTRAPERITONEAL CESAREAN SECTION
CSEC	74.4	CESAREAN SECTION OF OTHER SPECIFIED TYPE
CSEC	74.9	CESAREAN SECTION OF UNSPECIFIED TYPE
CSEC	74.91	HYSTEROTOMY TO TERMINATE PREGNANCY
CSEC	74.99	OTHER CESAREAN SECTION OF UNSPECIFIED TYPE
HPRO	00.70	REVISION OF HIP REPLACEMENT: ACETABULAR AND FEMORAL COMPONENTS (TOTAL)
HPRO	00.71	REVISION OF HIP REPLACEMENT: ACETABULAR COMPONENT ONLY
HPRO	00.72	REVISION OF HIP REPLACEMENT: FEMORAL HEAD ONLY
HPRO	00.73	REVISION OF HIP REPLACEMENT: ACETABULAR LINER AND/OR FEMORAL HEAD ONLY



NNIS Code	ICD-9-CM code	Beschrijving (engels)
HPRO	00.85	RESURFACING HIP, TOTAL ACETABULUM, AND FEMORAL HEAD
HPRO	00.86	RESURFACING HIP, PARTIAL, FEMORAL HEAD
HPRO	00.87	RESURFACING HIP, PARTIAL, ACETABULUM
HPRO	81.5	JOINT REPLACEMENT OF LOWER EXTREMITY
HPRO	81.51	TOTAL HIP REPLACEMENT
HPRO	81.52	PARTIAL HIP REPLACEMENT
HPRO	81.53	REVISION OF HIP REPLACEMENT
KPRO	00.80	REVISION OF KNEE REPLACEMENT: TOTAL (ALL COMPONENTS)
KPRO	00.81	REVISION OF KNEE REPLACEMENT: TIBIAL COMPONENT
KPRO	00.82	REVISION OF KNEE REPLACEMENT: FEMORAL COMPONENT
KPRO	00.83	REVISION OF KNEE REPLACEMENT: PATELLAR COMPONENT
KPRO	00.84	REVISION OF KNEE REPLACEMENT: TIBIAL INSERT
KPRO	81.54	TOTAL KNEE REPLACEMENT
KPRO	81.55	REVISION OF KNEE REPLACEMENT NOS
LAM	03.01	REMOVAL OF FOREIGN BODY FROM SPINAL CANAL
LAM	03.02	REOPENING OF LAMINECTOMY SITE
LAM	03.09	OTHER EXPLORATION AND DECOMPRESSION OF SPINAL CANAL
LAM	80.50	EXCISION OR DESTRUCTION OF INTERVERTEBRAL DISC, UNSPECIFIED
LAM	80.51	EXCISION OF INTERVERTEBRAL DISC
LAM	80.53	REPAIR OF THE ANULUS FIBROSUS WITH GRAFT OR PROSTHESIS
LAM	80.54	OTHER AND UNSPECIFIED REPAIR OF THE ANULUS FIBROSUS
LAM	84.60	INSERTION OF SPINAL DISC PROSTHESIS; NOS
LAM	84.61	INSERTION OF PARTIAL SPINAL DISC PROSTHESIS, CERVICAL
LAM	84.62	INSERTION OF TOTAL SPINAL DISC PROSTHESIS, CERVICAL
LAM	84.63	INSERTION OF SPINAL DISC PROSTHESIS, THORACIC
LAM	84.64	INSERTION OF PARTIAL SPINAL DISC PROSTHESIS, LUMBOSACRAL
LAM	84.65	INSERTION OF TOTAL SPINAL DISC PROSTHESIS, LUMBOSACRAL
LAM	84.66	REVISION OR REPLACEMENT OF ARTIFICIAL SPINAL DISC PROSTHESIS
LAM	84.67	REVISION OR REPLACEMENT OF ARTIFICIAL SPINAL DISC PROSTHESIS, LUMBOSACRAL
LAM	84.68	REVISION OR REPLACEMENT OF ARTIFICIAL SPINAL DISC PROSTHESIS, LUMBOSACRAL
LAM	84.69	REVISION OR REPLACEMENT OF ARTIFICIAL SPINAL DISC PROSTHESIS, NOT OTHERWISE SPECIFIED
LAM	84.80	INSERTION OR REPLACEMENT OF INTERSPINOUS PROCESS DEVICE(S)
LAM	84.81	REVISION OF INTERSPINOUS PROCESS DEVICE(S)
LAM	84.82	INSERTION OR REPLACEMENT OF PEDICLE-BASED DYNAMIC STABILIZATION DEVICE(S)
LAM	84.83	REVISION OF PEDICLE-BASED DYNAMIC STABILIZATION DEVICE(S)
LAM	84.84	INSERTION OR REPLACEMENT OF FACET REPLACEMENT DEVICE(S)
LAM	84.85	REVISION OF FACET REPLACEMENT DEVICE(S)

