Appendix 2 Specification of STOPP/START criteria

STOPP criteria

						Considerations/solutions and other variables		
A 1	Digoxin > 0,125mg/day C01AA05 = digoxin	and	impaired renal function (GFR <50 ml/min) ICPC U99.01 = impaired renal function			1) ICD9 584 = Acute kidney failure Can be reversible, therefore only included if recent episode (<1 year) of acute kidney failure. 2) Only include digoxin if dose > 0,125 mg/day 3) If the actual GFR is available use this information instead of the ICPC or ICD9		
			ICD9 585 = chronic kidney disease ICD9 586 = renal failure, unspecified. ICD9 584 = acute kidney failure			Variables (Episode of acute kidney failure) in the past year Digoxin dose >0.125mg/day GFR< 50 ml/min		
A 2	Loop diuretic	and	and	and	ankle oedema	without	clinical signs o f heart failure	1) Ankle oedema has no ICD9 code. ICD9 782.3 = oedema but not particularly from the ankle, therefore excluded.
	CO3CA = sulfonamides plain CO3CB =		ICPC K07 = ankle oedema/swolling ankles		ICPC K77 = decompensatio cordis	2) Many clinical signs of heart failure. Only include decompensatio cordis/heart failure.		
	sulfonamides and potassium in combination		ICD9 459.81 = venous (peripheral) insufficiency		ICD9 428 = heart failure	3)) The ICPC and ICD9 codes do not distinguish between systolic or diastolic heart failure. All heart failure is therefore included.		
A 3	Loop diuretic	as and	first line therapy for hypertension	without	decompensatio cordis	1) To ensure the loop diuretics are given as a therapy for hypertension, decompensatio cordis must be absent.		
	C03CA = sulfonamides plain C03CB = sulfonamides and		ICPC K85 = hypertension ICPC K86 = without organ failure		ICPC K77 = decompensatio cordis	2) First-line therapy is defined by the absence of other anti-hypertensive drugs. Please see Appendix 3 'Specification of included medication codes' in the supplementary data on the journal website http://www.ageing.oxfordjournals.org/ for a specification of all the included		
	potassium in combination			ICPC K87 = with organ failure		ICD9 428 = heart failure	anti-hypertensives.	

ICD9 401 = essential hypertension or other anti-ICD9 405 = hypertensive drug Secondary hypertension C02AC01, C02LC01, C02LC51, C02AC05, C02LC05, CO2AB, C02LB01, C02CA04, C02CA06, C02DB02, C02LG02, C02DB01, C02LG01, C02LG51, C02DC01, C02KD01, C02LN, C02N = antihypertensives C03A, C03B, C03D, C03E, C03X = diuretics (excl loop diuretics) **C07** = β-blocking agents **C08** = calcium channel blockers **C09** = agents acting on the renninangiotensin system

A 4	Thiazide diuretic	and	history of gout	1) Included are those thiazide diuretic and combinations available in the Netherlands. Please see Appendix 3 'Specification of included medication	
7	C03AA03= hydrochlorothiazide C03EA01, C09DA04, C03EA01, C09DA06, C07BB02, C09DA07, C07BB07, C09DA08, C09BA01, C09DX01, C09BA02, C09DX03, C09BA03, C09XA52, C09BA05, C09BA09, C09BA06, C09DA01 C09DA02, C09DA03		ICPC T92 = gout ICD9 274 = gout	codes' in the supplementary data on the journal website http://www.ageing.oxfordjournals.org/ for a table with a specification of all the included thiazide diuretic and combinations.	
A 5		and	COPD		
	C07AA = β -blocking agents, non-selective C07AG01 = labetalol C07AG02 = carvedilol C07BA, C07CA, C07DA, C07EA, C07FA = non- selective β - blocking agents in combination with other anti- hypertensive drugs		ICPC R91 = chronic bronchitis ICPC R95 = emphysema/COPD ICD9 490 = bronchitis, not specified as acute or chronic ICD9 491 = chronic bronchitis ICD9 492 = emphysema ICD9 496 = chronic airway		
			ICD9 496 = chronic airway obstruction, not elsewhere classified		

A 6	β -blocker	and	verapamil	
	C07 = β blocking agents		C08DA01 = verapamil C09BB10 = verapamil + tandolapril C08DA51 = verapamil, combinations	
A 7	NYHA III-IV heart failure	and	diltiazem or verapamil	The ICPC and ICD9 codes do not define the stage of heart failure, decided is to included any stage of heart failure/decompensatio cordis.
	ICPC K77 = decompensatio cordis	C08DB01 = diltiazem C08DA01 =	NYHA stage III-IV (heart failure)	
	ICD9 428 = heart failure		verapamil C09BB10 = verapamil + tandolapril C08DA51 = verapamil, combinations	
A 8	Calcium channel blockers	and	chronic constipation	
	CO8 = Calcium channel blockers (CCB)		ICPC D12 = constipation	
	CO8G = CCB + diuretic CO9BB = CCB + ACE inhibitor CO9DB = CCB + AT2 antagonists		IDC9 564.0 = constipation	

A 9	Salicylates (acetylsalicylic acid, carbasalate calcium) B01AC06 = acetylsalicylic acid B01AC08 = carbasalate calcium	and	Dose > 160mg/day (acetylsalicylic acid) or dose > 200 mg/day (carbasalate calcium)	1) Combination drugs (+ esomeprazole, dipyridamole, clopidogrel) excluded because these combination drugs have a different maximum dose (mg/day) Variables Dose > 160 mg/day (acetylsalicylic acid) Dose > 200 mg/day (carbasalate calcium)
A 1 0	Salicylates (acetylsalicylic acid, carbasalate calcium)	without	history of coronary vascular, cerebral vascular or peripheral vascular symptoms	 Included are those conditions in which salicylates have an indication. For example intracerebral hemorrhage (ICD9 431) is excluded. Combination of acetylsalicylic acid with esomeprazole, clopidogrel and dipyridamol are also included.
	B01AC06 = acetylsalicylic acid		ICPC K74 = angina pectoris	
	B01AC30 =		ICPC K75 =	
	acetylsalicylic acid +		acute myocardial	
	clopidogrel/		infarction	
	dipyridamol		ICPC K76 =	
	B01AC56 =		ischemic heart disease	
	acetylsalicylic acid + esomeprazole		ICPC K89 =	
	B01AC08 =		transient cerebral	
	carbasalate calcium		ischemia	
			ICPC K90.03 =	
			cerebrovascular	
			disease	
			ICPC 92.01 =	
			intermittent	
			claudication	
			ICD9 410 =	
			acute myocardial	
			infarction	
			ICD 9 411 =	
			other acute and	
			subacute forms of	
			ischemic heart	
			disease	

