

eAppendix

Diagnostic codes used to identify infection

Abscesses

ICD-10: A541, B43, D733, E060A, E236A, E321, G06, G07, H000A, H050A, H440A, H600, J340A, J36, J383D, J387G, J390, J391, J398A, J851, J852, J853, K113, K122, K130A, K140A, K209A, K353A, K353B, K570, K572, K574, K578, K61, K630, K650, K750, K810A, K858A, L02, L050, L059, M608A, M868A, M869A, N151, N340, N412, N450, N482, N492A, N619A, N619B, N700A, N700B, N710A, N730A, N730B, N732A, N732B, N733A, N735A, N738A, N738C, N751, N764, and N768A.

Except: A541B, B430, B438, B439, K570B, K570C, K572B, K572C, K574A, K650M, K650N, K650O, and K650P.

Infections of the skin and subcutaneous tissue

ICD-10: A46, L00-L08, L303, L738H, and L88.

Except: L889 and L889C.

Erysipelas

ICD-10: A46

Other

Diagnostic codes for infections of the skin and subcutaneous tissue except for erysipelas.

Respiratory tract infections

ICD-10: J00-J06, J09-J18, J20-J22, J340, J350, J36, J383C, J383D, J387B, J387F, J387G, J390, J391, J398A, and J85-J86.

Except: J340E, J340F, J340G, and J340H.

Tonsillitis

ICD-10: J03, and J350.

Pneumonia

ICD-10: J100, J110, and J12-J18.

Other

Diagnostic codes for respiratory tract infections except for tonsillitis and pneumonia.

Ear infections

ICD-10: H60, H610, H620, H621, H623, H65, H66, H670, H671, H68, H70, H730, H750, H830, and H940.

Except: H604, H604A, H605, H605B, H608, H608A, H652, H653, H654, H654C, H661, H662, H663, H681, H701, and H708.

Gastrointestinal infections

ICD-10: A0, K35, DK37, K57, K65, and K67.

Except: A06, A07, K573C, K573D, K574, K574A, K575, K578, K579, K658A, K658C, K658E, K658F, K658G, and K658H.

Infectious gastrointestinal diseases

ICD-10: A0.

Except: A06, and A07.

Appendicitis

ICD-10: K35, and K37.

Diverticulitis

ICD-10: K57.

Except: K573C, K573D, K574, K574A, K575, K578, and K579.

Other

Diagnostic codes for gastrointestinal infections except for infectious gastrointestinal infections, appendicitis and diverticulitis.

Urinary tract infections

ICD-10: N080, N109A, N109B, N109C, N12, N136, N151, N160, N288D, N288E, N288F, N290, N291, N30, N330, N340, N341, N342A, N342B, N390, N412, DN45, N481, N482, N49, N511 and N512.

Except: N301, N302, N304, N308, N459B, and N481D.

Cystitis

ICD-10: N30.

Exept: N301, N302, N304, and N308.

Other

Diagnostic codes for urinary tract infections except for cystitis.

Pelvic inflammatory diseases

ICD-10: N70-N77.

Except: N701, N702, N711, N729B, N729E, N731, N734, N736, N738B, N75, N750, N758, N758B, N759, N761A, N761C, N761E, N763A, N765 and N766.

Pelvic inflammatory diseases (except abscesses)

ICD-10: N70-N77.

Except: N700A, N700B, N701, N702, N710A, N711, N729B, N729E, N730A, N730B, N730D, N730E, N731, N732A, N732B, N732D, N732E, N733A, N734, N735A, N736, N738A, N738B, N738C, N760A, N761A, N761C, N761E, N763A, N764, N765, N766, and N768A.

Infections overall:

The above mentioned ICD-10 codes along with A, B, D738C, D738D, D762, E060B, G00, G01, G02, G039, G04, G05, G06, G07, G531, G630, G734, G940, I00, I01, I02, I30, I320, I321, I33, I38, I39, I400, I410, I411, I412, I430, I520, I521, K112, K113, K12, K140, K230, K770, K858E, K930, M00, M01, M03, M461, M462, M463, M464, M465, M490, M491, M492, M493, M600, M630, M632, M650, M651, M680, M710, M711, M726, M730, M731, M86, M900, M901, M902, and N61.