### 3 T-tijden voor de NHSN-operatiecategoriën

Bron: National Nosocomial Infections Surveillance (NNIS) System Report, Data Summary from October 1986 – April 1998, Issued June 1998. AJIC 1998; 26: 522-533 (table 7).



NHSN Operatiecategorie		T-tijd (uur) cut-off waarde
CARD	Cardiac surgery	5
<b>CBGB</b>	<b>CABG – Chest and leg</b>	<b>5</b>
<b>CBGC</b>	<b>CABG – Chest only</b>	<b>4</b>
OCVS	Other cardiovascular	2
ORES	Other respiratory system	2
THOR	Thoracic surgery	3
APPY	Appendectomy	1
BILI	Liver/pancreas surgery	4
<b>CHOL</b>	<b>Cholecystectomy</b>	<b>2</b>
<b>COLO</b>	<b>Colon surgery</b>	<b>3</b>
GAST	Gastric surgery	3
OGIT	Other digestive tract surgery	3
SB	Small bowel surgery	3
XLAP	Laparotomy	2
NEPH	Nephrectomy	3
OGU	Other genitourinary	2
PRST	Prostatectomy	4
HN	Head and neck surgery	5
OENT	Other ENT surgery	3
<b>HER</b>	<b>Herniorrhaphy</b>	<b>2</b>
MAST	Mastectomy	2
CRAN	Craniotomy	5
ONS	Other nervous system surgery	3
VSHN	Ventricular shunt	2
<b>CSEC</b>	<b>Cesarian section</b>	<b>1</b>
HYST	Abdominal hysterectomy	2
OOB	Other obstetric surgery	1
VHYS	Vaginal hysterectomy	2
AMP	Limb amputation	1
FUSN	Spinal fusion	4
FX	Open reduction of fracture	2
<b>HPRO</b>	<b>Hip prosthesis</b>	<b>2</b>
<b>KPRO</b>	<b>Knee prosthesis</b>	<b>2</b>
OPRO	Other joint prosthesis	3
<b>LAM</b>	<b>Laminectomy</b>	<b>2</b>
OMS	Other musculoskeletal	3
OBL	Other hematologic/lymphatic surgery	3
OES	Other endocrine surgery	3
OEYE	Other eye surgery	2
OSKN	Other integumentary system surgery	2
SPLE	Splenectomy	2
TP	Organ transplant	7
<b>VS</b>	<b>Vascular surgery</b>	<b>3</b>
SKGR	Skin graft	2

#### 4 Merkers voor Antimicrobiële Resistentie

De bijgevoegde lijst geeft de merkers voor Antimicrobiële Resistentie (AMR) weer die per microorganisme of groep van microorganismen worden opgevraagd. Deze worden automatisch getoond bij aanduiden van een microorganisme in de registratiesoftware NSIHwin. De AMR merkers aangeduid met prioriteitscode "0" zijn de minimale merkers uit de ECDC protocols "European Surveillance of Surgical Site Infections", "European surveillance of Healthcare-associated Infections in Intensive Care Units" en "Point Prevalence Survey of Healthcare-associated Infections and Antimicrobial Use". Deze



merkers dienen in de registratiesoftware NSIHwin verplicht te worden aangeduid, de waarde “onbekend” is hierbij weliswaar een mogelijk resultaat. De AMR merkers met prioriteitscode “1” zijn aanvullingen uit de uitgebreide lijst van merkers van het ECDC protocol “European Surveillance of Healthcare-associated Infections in Intensive Care Units”. De AMR merkers met prioriteitscode “2” zijn aanvullingen uit het ECDC-protocol “European Antimicrobial Resistance Surveillance (EARS)”. De AMR merkers met code 1 of 2 dienen in de registratiesoftware NSIHwin optioneel te worden aangeduid.