			ICD 9 412 =				
			old myocardial				
			infarction				
			ICD 9 413 =				
			angina pectoris				
			ICD 9 414 =				
			other forms of				
			chronic ischemic				
			heart disease				
			ICD9 433 =				
			occlusion and				
			stenosis of				
			precerebral arteries				
			ICD9 434 =				
			occlusion of cerebral				
			arteries				
			ICD9 435 =				
			transient cerebral				
			ischemia				
			ICD9 436 =				
			acute, but ill-defined,				
			cerebrovascular				
			disease.				
			ICD9 437 =				
			other and ill-defined				
			cerebrovascular				
			disease.				
			ICD9 444 =				
			arterial embolism				
			and thrombosis				
			ICD9 445 =				
			atheroembolism				
^	Saligulatos	and	dizzinose not electiv	without	cerebrovascular	1) Combination drugs also included	
A 1	Salicylates (acetylsalicylic acid,	and	dizziness not clearly attributable to	without	disease	1) Combination drugs also included.	
1	carbasalate calcium)		cerebrovascular		uisease		
١,	cai basaiate caiciuiii)		disease				
			uiscusc				

	B01AC06 = acetylsalicylic acid B01AC30 = acetylsalicylic acid + clopidogrel/ dipyridamol B01AC56 = acetylsalicylic acid + esomeprazole B01AC08 = carbasalate calcium		ICPC H82 = vertigo syndromes/ labyrinthitis ICPC N17 = vertigo ICD9 386 = vertiginous syndromes and other disorders of vestibular system ICD9 780.4 = dizziness and giddiness	ICPC K89 = transient cerebral ischemia ICPC K90.03 = cerebrovascular disease ICD9 430 = subarachnoid hemorrhage ICD9 431 = intracerebral hemorrhage ICD9 432 = other and unspecified intracranial hemorrhage ICD 9 433 – 438 = cerebrovascular disease	
A 1 2	Dipyridamole B01AC07 =	without	acetylsalicylic acid B01AC06 =	,	Monotherapy is defined as dipyridamole without acetylsalicylic acid. Included is the combination with esomeprazole.
2	dipyridamole		acetylsalicylic acid B01AC56 =		2) included is the combination with esomeprazoie.
			acetylsalicylic acid + esomeprazole		
A 1 3	Oral anticoagulants during > 6 months	for and	first, uncomplicated deep venous thrombosis (DVT)		Variables
	B01AA = vitamin K antagonists		ICPC K94.01 = DVT		During > 6 months (use of oral anticoagulants) First, uncomplicated (DVT)
			ICD9 453.4 = DVT of lower extremity ICD9 453.82 = DVT of upper		

			extremity			
A 1 4	Oral anticoagulants during > 12 months	for and	first, uncomplicated pulmonary embolism.			
	B01AA = vitamin K antagonists		ICPC K93 = pulmonary embolism and infarction			Variables During > 12 months (use of oral anticoagulants) First, uncomplicated (PE)
			ICD9 415.1 = pulmonary embolism and infarction			
A 1 5	Platelet aggregation inhibitors/ oral anticoagulants	and	concurrent bleeding disorder			
	B01AC = platelet aggregation inhibitors		ICPC B83.01 = haemophilia			
	B01AA = vitamin K antagonists		ICD9 286 = coagulation defects			

В	TCA	and	dementia	1) Drug-induced persisting amnestic disorder (ICD 9 292.83) is excluded.
1	N06AA =		ICPC P70 =	2) Other cerebral degenerations (ICD 9 331) not complete group included.
	non-selective		dementia/	Exclusion of 331.3 (= communicating hydrocephalus), 331.4 (= obstructive
	monoamine reuptake		Alzheimers	hydrocephalus) and 331.81(=Reye's syndrome)
	inhibitors		ICPC P20 =	nyar osophalas, and oo non (noje s synar only
	N06CA01 =		amnestic/	
	amitriptyline +		concentration/	
	psycholeptics		orientation disorder	
			1000 200	
			ICD9 290 =	
			dementias	
			ICD9 291.1 = alcohol induced	
			persisting amnestic	
			disorder ICD9 291.2 =	
			alcohol induced	
			persisting dementia	
			ICD9 292.82 =	
			drug induced	
			persisting dementia	
			ICD9 294.1 =	
			dementia in	
			conditions classified	
			elsewhere	
			ICD9 294.2 =	
			dementia unspecified	
			ICD9 331 =	
			other cerebral	
			degenerations	
			Except	
			331.3 + 331.4 +	
			331.81	

B 2	TCA	and	glaucoma
	N06AA = non-selective		ICPC F93 = glaucoma
	monoamine reuptake inhibitors N06CA01 = amitriptyline +		ICD9 365 = glaucoma
В	psycholeptics TCA	and	cardiac conductive
3	TOA	and	abnormalities
	N06AA = non-selective monoamine reuptake inhibitors N06CA01 = amitriptyline + psycholeptics		ICPC K84.01 = WPW-syndrome ICPC K84.02 = AV-block ICPC K84.07 = long QT syndrome ICD9 426 =
			conduction disorders
B 4	TCA	and	constipation
	N06AA = non-selective monoamine reuptake		ICPC D12 = constipation
	inhibitors N06CA01 = amitriptyline + psycholeptics		IDC9 564.0 = constipation

B 5	TCA	and	prostatism or prior history of urine retention	1) Prostatism is defined as hyperplasia of the prostate or urine retention.
	N06AA = non-selective monoamine reuptake inhibitors N06CA01 = amitriptyline +		ICPC Y85 = benign prostatic hypertrophy U05.02 = urine retention	
	psycholeptics		ICD9 788.2 = retention of urine ICD9 600 = hyperplasia of prostate	
В 6	TCA	and	opiate or calcium channel blocker	 Opioid anesthetics (NO1AH) are excluded because they are only used during and shortly afterwards surgery.
	N06AA = non-selective monoamine reuptake inhibitors N06CA01 = amitriptyline + psycholeptics		NO2A = opioids CO8 = calcium channel blocker CO8G = CCB + diuretic CO9BB = CCB + ACE inhibitor CO9DB = CCB + AT2-antagonist	

B 7	Long acting benzodiazepines during > 1 month			О	 Definition long acting benzodiazepines, please see Appe of included medication codes' in the supplementary data website http://www.ageing.oxfordjournals.org/ 	
	N05BA08 =				Variables	
	bromazepam N05BA02 =				During > 1 month (use of long-acting benzodiazepines)	
	chlordiazepoxide N05BA09 =					
	clobazam					
	N05BA05 =					
	clorazepate					
	N05BA01 = diazepam					
	N05CD01 =					
	flurazepam					
	N05CD02 =					
	nitrazepam N05CD03 =					
	flunitrazepam					
	N05BA11 =					
	prazepam					
B 8	Neuroleptics (except clozapine or	and	parkinsonism	1	I) Lithium is also excluded.	
	quetiapine)					
	N05A = antipsychotics		ICPC N87 =			
	EXCEPT		parkinsonism/			
	N05AH02 = clozapine		Parkinson's disease			
	N05AH04 = quetiapine		ICD9 332 =			
	N05AN = lithium		Parkinson's disease/			
			secondary			
			Parkinson's ICD9 331.6 =			
			corticobasal			
			degeneration			
			ICD9 331.82 =			
			dementia with lewy bodies			