Except: A06, A07, A33, A630, A65, A66, A67, A68, A69, A881, B079D, B18, B35, B36, B37, B38, B39, B4, B5, B5, B6, B7, B80, B81, B82, B83, B85, B86, B87, B88, B89, B90, B91, B92, B94, I300, I521C, K112B, M031A, M036, M863, M864, M865 and M866.

Table 1: The association between abdominal obesity and infection

Site of infection	Women				Men			
	N ^a	IR ^b	Crude ^c	Adjusted ^f	N	IR	Crude	Adjusted
			HR ^c (95% CI ^d)	HR (95% CI)			HR (95% CI)	HR (95% CI)
Infections overall								
Women, waist<99; men, waist<106 (reference)	464	9.4	1	1	531	10.7	1	1
Woman, waist≥99; men, waist≥106	68	10.3	1.4 (1.1-1.8)	1.4 (1.1-1.8)	86	14.7	1.4 (1.1-1.8)	1.4 (1.1-1.8)
Abscesses								
All abscesses								
Women, waist<99; men, waist<106 (reference)	78	1.7	1	1	97	1.9	1	1
Woman, waist≥99; men, waist≥106	18	3.4	2.2 (1.3-3.7)	2.1 (1.2-3.5)	31	5.2	2.9 (1.9-4.4)	2.9 (1.9-4.3)
Infections of the skin and subcutaneous tissue								
All infections of the skin and subcutaneous tissue								
Women, waist<99; men, waist<106 (reference)	80	1.8	1	1	149	3.0	1	1
Woman, waist≥99; men, waist≥106	3	0.6	0.4 (0.1-1.2)	0.4 (0.1-1.1)	37	6.3	2.2 (1.5-3.2)	2.2 (1.5-3.2)
Erysipelas								
Women, waist<99; men, waist<106 (reference)	15	0.3	1	1	25	0.5	1	1
Woman, waist≥99; men, waist≥106	0	-	-	-	9	1.5	2.87 (1.33-6.19)	2.85 (1.32-6.13)
Other								
Women, waist<99; men, waist<106 (reference)	66	1.4	1	1	125	2.5	1	1
Woman, waist≥99; men, waist≥106	3	0.6	0.5 (0.1-1.5)	0.4 (0.1-1.4)	28	4.7	2.0 (1.3-3.1)	2.0 (1.3-3.1)
Respiratory tract infections								
All respiratory tract infections								
Women, waist<99; men, waist<106 (reference)	107	2.3	1	1	119	2.4	1	1
Woman, waist≥99; men, waist≥106	21	4.0	1.9 (1.2-3.0)	1.9 (1.2-3.0)	13	2.2	0.9 (0.5-1.7)	0.9 (0.5-1.7)
Tonsillitis								
Women, waist<99; men, waist<106 (reference)	26	0.6	1	1	20	0.4	1	1
Woman, waist≥99; men, waist≥106	6	1.1	3.0 (1.2-7.4)	3.0 (1.2-7.4)	5	0.8	2.6 (1.0-7.0)	2.6 (1.0-7.0)
Pneumonia								
Women, waist<99; men, waist<106 (reference)	46	1.0	1	1	67	1.3	1	1
Woman, waist≥99; men, waist≥106	12	2.3	2.2 (1.2-4.2)	2.2 (1.1-4.1)	6	1.0	0.7 (0.3-1.6)	0.7 (0.3-1.6)
Other								
Women, waist<99; men, waist<106 (reference)	39	0.9	1	1	38	0.8	1	1
Woman, waist≥99; men, waist≥106	4	0.8	1.0 (0.3-2.7)	1.0 (0.3-2.7)	2	0.3	0.5 (0.1-2.1)	0.5 (0.1-2.1)

Ear infections

All ear infections

Women, waist<99; men, waist<106 (reference)	17	0.4	1	1	17	0.3	1	1
Woman, waist≥99; men, waist≥106	3	0.6	1.7 (0.5-6.0)	1.7 (0.5-6.0)	2	0.3	0.9 (0.2-4.0)	0.9 (0.2-4.0)

