

**Appendix 5.** Prevalence and composition of diagnostic clusters in men aged 45-64 years (n= 191,171).

Cluster order number, n	Prevalence 1 .%*	Prevalence 2, %†	Blocks of diagnoses	Prevalence in group‡, %	Prevalence in cluster, %	Most prevalent diagnoses of the block	AU p-value*
<b>MC1^</b> 160,216	83.8	50.4	E70-E90:Metabolic disorders	42.2	50.3	E78 Disorders of lipoprotein metabolism and other lipidaemias	0.69 (0.64-0.75)
			F10-F19:Mental and behavioural disorders due to psychoactive substance use	33.6	40.1	F17 Mental and behavioural disorders due to use of tobacco	
			I10-I15:Hypertensive diseases	32.5	38.8	I10 Essential (primary) hypertension	
			M50-M54:Other dorsopathies	27.8	33.2	M54 Dorsalgia	
			E65-E68:Obesity and other hyperalimentation	14.6	17.4	E66 Obesity	
			E10-E14:Diabetes mellitus	14.2	16.9	E11 Non-insulin-dependent diabetes mellitus	
<b>MC2</b> 110,200	57.6	24.2	M70-M79:Other soft tissue disorders	16.9	29.3	M75 Shoulder lesions	0.87 (0.84-0.90)
			N40-N51:Diseases of male genital organs	12.1	21.0	N40 Hyperplasia of prostate	
			M20-M25:Other joint disorders	12.0	20.9	M25 Other joint disorders, not elsewhere classified	
			K20-K31:Diseases of oesophagus, stomach and duodenum	11.5	20.0	K29 Gastritis and duodenitis	
			I80-I89:Diseases of veins, lymphatic vessels and lymph nodes, not elsewhere classified	10.0	17.4	I84 Haemorrhoids	
			K40-K46:Hernia	8.8	15.2	K40 Inguinal hernia	

			D10-D36:Benign neoplasms	8.6	14.9	D17 Benign lipomatous neoplasm	
			M15-M19:Arthrosis	7.7	13.4	M17 Gonarthrosis [arthrosis of knee]	
			K55-K63:Other diseases of intestines	6.4	11.1	K62 Other diseases of anus and rectum	
<b>MC3</b> 103,365	54.1	20.7	F40-F48:Neurotic, stress-related and somatoform disorders	13.5	24.9	F41 Nutritional marasmus	0.79 (0.74-0.84)
			K00-K14:Diseases of oral cavity, salivary glands and jaws	12.0	22.3	K02 Dental caries	
			J40-J47:Chronic lower respiratory diseases	9.3	17.2	J44 Other chronic obstructive pulmonary disease	
			J00-J06:Acute upper respiratory infections	8.9	16.4	J00 Acute nasopharyngitis [common cold]	
			J30-J39:Other diseases of upper respiratory tract	8.0	14.8	J30 Vasomotor and allergic rhinitis	
			L20-L30:Dermatitis and eczema	7.5	13.9	L21 Seborrhoeic dermatitis	
			G40-G47:Episodic and paroxysmal disorders	7.4	13.7	G47 Sleep disorders	
			F50-F59:Behavioural syndromes associated with physiological disturbances and physical factors	6.6	12.2	F52 Sexual dysfunction, not caused by organic disorder or disease	
			F30-F39:Mood [affective] disorders	6.3	11.6	F32 Depressive episode	
			B35-B49:Mycoses	4.1	7.6	B35 Dermatophytosis	
<b>MC4</b> 48,140	25.2	4.7	H90-H95:Other disorders of ear	7.7	30.6	H91 Disorders of sclera and cornea in diseases classified elsewhere	0.87 (0.83-0.91)
			H53-H54:Visual disturbances and blindness	3.9	15.5	H54 Blindness and low vision	
			B00-B09:Viral infections characterized by skin and	3.5	13.9	B07 Viral warts	

			mucous membrane lesions				
			L60-L75:Disorders of skin appendages	3.5	13.9	L72 Follicular cysts of skin and subcutaneous tissue	
			H10-H13:Disorders of conjunctiva	3.0	12.0	H10 Conjunctivitis	
			H49-H52:Disorders of ocular muscles, binocular movement, accommodation and refraction	2.8	11.2	H52 Disorders of refraction and accommodation	
			L80-L99:Other disorders of the skin and subcutaneous tissue	2.5	10.0	L82 Seborrhoeic keratosis	
			L00-L08:Infections of the skin and subcutaneous tissue	2.1	8.3	L02 Cutaneous abscess, furuncle and carbuncle	
			H00-H06:Disorders of eyelid, lacrimal system and orbit	1.6	6.5	H00 Hordeolum and chalazion	
<b>MC5</b> 30,315	15.9	2.9	I30-I52:Other forms of heart disease	6.9	43.7	I45 Other conduction disorders	0.77 (0.73-0.82)
			I20-I25:Ischaemic heart diseases	5.0	31.0	I25 Chronic ischaemic heart disease	
			I70-I79:Diseases of arteries, arterioles and capillaries	2.4	15.2	I73 Other peripheral vascular diseases	
			I60-I69:Cerebrovascular diseases	1.8	11.4	I64 Stroke, not specified as haemorrhage or infarction	
			H30-H36:Disorders of choroid and retina	1.7	11.0	H36 Retinal disorders in diseases classified elsewhere	
			N17-N19:Renal failure	1.5	9.2	N18 Chronic renal failure	
<b>MC6</b> 29,907	15.6	1.5	M05-M14:Inflammatory polyarthropathies	5.4	34.5	M10 Gout	0.66 (0.60-0.72)
			S80-S89:Injuries to the knee and lower leg	3.2	20.7	S83 Dislocation, sprain and strain of joints and ligaments of knee	