			ICD9 333.0 = other degenerative diseases of the basal ganglia (PSP/MSA)	
B 9	Neuroleptics during > 1 month N05A = antipsychotics EXCEPT N05AN = lithium			Variables During > 1 month (use of neuroleptics)
B 1	Phenothiazine antipsychotics	and	epilepsy	
	N05AA = phenothiazines with aliphatic side-chain	azines with epilepsy		
	N05AB = phenothiazines with piperazine structure N05AC = Phenothiazines with piperidine structure		ICD9 345 = epilepsy and recurrent seizures	
B 1 1	Anticholinergic anti- Parkinson drugs N04A = anticholinergic anti- Parkinson drugs	and	anti-psychotics N05A = antipsychotics. Except	No ICPC or ICD9 code for extrapyramidal side-effects of neuroleptic medications, solution: anticholinergic antiparkinson drugs in combination with the use of anti-psychotics.
			N05AN = lithium	
B 1 2	SSRI	and	non-iatrogenic hyponatraemia (Na < 130mmol/L) last 2 months	 No ICPC code for hyponatraemia. If biochemical data of the patient is available use the natrium value in the past 2 months instead of the ICD9 code.
	N06AB = selective serotonin reuptake inhibitors		ICD9 276.1 = hyposmolality and/or hyponatraemia	Variables Natrium < 130mmol/L last 2 months

Classic antihistamines during > 1 week R06AA02,R06AA52				1i	1) Classic antihistamines specification, please see Appendix 3 'Specification of ncluded medication codes' in the supplementary data on the journal website http://www.ageing.oxfordjournals.org/
ROGAAO2,ROGAAS2 ROGAAO4,ROGAAS4 ROGABO2,ROGAB52 ROGABO3,ROGABO4 ROGABS4,ROGACO4 ROGADO1,ROGADO2 ROGAD52,ROGADO8 ROGAEO3,ROGAE53 ROGAEO4,ROGAEO5 ROGAEO5,ROGAEO6 ROGAXO2,ROGAX15 ROGAX17 NO5BBO1 NO5BB51,NO7CAO2 NO7CA52 = classic antihistamines					Variables During > 1 week (use of classic antihistamines)
Loperamide or codeine	and	diarrhea of unknown cause			
A07DA03 = loperamide A07DA05 = loperamide oxide A07DA53 = loperamide, combinations R05DA04 = codeine N02AA59 = codeine, combinations excl. psycholeptics N02AA79 = codeine, combinations with psycholeptics		ICPC D11 = diarrhea ICPC D73 = assumed gastro- intestinal infection ICD9 787.91 = diarrhea			

C 2	Loperamide or codeine	and	severe infective gastroenteritis	1) Including all intestinal infectious diseases ICD9 001-009 (e.g. cholera, typhoid, salmonella etc)
	A07DA03 = loperamide A07DA05 = Loperamide oxide		ICPC D70 = Infectious diarrhoea/ dysenteriae	
	A07DA53 = loperamide, combinations R05DA04 =		ICD9 001 – 009 = intestinal infectious diseases	
	codeine N02AA59 = codeine, combinations excl. psycholeptics N02AA79 =			
С	codeine, combinations with psycholeptics Parkinsonism	and	metoclopramide	
3	ICPC N87 = parkinsonism/ Parkinson's disease	anu	A03FA01 = metoclopramide	
	ICD9 332 = Parkinson's disease/ secondary Parkinson's ICD9 331.6 = corticobasal degeneration			
	ICD9 331.82 = dementia with lewy bodies ICD9 333.0 = other degenerative diseases of the basal ganglia (PSP/MSA)			

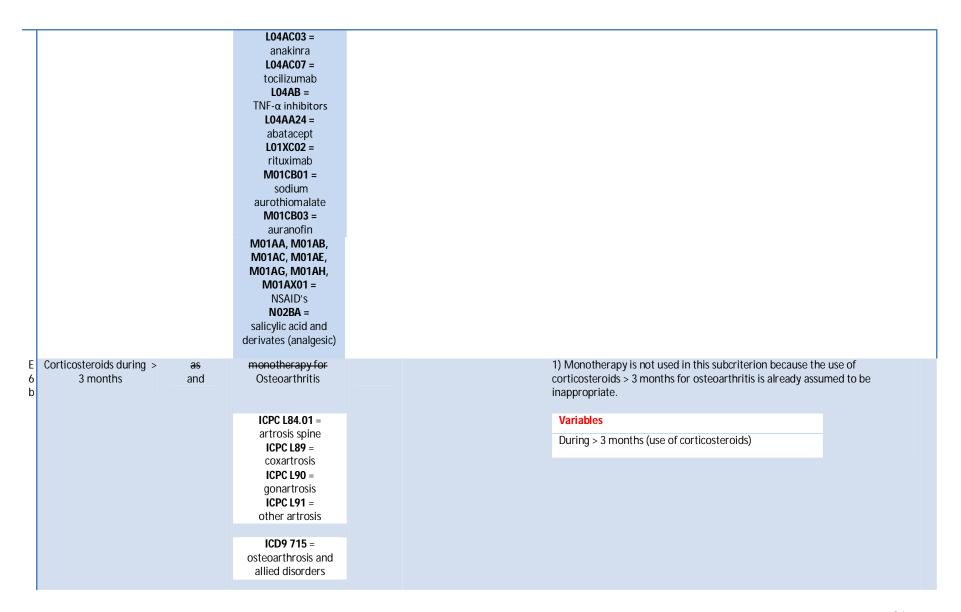
С	PPI at full therapeutic	for	peptic ulcer disease
4	dosage during > 8 weeks	and	
	A02BC = proton pump inhibitors		ICPC D85 = ulcus duodeni ICPC D86 = other ulcus pepticum
			ICD9 530.2 = ulcer of esophagus ICD9 531 = gastric ulcer ICD9 532 = duodenal ulcer ICD9 533 = peptic ulcer, site unspecified ICD9 534 = gastrojejunal ulcer
C 5	Anticholinergic antispasmodic drugs	and	chronic constipation
	A03BB01 = Butylscopolamine		ICPC D12 = constipation
			IDC9 564.0 = constipation

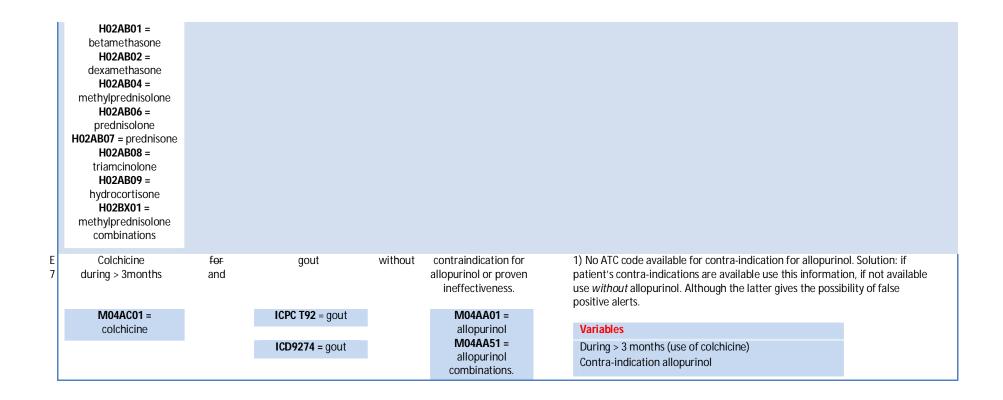
D 1	COPD	and	theophylline	as without	monotherapy:	Monotherapy is defined by the absence of : anticholinergics inhalants, glucocorticoids inhalants and adrenergics inhalants.
	ICPC R91 = chronic bronchitis ICPC R95 = emphysema/COPD ICD9 490 = bronchitis, not specified as acute or chronic ICD9 491 = chronic bronchitis ICD9 492 = emphysema ICD9 496 = chronic airway obstruction, not elsewhere classified		R03DA04 = theophylline R03DB04 = theophylline + adrenergics R03DA54 = theophylline, combinations excl. psycholeptics R03DA74 = theophylline, combinations with psycholeptics		R03A = adrenergics inhalants R03BA = Glucocorticoids inhalants R03BB = Anticholinergics inhalants	
D 2	Systemic corticosteroids	instead of without	inhaled corticosteroids	for and	maintenance therapy in moderate-severe COPD	Systemic corticosteroids which can be indicated for COPD and those available in the Netherlands are included. Not complete group H02AB included because not all indicated for COPD. For example Cortisone (H02AB10) is not indicated for COPD.
			R03BA = glucocorticoids inhalants		ICPC R91 = chronic bronchitis ICPC R95 = emphysema/COPD	