Gastrointestinal infections

All gastrointestinal infections

Women, waist<99; men, waist<106 (reference)	104	2.3	1	1	104	2.1	1	1
Woman, waist≥99; men, waist≥106	10	1.9	0.9 (0.5-1.7)	0.9 (0.5-1.7)	11	1.8	0.9 (0.5-0.6)	0.9 (0.5-0.6)

Infectious gastrointestinal diseases

Women, waist<99; men, waist<106 (reference)	29	0.6	1	1	30	0.6	1	1
Woman, waist≥99; men, waist≥106	1	0.2	0.4 (0.1-2.7)	0.4 (0.1-2.6)	2	0.3	0.6 (0.1-2.4)	0.6 (0.1-2.4)

Appendicitis

Women, waist<99; men, waist<106 (reference)	51	1.1	1	1	48	1.0	1	1
Woman, waist≥99; men, waist≥106	4	0.8	0.8 (0.3-2.3)	0.8 (0.3-2.4)	4	0.7	0.7 (0.3-2.1)	0.7 (0.3-2.1)

Diverticulitis

Women, waist<99; men, waist<106 (reference)	26	0.6	1	1	25	0.5	1	1
Woman, waist≥99; men, waist≥106	4	0.8	1.0 (0.4-2.9)	1.0 (0.4-2.9)	4	0.7	1.2 (0.4-3.4)	1.2 (0.4-3.3)

Other

Women, waist<99; men, waist<106 (reference)	1	0.02	1	1	4	0.1	1	1
Woman, waist≥99; men, waist≥106	3	0.6	17.7 (1.8-170.7)	16.3 (1.7-158.2)	1	0.2	1.7 (0.2-15.4)	1.7 (0.2-14.8)

Urinary tract infections

All urinary tract infections

Women, waist<99; men, waist<106 (reference)	65	1.4	1	1	64	1.3	1	1
Woman, waist≥99; men, waist≥106	10	1.9	1.6 (0.8-3.2)	1.6 (0.8-3.1)	7	1.2	1.0 (0.4-2.1)	1.0 (0.4-2.1)

Cystitis

Women, waist<99; men, waist<106 (reference)	42	1.0	1	1	18	0.4	1	1
Woman, waist≥99; men, waist≥106	7	1.3	1.7 (0.8-3.8)	1.7 (0.8-3.8)	1	0.2	0.5 (0.1-3.6)	0.5 (0.1-3.7)

Other

Women, waist<99; men, waist<106 (reference)	25	0.5	1	1	48	1.0	1	1
Woman, waist≥99; men, waist≥106	3	0.6	1.4 (0.4-4.6)	1.3 (0.4-4.4)	6	1.0	1.1 (0.5-2.6)	1.1 (0.5-2.6)

Pelvic inflammatory diseases

All pelvic inflammatory diseases

Women, waist<99; men, waist<106 (reference)	54	1.2	1	1	-	-	-	-
Woman, waist≥99; men, waist≥106	7	1.3	1.3 (0.6-2.9)	1.3 (0.6-2.8)	-	-	-	-

Pelvic inflammatory diseases (except abscesses)

Women, waist<99; men, waist<106 (reference)	43	0.9	1	1	-	-	-	-
Woman, waist≥99; men, waist≥106	1	0.2	0.2 (0.03-1.8)	0.24 (0.03-1.8)	-	-	-	-

Multivariable Cox proportional hazards analysis was performed with waist ≥ 99 cm (women)/waist ≥ 106 cm (men) as predictor.

^aN: number of cases.

^b IR: incidence rate per 1000 person-years

^c HR: hazard ratio.

^d 95% CI: 95% confidence interval.

^e The crude HR was calculated with the use of Cox's regression, with age as the underlying time scale.

^f Multivariable-adjusted model based on the crude model with additional adjustments for smoking at baseline and comorbidity using Charlsons Comorbidity Index.