			L40-L45: Papulosquamous disorders	3.2	20.5	L40 Psoriasis	
			G50-G59: Nerve, nerve root and plexus disorders	2.7	17.4	G56 Mononeuropathies of upper limb	
			M65-M68: Disorders of synovium and tendon	2.6	16.8	M65 Synovitis and tenosynovitis	
<b>MC7</b> 19,313	10.1	0.9	K70-K77: Diseases of liver	5.2	51.9	K76 Other diseases of liver	1.00
			B15-B19: Viral hepatitis	3.2	32.0	B18 Chronic viral hepatitis	
			K80-K87: Disorders of gallbladder, biliary tract and pancreas	2.6	25.8	K80 Cholelithiasis	
<b>MC8</b> 19,160	10.0	0.7	T08-T14: Injuries to unspecified part of trunk, limb or body region	4.1	41.0	T14 Injury of unspecified body region	0.80 (0.75-0.86)
			L50-L54: Urticaria and erythema	2.1	20.8	L50 Urticaria	
			S60-S69: Injuries to the wrist and hand	1.9	18.5	S61 Open wound of wrist and hand	
			S90-S99: Injuries to the ankle and foot	1.4	13.9	S93 Dislocation, sprain and strain of joints and ligaments at ankle and foot level	
			S00-S09: Injuries to the head	1.3	13.3	S01 Open wound of head	
<b>MC9</b> 13,752	7.2	0.3	E00-E07: Disorders of thyroid gland	2.4	32.8	E03 Other hypothyroidism	0.97 (0.96-0.98)
			K50-K52: Noninfective enteritis and colitis	1.7	24.1	K52 Other non-infective gastro-enteritis and colitis	
			D50-D53: Nutritional anaemias	1.2	16.3	D50 Iron deficiency anaemia	
			Q38-Q45: Other congenital malformations of the digestive system	1.2	16.2	Q40 Other congenital malformations of upper alimentary tract	
			D70-D77: Other diseases of blood and blood-forming organs	1.1	15.3	D72 Other disorders of white blood cells	
<b>MC10</b>	7.1	0.5	J20-J22: Other acute lower	2.6	37.2	J20 Acute bronchitis	0.86 (0.82-0.91)

13,490			respiratory infections				
			A00-A09: Intestinal infectious diseases	2.4	34.2	A09 Diarrhoea and gastro-enteritis of presumed infectious origin	
			J09-J18: Influenza and pneumonia	1.6	22.0	J11 Influenza, virus not identified	
			B25-B34: Other viral diseases	1.0	14.6	B34 Viral infection of unspecified site	
<b>MC11</b> 13,434	7.0	0.4	H60-H62: Diseases of external ear	3.9	55.3	H61 Other disorders of external ear	0.88 (0.85-0.92)
			H65-H75: Diseases of middle ear and mastoid	2.1	30.5	H65 Nonsuppurative otitis media	
			H80-H83: Diseases of inner ear	1.4	19.9	H81 Disorders of vestibular function	
<b>MC12</b> 10,952	5.7	0.1	N20-N23: Urolithiasis	4.3	75.5	N20 Calculus of kidney and ureter	0.99 (0.98-1.00)
			N30-N39: Other diseases of urinary system	1.6	27.1	N39 Other disorders of urinary system	
<b>MC13</b> 8,794	4.6	0.3	M45-M49: Spondylopathies	3.1	66.7	M47 Spondylosis	0.99 (0.95-1.00)
			M40-M43: Deforming dorsopathies	1.8	38.9	M41 Scoliosis	
<b>MC14</b> 7,444	3.9	0.2	H40-H42: Glaucoma	2.3	59.6	H40 Glaucoma	0.91 (0.88-0.95)
			H25-H28: Disorders of lens	1.8	45.4	H25 Senile cataract	
<b>MC15</b> 6,161	3.2	0.0	T51-T65: Toxic effects of substances chiefly nonmedicinal as to source	2.1	65.8	T65 Toxic effect of other and unspecified substances	0.90 (0.87-0.93)
			F20-F29: Schizophrenia, schizotypal and delusional disorders	1.1	35.3	F20 Schizophrenia	

\*\*Approximately unbiased (AU) probability-value