	H02AB01 = betamethasone H02AB02 = dexamethasone H02AB04 = methyl-prednisolone H02AB06 = prednisolone H02AB07 = prednisone H02AB08 = triamcinolone H02AB09 = hydrocortisone H02BX01 = methyl-prednisolone combinations			ICD9 490 = bronchitis, not specified as acute or chronic ICD9 491 = chronic bronchitis ICD9 492 = emphysema ICD9 496 = chronic airway obstruction, not elsewhere classified	
D 3	Glaucoma	and	ipratropium or tiotropium		
	ICPC F93 = glaucoma		R03BB01 = ipratropium		
	ICD9 365 = glaucoma		R03BB04 = tiotropium R03AK03 = fenoterol / ipratropium R03AK04 = salbutamol / ipratropium		
E 1	NSAID	and	moderate-severe hypertension		Please see Appendix 3 'Specification of included medication codes' in the supplementary data on the journal website http://www.org.ipg.outgrdicumpsls.org/for a table with a specification of
	M01AA, M01AB, M01AC, M01AE, M01AG, M01AH, M01AX01 = NSAID'S		ICPC K85 = hypertension ICPC K86 = without organ failure ICPC K87 = with organ failure		http://www.ageing.oxfordjournals.org/ for a table with a specification of included NSAID's.

	N02BA = salicylic acid and derivates (analgesic)		ICD9 401 = essential hypertension ICD9 405 = secondary hypertension			
E 2	NSAID	and	heartfailure			
2	M01AA, M01AB, M01AC, M01AE, M01AG, M01AH, M01AX01 =		ICPC K77 = decompensatio cordis			
	NSAID's NO2BA = salicylic acid and		ICD9 428 = heart failure			
	derivates (analgesic)					
E 3	NSAID	and	chronic renal failure			
3	M01AA, M01AB, M01AC, M01AE, M01AG, M01AH,		ICPC U99.01 = impaired renal function			
	M01AX01 = NSAID's N02BA = salicylic acid and derivates (analgesic)		ICD9 585 = chronic kidney disease ICD9 586 = renal failure, unspecified.			
E 4	NSAID during > 3months	for and	symptom relief of mild osteoarthritis			
	M01AA, M01AB, M01AC, M01AE, M01AG, M01AH, M01AX01 = NSAID'S N02BA = salicylic acid and derivates (analgesic)		ICPC L84.01 = artrosis spine ICPC L89 = coxartrosis ICPC L90 = gonartrosis ICPC L91 = other artrosis			Variables During > 3 months (use of NSAID)

			ICD9 715 = osteoarthrosis and allied disorders					
	NSAID during > 3 months	for and	gout	without	contraindication for allopurinol or proven ineffectiveness.	1) No ATC code available for contra-indication for allopurinol. Solution: if patient's contra-indications are available use this information, if not available use <i>without</i> allopurinol. Although the latter gives the possibility of false positive alerts.		
П	M01AA, M01AB,		ICPC T92 = gout		M04AA01 =			
	M01AC, M01AE, M01AG, M01AH, M01AX01 = NSAID's	ICD9274 = gout		allopurinol M04AA51 = allopurinol combinations.	Variables During > 3 months (use of NSAID) Contra-indication allopurinol			
	N02BA = salicylic acid and derivates (analgesic)							
(Corticosteroids during > 3 months	as without		monotherapy	for and	rheumatoid arthritis	1) Monotherapy is defined by the absence of DMARDs (disease modifying antirheumatic drugs), biological's or NSAIDs which can be indicated for RA.	
	H02AB01 = betamethasone H02AB02 = dexamethasone H02AB04 =		L04AX01 = azathioprine L04AX03 = methotrexate L04AA13 = leflunomide L04AD01 = Ciclosporin		ICPC L88.01 = Rheumatoid arthritis ICD9 714.0 =	 Corticosteroids which can be indicated for rheumatoid arthritis and those available in the Netherlands are included. Not complete group H02AB included because not all indicated for RA. For example Cortisone (H02AB10) is not indicated for RA. 		
	methyl-prednisolone H02AB06 = prednisolone				rheumatoid arthritis ICD9 7 14.2 =	3) STOPP criterion E6 is subdivided in criterion E6a (rheumatoid arthritis part) and E6b (osteoarthritis part)		
	H02AB07 = prednisone H02AB08 =				A07EC01 = sulfasalazine P01BA =		other rheumatoid arthritis with visceral or	Variables During > 3 months (use of corticosteroids)
	triamcinolone H02AB09 = hydrocortisone H02BX01 = methyl-prednisolone combinations		aminoquinolines		systematic involvement			





F	Urogenital	and	dementia	1) Drug-induced persisting amnestic disorder (ICD 9 292.83) is excluded.
1	anticholinergic drugs			2) Other corebral degenerations (ICD 0.221) not complete group included
	G04BD04 =		ICPC P70 =	 Other cerebral degenerations (ICD 9 331) not complete group included. Exclusion of 331.3 (= communicating hydrocephalus), 331.4 (= obstructive
- 1	oxybutynine		dementia/	hydrocephalus) and 331.81(=Reye's syndrome)
	G04BD07 =		Alzheimers	ingal ecopinates, and economy incomes,
	tolterodine		ICPC P20 =	
	G04BD08 =		amnestic/	
	solifenacine		concentration/	
	G04BD10 =		orientation disorder	
	darifenacine			
	G04BD11 =		ICD9 290 =	
	fesoterodine		dementias	
			ICD9 291.1 =	
			alcohol induced	
			persisting amnestic	
			disorder	
			ICD9 291.2 =	
			alcohol induced	
			persisting dementia	
			ICD9 292.82 =	
			drug induced	
			persisting dementia	
			ICD9 294.1 = dementia in	
			conditions classified	
			elsewhere	
			ICD9 294.2 =	
			dementia unspecified	
			ICD9 331 =	
			other cerebral	
			degenerations	
			Except	
			331.3 + 331.4 +	
			331.81	