Table 2: The association between abdominal obesity and filled prescriptions of antimicrobials

Type of prescription	Women				Men			
			Crude ^e	Adjusted ^f			Crude	Adjusted
	N ^a	IR ^b	HR ^c (95% CI ^d)	HR (95% CI)	N	IR	HR (95% CI)	HR (95% CI)
Antimicrobials overall:								
Women, waist<99; men, waist<106 (reference)	7,435	345.6	1	1	5,613	205.7	1	1
Woman, waist≥99; men, waist≥106	894	377.2	1.15 (1.07-1.23)	1.14 (1.06-1.22)	735	234.5	1.13 (1.05-1.22)	1.13 (1.05-1.22)
Phenoxymethylpenicillin								
Women, waist<99; men, waist<106 (reference)	3,535	131.5	1	1	3,268	107.7	1	1
Woman, waist≥99; men, waist≥106	560	193.2	1.50 (1.37-1.64)	1.48 (1.36-1.62)	481	137.7	1.25 (1.14-1.38)	1.25 (1.13-1.37)
Erythromycin, roxithromycin, and clarithromycin								
Women, waist<99; men, waist<106 (reference)	1,058	35.4	1	1	910	27.4	1	1
Woman, waist≥99; men, waist≥106	181	53.5	1.49 (1.27-1.75)	1.48 (1.26-1.74)	143	36.7	1.27 (1.06-1.51)	1.27 (1.06-1.51)
Dicloxacillin and flucloxacillin								
Women, waist<99; men, waist<106 (reference)	649	21.3	1	1	734	21.9	1	1
Woman, waist≥99; men, waist≥106	106	30.5	1.42 (1.15-1.74)	1.40 (1.14-1.73)	116	29.4	1.36 (1.11-1.65)	1.35 (1.11-1.65)
Miconazole and terbinafine								
Women, waist<99; men, waist<106 (reference)	274	8.9	1	1	534	15.9	1	1
Woman, waist≥99; men, waist≥106	40	11.3	1.28 (0.92-1.79)	1.28 (0.92-1.79)	56	14.0	0.88 (0.67-1.16)	0.88 (0.67-1.16)
Azithromycin								
Women, waist<99; men, waist<106 (reference)	838	27.8	1	1	664	19.8	1	1
Woman, waist≥99; men, waist≥106	79	22.6	0.93 (0.74-1.17)	0.92 (0.73-1.16)	73	18.2	1.00 (0.78-1.27)	1.00 (0.78-1.27)
Pivmecillinam and sulfamethizole								
Women, waist<99; men, waist<106 (reference)	2,108	73.5	1	1	207	6.1	1	1
Woman, waist≥99; men, waist≥106	165	48.5	0.73 (0.62-0.86)	0.73 (0.62-0.86)	23	5.7	0.87 (0.57-1.34)	0.87 (0.56-1.34)
Pivmecillinam, sulfamethizole, nitrofurantoin, trimethoprim, and ciprofloxacin								
Women, waist<99; men, waist<106 (reference)	2,555	90.9	1	1	601	17.9	1	1
Woman, waist≥99; men, waist≥106	202	60.2	0.73 (0.63-0.85)	0.73 (0.63-0.85)	73	18.3	1.03 (0.81-1.32)	1.03 (0.81-1.32)

Pivampicillin, amoxicillin, and amoxicillin + enzyme inhibitor

Women, waist<99; men, waist<106 (reference)	716	23.6	1	1	586	17.4	1	1
Woman, waist≥99; men, waist≥106	112	32.2	1.32 (1.08-1.62)	1.31 (1.07-1.60)	97	24.4	1.33 (1.07-1.64)	1.31 (1.06-1.63)

Multivariable Cox proportional hazards analysis was performed with waist ≥ 99 cm (women)/waist ≥ 106 cm (men) as predictor.

^aN: number of cases.

^bIR: incidence rate per 1000 person-years

^cHR: hazard ratio.

^d95% CI: 95% confidence interval.

^eThe crude HR was calculated with the use of Cox's regression, with age as the underlying time scale.

^fMultivariable-adjusted model based on the crude model with additional adjustments for smoking at baseline and comorbidity using Charlsons Comorbidity Index.