Genus / species	AMR marker	Prioriteitscode
<i>Staphylococcus</i> spp.	Glycopeptides: Vancomycin/teicoplanin	0
	Penicillins: Methicillin/Oxacillin	
	Cephalosporins: Cefuroxim / Cefamandole / Cefoxitin (2nd gen)	2
	Fluoroquinolones: Ciprofloxacin / Ofloxacin	
	Penicillins: Cloxacillin	
	Penicillins: Dicloxacillin	
	Penicillins: Flucloxacillin	
	Fluoroquinolones: Levofloxacin	
	Other antibiotics: Linezolid	
	Fluoroquinolones: Norfloxacin	
Antimycobacterials: Rifampicin		
<i>Streptococcus pneumoniae</i>	Macrolides & sim.: Azithromycin	2
	Cephalosporins: Cefotaxime / Ceftriaxone (3rd gen)	
	Fluoroquinolones: Ciprofloxacin / Ofloxacin	
	Macrolides & sim.: Clarithromycin	
	Macrolides & sim.: Erythromycin	
	Fluoroquinolones: Levofloxacin	
	Fluoroquinolones: Moxifloxacin/Trovafloxacin	
	Fluoroquinolones: Norfloxacin	
	Penicillins: Methicillin/Oxacillin	
<i>Enterococcus</i> spp.	Glycopeptides: Vancomycin/teicoplanin	0
	Penicillins: Ampicillin	1
	Penicillins: Amoxicillin/clavulanate	
	Aminoglycosides: Gentamycin	2
	Other antibiotics: Linezolid	
<i>Enterobacteriaceae</i>	Cephalosporins: Cefotaxime / Ceftriaxone (3rd gen)	0
	Carbapenems: Meropenem / Imipenem / Doripenem	
	Cephalosporins: Ceftazidim (anti-pseudom 3rd gen)	
	Penicillins: Amoxicillin/clavulanate	1
	Ext Spect. Beta Lact. (ESBL): Resistant/Sensitive=Yes/No ESBL-production	
	Aminoglycosides: Amikacin	2
	Fluoroquinolones: Ciprofloxacin / Ofloxacin	
	Aminoglycosides: Gentamycin	
Fluoroquinolones: Levofloxacin		



Genus / species	AMR marker	Prioriteits-code
	Aminoglycosides: Tobramycin	
<i>Acinetobacter</i> spp.	Carbapenems: Meropenem / Imipenem / Doripenem	0
	Polymyxins: Colistin	1
	Penicillins: Sulbactam	
<i>Pseudomonas</i> spp.	Carbapenems: Meropenem / Imipenem / Doripenem	0
	Cephalosporins: Ceftazidim (anti-pseudom 3rd gen)	1
	Polymyxins: Colistin	
	Penicillins: Piperacillin/ticarcillin	
	Penicillins: Piperacillin/ticarcillin + enzyme inhibitor	
	Aminoglycosides: Amikacin	2
	Fluoroquinolones: Ciprofloxacin / Ofloxacin	
	Aminoglycosides: Gentamycin	
	Fluoroquinolones: Levofloxacin	
Aminoglycosides: Tobramycin		

## 5 Afdelingstypes

Code	Beschrijving (engels)
00/	unknown
BR/	Burn
CA/	General/Abdom. Surgery
CC/	Cardiovascular surgery
CM/	Mixed surgical/medicine
CN/	Neurosurgery
CO/	Orthopedics
CP/	Plastic surgery
CU/	Urology
CX/	Other Surgery
GE/	Geriatrics
GY/	Gynecology
IC/	Intensive care
MC/	Cardiology
MD/	Endocrinology
ME/	Internal Medicine
MN/	Nephrology
MO/	Oncology / Hematology
MP/	Pneumology
MX/	Medicine, other
NI/	Neonatal Intensive Care



<b>Code</b>	<b>Beschrijving (engels)</b>
OB/	Obstetrics
OL/	Otorhinolaryngology
OP/	Ophthalmology
PE/	Pediatrics
PS/	Psychiatry
RV/	Revalidation
TR/	Trauma / Emergency
XX/	Other