F 2	Urogenital anticholinergic drugs	and	chronic glaucoma	
	G04BD04 = oxybutynine G04BD07 = tolterodine G04BD08 = solifenacine G04BD10 = darifenacine G04BD11 = fesoterodine		ICPC F93 = glaucoma ICD9 365 = glaucoma	
F 3	Urogenital anticholinergic drugs G04BD04 = oxybutynine G04BD07 = tolterodine G04BD08 = solifenacine G04BD10 = darifenacine G04BD11 = fesoterodine	and	chronic constipation ICPC D12 = constipation IDC9 564.0 = constipation	
F 4	Urogenital anticholinergic drugs G04BD04 = oxybutynine G04BD07 = tolterodine G04BD08 = solifenacine G04BD10 = darifenacine G04BD11 = fesoterodine	and	chronic prostatism ICPC Y85 = benign prostatic hypertrophy U05.02 = urine retention ICD9 788.2 = retention of urine ICD9 600 = hyperplasia of prostate	

F 5	Males and one or more episodes of incontinence daily	episodes of		1) Including all α -1 blockers (indication BPH and hypertension) Please see Appendix 3 'Specification of included medication codes' in the supplementary data on the journal website http://www.ageing.oxfordjournals.org/			
	ICPC U04 = urinary incontinence		G04CA = alpha- adrenoreceptor antagonists C02CA04 = doxazosin C02CA06 = urapidil C02KD01 = ketanserine			Variables males	
	ICD9 788.3 = urinary incontinence						
F 6	Urinary catheter in situ during > 2 months	and	α-blockers			1) Including only the α -blockers given for urinary problems. the α -blockers given for hypertension.	No need to stop
	ICD9 V53.6 = fitting and adjustment of urinary devices.		G04CA = alpha- adrenoreceptor antagonists			2) ICD9 V53.6 = fitting and adjustment of urinary devices. N ICPC code available for urinary catheter. V53.6 is included. Variables	o other ICD9 or
						During > 2 months (urinary catheter in situ) Urinary catheter in situ	
G 1	Diabetes mellitus type 2	and	glibenclamide				
	ICPC T90.02 = diabetes mellitus type 2		A01BB01 = glibenclamide				
	1CD9 250.00, 250.02 250.10, 250.12 250.20, 250.22 250.30, 250.32 250.40, 250.42 250.50, 250.52 250.60, 250.62 250.70, 250.72 250.80, 250.82 250.90, 250.92 = DM type 2						

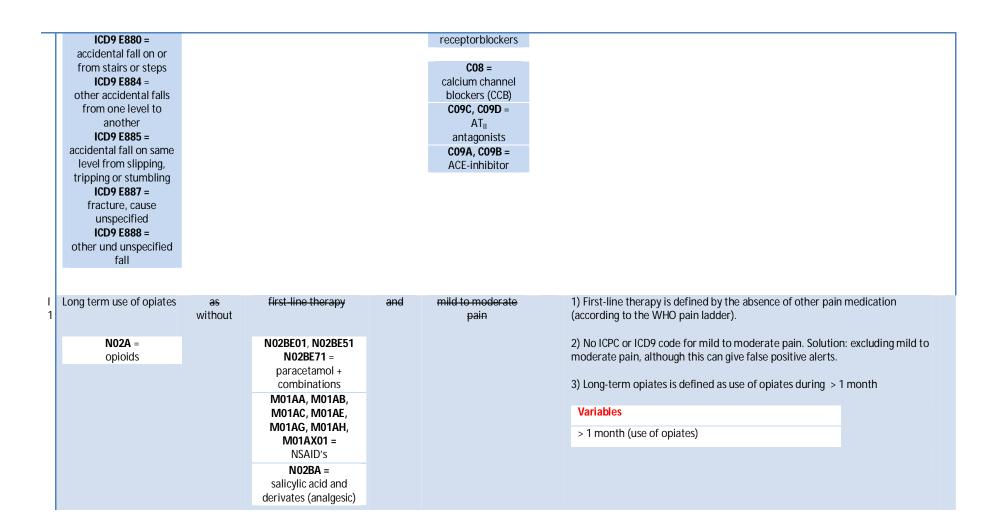
G 2	Non-selective β-blocker	and	diabetes mellitus	and	1 or more hypoglycemic episodes per month	Variables
	CO7AA = β -blocking agents, non-selective		ICPC T90 = diabetes mellitus (type 1 + 2)		ICPC T87 = hypoglycemia	1 or more (hypoglycemic episodes) per month
	C07AG01 = labetalol C07AG02 = carvedilol		ICD9 250 = diabetes mellitus (type 1 + 2)		ICD9 251.0 = hypoglycemic coma ICD9 252.1 =	
	CO7BA, CO7CA, CO7DA, CO7EA, CO7FA = non-selective β - blocking agents in combination with				other specified hypoglycemia ICD9 251.2 = hypoglycemia, unspecified.	
	other anti- hypertensive drugs				инърссинси.	
G 3	Oestrogens	and	breast cancer			Please see Appendix 3 'Specification of included medication codes' in the supplementary data on the journal website
3	G03AA, G03AB, G03C, G03EA, G03EB, G03F, G03HB, L02AA = estrogens (and combinations)		ICPC X76 = malignant neoplasm of female breast ICD9 174 = Malignant neoplasm of female breast			http://www.ageing.oxfordjournals.org/ for a specification of the included oestrogens

G 4	G03AA, G03AB, G03C, G03EA, G03EB, G03F, G03HB, G03XC01, G03XC02, L02AA = estrogens (and combinations)	and	venous thromboembolism ICPC K94.01 = DVT ICD9 453.4 = DVT of lower extremity ICD9 453.82 = DVT of upper extremity ICD9 453 = Other venous embolism and thrombosis ICPC K93 = pulmonary embolism or infarction ICD9 415.1 = pulmonary embolism or infarction ICD9 452 = portal vein thrombosis ICP9 325 = phlebitis and thrombophlebitis of intracranial venous sinuses			1) Notice the difference of included estrogens between criterion G3 and G4. Please see Appendix 3 'Specification of included medication codes' in the supplementary data on the journal website http://www.ageing.oxfordjournals.org/ The supplementary data on the journal website http://www.ageing.oxfordjournals.org/
G 5	Oestrogens G03AA, G03AB G03C, G03EA G03EB, G03F G03HB, G03XC01 G03XC02, L02AA = estrogens (and combinations)	without	progestogens G03A, G03D, G03EB, G03F, G02BA03, G02BB01, L02AB = progestogens	and	intact uterus	 Please see Appendix 3 'Specification of included medication codes' in the supplementary data on the journal website http://www.ageing.oxfordjournals.org/ for a specification of included progestogens. No ICD9 or ICPC code for intact uterus or hysterectomy. Solution: excluding intact uterus, although this can give false positive alerts.

H 1	History of falling or tendency to fall.	and	benzodiazepines			
	ICPC A80 = accident/injury ICD9 E880 = accidental fall on or from stairs or steps ICD9 E884 = other accidental falls from one level to another ICD9 E885 = accidental fall on same level from slipping, tripping or stumbling ICD9 E887 = fracture, cause unspecified ICD9 E888 = other und unspecified fall		N03AE = benzodiazepine derivates N05BA = benzodiazepine derivates N05CD = benzodiazepine derivates N05CF = benzodiazepine related drugs			
H 2	History of falling or tendency to fall.	and	neuroleptic drugs		1) Lithium is excluded.	
	ICPC A80 = accident/injury		N05A = antipsychotics			
	ICD9 E880 =		EXCEPT N05AN = lithium			
	accidental fall on or from stairs or steps ICD9 E884 = other accidental falls from one level to another ICD9 E885 = accidental fall on same level from slipping,					

	tripping or stumbling ICD9 E887 = fracture, cause unspecified ICD9 E888 = other und unspecified fall			
H 3	History of falling or tendency to fall.	and	first-generation antihistamines	 Please see Appendix 3 'Specification of included medication codes' in the supplementary data on the journal website http://www.aqeinq.oxfordjournals.org/ for a specification of the first-
	ICPC A80 = accident/injury		R06AA02,R06AA52 R06AA04,R06AA54	generation antihistamines.
	ICD9 E880 = accidental fall on or from stairs or steps ICD9 E884 = other accidental falls from one level to another ICD9 E885 = accidental fall on same level from slipping, tripping or stumbling ICD9 E887 = fracture, cause unspecified ICD9 E888 = other und unspecified fall		R06AB02,R06AB52 R06AB03,R06AB04 R06AB54,R06AC04 R06AD01,R06AD02 R06AD52,R06AD08 R06AE03,R06AE53 R06AE04,R06AE05 R06AE05,R06AE06 R06AX02,R06AX15 R06AX17 N05BB01 N05BB51,N07CA02 N07CA52 = classic antihistamines	

H 4	History of falling or tendency to fall.	and	long-term opiates			1) morfine as antipropulsives (A07DA52) codeine/morfine cough suppressant (R05DA04 and R05DA05) are excluded.
	ICPC A80 = accident/injury		N02A = Opioids			2) Long-term opiates is defined as use of opiates during > 1 month
	ICD9 E880 = accidental fall on or from stairs or steps ICD9 E884 = other accidental falls from one level to another ICD9 E885 = accidental fall on same level from slipping, tripping or stumbling					Variables > 1 month (use of opiates)
	ICD9 E887 = fracture, cause unspecified ICD9 E888 = other und unspecified fall					
H 5	History of falling or tendency to fall.	and	persistent postural hypotension	and	vasodilator drugs	Please see Appendix 3 'Specification of included medication codes' in the supplementary data on the journal website http://www.ageing.oxfordjournals.org/ for a specification of all the included
	ICPC A80 = accident/injury		ICPC K88 = orthostatic hypotension ICD9 458.0 = orthostatic hypotension		C02DB01, C02LG01, C02LG51, C02DB02 C02LG02, C02DC01 = direct vasodilators G04CA, C02CA04, C02CA06,	vasodilator drugs. Diuretics are excluded
					C02KD01 = selective alpha1	



1 2	Long term use of opiates	and	dementia	without	moderate-severe chronic pain or palliative care	No ICPC code for moderate-severe chronic pain and palliative care, solution: excluding moderate-severe chronic pain or palliative care although this can cause false positive alerts. The ICD9 codes are included and should be used.
	NO2A = opioids		ICPC P70 = dementia/ Alzheimers ICPC P20 = amnestic/ concentration/ orientation disorder ICD9 290 = dementias ICD9 291.1 = alcohol induced persisting amnestic disorder ICD9 291.2 = alcohol induced persisting dementia ICD9 292.82 = drug induced persisting dementia ICD9 294.1 = dementia in conditions classified elsewhere ICD9 294.2 = dementia unspecified ICD9 331 = other cerebral degenerations Except 331.3 + 331.4 +		ICD9 338.4 = chronic pain syndrome ICD9 V66.7 = palliative care	2) Long-term opiates is defined as use of opiates during > 1 month 3) Drug-induced persisting amnestic disorder (ICD 9 292.83) is excluded. 4) Other cerebral degenerations (ICD 9 331) not complete group included. Exclusion of 331.3 (= communicating hydrocephalus), 331.4 (= obstructive hydrocephalus) and 331.81(=Reye's syndrome) Variables > 1 month (use of opiates)
J	-		331.81			 No specification has been made for this criterion. If criterion J would be specified as the first five identical characters in ATC code many false positive alerts would show up because many duplicate drug class prescriptions are considered to be appropriate, as for example double antibiotics, antidepressant or epileptics.

START criteria

	START Criteria			Considerations/solutions and other variables		
A 1	Chronic heart failure	without	without	ACE-inhibitor or angiotensin II receptor blocker	1) The ICPC and ICD9 codes do not distinguish between systolic or diastol heart failure. All heart failure is therefore included.	iC
	ICPC K77 = decompensatio cordis		C09A = ACE-inhibitors, plain C09B =			
	ICD9 428 = heart failure		ACE-inhibitors, combinations			
			C09C = angiotensin II antagonists plain C09D = angiotensin II antagonists combinations			
A 2 a	Diabetes with proteinuria (life expectancy	without	ACE-inhibitor or angiotensin II receptor	1) Criterion is divided in 2 subcriteria because of the combined ICD9 code DM with renal manifestations.	for	
	>10years)		blocker	2) No ICPC or ICD9 code for life expectancy > 10 years.		
	ICD9 250.4 = diabetes with renal		CO9A =	Variables		
	manifestations		ACE-inhibitors, plain C09B = ACE-inhibitors, combinations	Life expectancy > 10 years		
			co9c = angiotensin II antagonists plain co9D = angiotensin II antagonists combinations			

A 2 b	Diabetes (life expectancy >10years)	and	proteinuria	without	ACE-inhibitor or Angiotensin II receptor blocker	1) No ICPC or ICD9 code for life expectancy > 10 years.	
	ICPC T90 = diabetes mellitus (type 1 + 2)		ICPC U98.01 = proteinuria ICD9 791.0 =		CO9A = ACE- inhibitors, plain CO9B = ACE- inhibitors,	Variables Life expectancy > 10 years	
	ICD9 250 = diabetes mellitus (type 1 + 2)		proteinuria		combinations		
					angiotensin II antagonists plain C09D = angiotensin II antagonists combinations		
A 3	History of acute myocardial infarction	without	ACE-inhibitor or angiotensin II receptor blocker				
	ICPC K75 = acute myocardial infarction ICPC K76 = ischemic heart disease		C09A = ACE-inhibitors, plain C09B = ACE-inhibitors, combinations				
	ICD9 410 = acute myocardial infarction ICD9 411 = other acute and subacute forms of ischemic heart disease ICD9 412 = old myocardial infarction ICD 9 414 =		co9c = angiotensin II antagonists plain co9D = angiotensin II antagonists combinations				

other forms of chronic ischemic heart disease

A History of coronary cerebral or peripher vascular disease (Life expectancy > 5 years)	al	statin therapy		No ICPC or ICD9 code for life expectancy > 5 years. Variables Life expectancy > 5 years
ICPC K74 = angina pectoris ICPC K75 = acute myocardial infarction ICPC K76 = ischemic heart disea ICPC K89 = transient cerebral ischemia ICPC K90.03 = cerebrovascular disease ICPC K92.01 = claudicatio intermittens	ise	C10AA = HMG CoA reductase inhibitors C10B = lipid modifying agents, combinations		
ICD9 410 = acute myocardial infarction ICD 9 411 = other acute and subacute forms of ischemic heart disea ICD 9 412 = old myocardial infarction ICD 9 413 = angina pectoris ICD 9 414 = other forms of chrol ischemic heart disea	: Ise			

ICD9 433 = occlusion and stenosis of precerebral arteries ICD9 434 = occlusion of cerebral arteries ICD9 435 = transient cerebral ischemia ICD9 436 = acute, but ill-defined, cerebrovascular disease. ICD 9 437 = other and ill-defined cerebrovascular disease. ICD9 438 = late effects of cerebrovascular disease ICD 9 444 = arterial embolism and thrombosis ICD9 445 = atheroembolism

A Systolic blood pressure 5 > 160 mmHq without anti-hype

anti-hypertensive drug

ICPC K85 =
hypertension
ICPC K86 =
without organ failure
ICPC K87 =
with organ failure

ICD9 401 =
Essential hypertension
ICD9 405 =
secondary
hypertension

C02AC01, C02LC01, C02LC51, C02AC05, C02LC05, C02AB, C02LB01,C02CA04, C02CA06, C02DB02, C02LG02,C02DB01, C02LG01,C02LG51, C02DC01,C02KD01 CO2LN, CO2N = antihypertensive drugs group CO2 C03A, C03B, C03D, C03E, C03X = diuretics (excl loop diuretics) C07 = β-blocking agents C08 = calcium channel blockers C09 = agents acting on the rennin-angiotensin system

- 1) Please see Appendix 3 'Specification of included medication codes' in the supplementary data on the journal website http://www.ageing.oxfordjournals.org/ STOPP criterion A3 for a specification of the included anti-hypertensives, excluding loop diuretics.
- 2) Systolic blood pressure > 160 mmHg is defined as hypertension because there are no ICPC or ICD9 codes for systolic blood pressure > 160 mmHg. However if the patient's systolic blood pressure is available this variable should be included instead of the ICPC or ICD9 code.

Variables

Systolic blood pressure > 160 mmHg

A Chronic heart failure without diuretics

ICPC K77 = decompensatio cordis

ICD9 428 = heart failure

without diuretics

C03 = diuretics

A Stable angina pectoris,
 7 acute myocardial infarction or (a stable patient with) chronic heart failure

without

β-blocker

ICPC K74.02 = stable angina pectoris

ICD9 413 = angina pectoris

ICPC K75 =

acute myocardial infarction

ICPC K76 =

ischemic heart disease

ICD9 410 =

acute myocardial infarction

ICD9 411 =

other acute and subacute forms of ischemic heart disease

ICD9 412 =

old myocardial infarction

ICD 9 414 =

other forms of chronic ischemic heart disease

ICPC K77 =

decompensatio cordis

ICD9 428 =

heart failure

C07 = β- blocking agents

A 8	ICPC K78 = atrial fibrillation and flutter ICD9 427.3 = atrial fibrillation and flutter	and	contra-indication oral anticoagulants B01AA = vitamin K antagonists	without	acetylsalicylic acid/ carbasalate calcium B01AC06 = acetylsalicylic acid B01AC56 = acetylsalicylic acid + esomeprazole B01AC08 = carbasalate calcium	No ATC code available for contra-indication for oral anticoagulants. Solution: if patient's contra-indications are available use this information, if not available do not program/use this criterion because it will give an iteration of START-criterion A10. Variables Contra-indication oral anticoagulants (Vit. K antagonists)
A 9	History of coronary, cerebral or peripheral vascular disease ICPC K74 = angina pectoris ICPC K75 = acute myocardial infarction ICPC K76 = ischemic heart disease ICPC K89 = transient cerebral ischemia ICPC K90.03 = cerebrovascular disease ICPC 92.01 = intermittent claudication ICD9 410 – 414 = ischemic heart disease	and without	sinus rhythm atrial fibrillation ICPC K78 = atrial fibrillation and flutter ICD9 427.3 = atrial fibrillation and flutter	without	acetylsalicylic acid/carbasalate calcium/clopidogrel B01AC06 = acetylsalicylic acid B01AC30 = acetylsalicylic acid + clopidogrel/dipyridamol B01AC56 = acetylsalicylic acid + esomeprazole B01AC08 = carbasalate calcium B01AC04 = clopidogrel	There is no ICPC or ICD9 code for sinus rhythm. Sinus rhythm is now defined by the absence of atrial fibrillation.
	ICD9 433 – 437 = cerebrovascular disease ICD 9 444 = arterial embolism and thrombosis					

ICD9 445 = atheroembolism A chronic atrial fibrillation without oral anticoagulants ICPC K78 = B01AA = 0 atrial fibrillation and vitamin K antagonists flutter ICD9 427.3 = atrial fibrillation and flutter Mild to moderate regular inhaled β_2 1) No ICPC or ICD9 code for severity of asthma and COPD. В without asthma/COPD agonist **Variables** or regular inhaled Severity of asthma (mild to moderate) anticholinergic agent Severity of COPD (GOLD I and II) R03A = ICPC R91 = adrenergics inhalants chronic bronchitis ICPC R95 = R03BB =emphysema/COPD anticholinergics ICPC R96 = inhalants asthma ICD9 490 = bronchitis, not specified as acute or chronic ICD9 491 =

chronic bronchitis
ICD9 492 =
emphysema
ICD9 493 =
asthma
ICD9 496 =
chronic airway
obstruction, not
elsewhere classified

B 2	Moderate-severe asthma/COPD (Gold III- V, FEV1<50% and frequent exacerbations)	without	regular inhaled corticosteroid		No ICPC or ICD9 code for COPD Gold III-V, predicted FEV1<50 and exacerbations Variables				
	ICPC R91 = chronic bronchitis ICPC R95 = emphysema/COPD ICPC R96 = asthma						R03BA = glucocorticoids inhalants R03AK06 = salmeterol+ fluticson R03AK07 =		Severity of asthma (moderate/severe) Severity of COPD (GOLD III-V) FEV1<50%, frequent exacerbations
	ICD9 490 = bronchitis, not specified as acute or chronic ICD9 491 =		formoterol+ beclomethason/ budesonide/ fluticason						
	Chronic bronchitis ICD9 492 = Emphysema ICD9 493 = asthma ICD9 496 = Chronic airway obstruction, not elsewhere classified								
B 3	Chronic respiratory failure	without	home continuous oxygen		1) No ICPC code for chronic respiratory failure.				
	ICD9 518.8= respiratory failure (chronic + acute)		V03AN01 = oxygen						
C 1	Parkinson's disease (with functional impairment and resultant disability)	without	L-DOPA		No ICD9 or ICPC code for functional impairment and disability resulting from Parkinson's disease. All Parkinson included. Variables				
	ICPC N87.01 = Parkinson's disease				Functional impairment and resultant disability				

	ICD9 332.0 = Parkinson's disease		N04BA02 = levodopa + benserazide/ carbidopa N04BA03 = levodopa + carbidopa + entacapon			
C 2	Depression (according to DSM IV and psychotherapy not effective or wanted)	without	antidepressant drugs		Variables Psychotherapy not effective or wanted by the patient.	
	ICPC P76 = depression		N06A = antidepressants			
	ICD9 296.2 = major depressive disorder single episode ICD9 296.3 = major depressive disorder, recurrent episode.					
D 1 (Severe gastro- oesophageal acid reflux disease or peptic stricture requiring dilatation	without	protonpump inhibitor			
	ICPC D84.02 = esophageal reflux without esophagitis ICPC D84.03 = esophageal reflux with esophagitis ICPC D84.05 = esophagus-stenosis		A02BC = proton pump inhibitors			

ICD9 530.1 = esophagitis ICD9 530.2 = Ulcer of esophagus **ICD9 530.3** = Stricture and stenosis of esophagus ICD9 530.81 = esophageal reflux ICD9 530.85 = Barrett's esophagus history of peptic ulcer D NSAID and without PPI 2 disease or complication from а peptic ulcer disease. M01AA, M01AB, ICPC D85 = A02BC = M01AC, M01AE, proton pump ulcus duodeni M01AG, M01AH, ICPC D86 = inhibitors M01AX01 = other ulcus pepticum ICPC D14 = NSAID's N02BA = haematemesis salicylic acid and ICPC D15 = melaena derivates (analgesic) ICD9 530.2 = ulcer of esophagus ICD9 530.82 = esophageal hemorrhage (due to ulcus) ICD9 531 = gastric ulcer ICD9 532 = duodenal ulcer ICD9 533 = peptic ulcer, site unspecified ICD9 534 = gastrojejunal ulcer

ICD9 578 =
gastro-intestinal
hemorrhage
(haematemesis +
melaena)

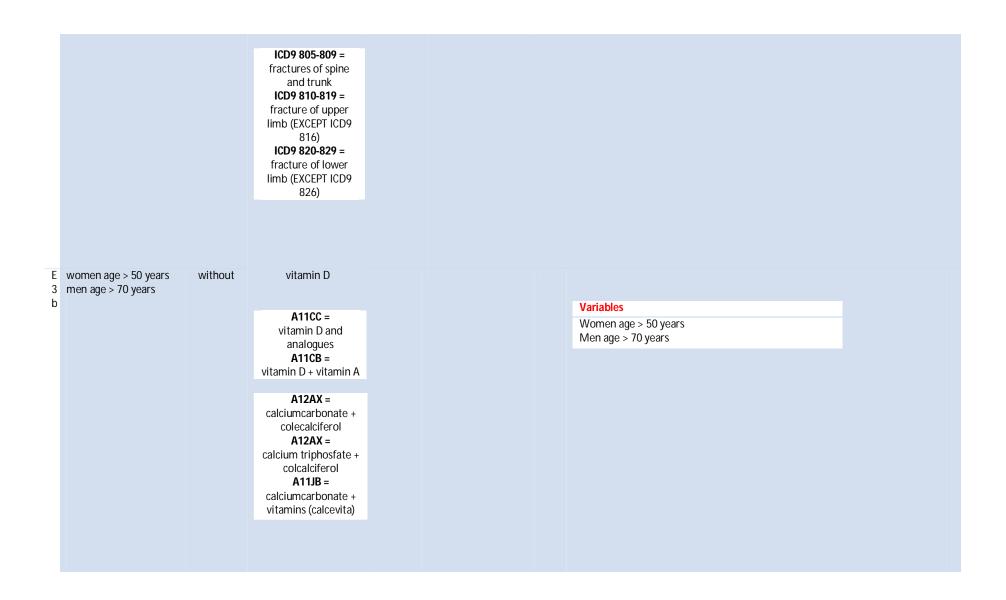
D 2 b	NSAID (and age > 70years)	without	PPI			Variables
	M01AA, M01AB, M01AC, M01AE, M01AG, M01AH, M01AX01 = NSAID's N02BA = salicylic acid and derivates (analgesic)		A02BC = proton pump inhibitors			Patients age > 70 years
D 2 c	NSAID (and age 60-70 years)	and	oral anticoagulants/ oral corticosteroid / SSRI/ acetylsalicylic acid/ carbasalate calcium	without	PPI	Variables Patients age 60-70 years
	M01AA, M01AB, M01AC, M01AE, M01AG, M01AH, M01AX01 =		B01AA = Vitamin K antagonists		A02BC = proton pump inhibitors	
	NSAID's N02BA = salicylic acid and derivates (analgesic)		H02 = corticosteroids for systemic use			
			N06AB = selective serotonin reuptake inhibitors			
			B01AC06 = acetylsalicylic acid B01AC30 = acetylsalicylic acid + clopidogrel/			

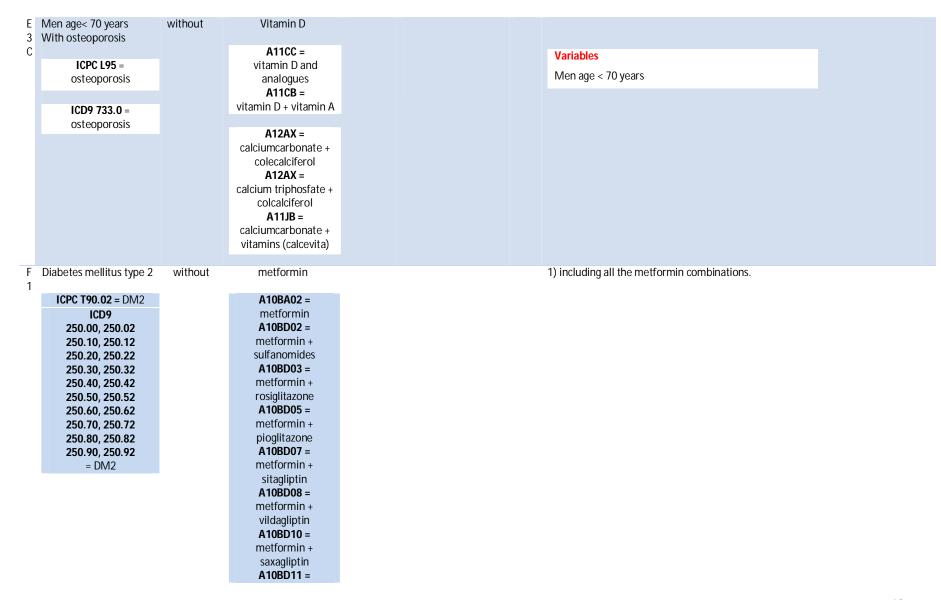
B01AC08 = carbasalate calcium Acetylsalicylic acid or history of peptic ulcer PPI 1) Not including the complications of peptic ulcer disease (unlike criterion D2a) and without carbasalate calcium disease. (low dose) and age > 60 **Variables** years Patients age > 60 years B01AC06 = ICPC D85 = A02BC = acetylsalicylic acid ulcus duodeni proton pump inhibitors B01AC30 = ICPC D86 = acetylsalicylic acid + other ulcus pepticum clopidogrel/ dipyridamol ICD9 530.2 = B01AC08 = ulcer of esophagus carbasalate calcium ICD9 531 = gastric ulcer ICD9 532 = duodenal ulcer ICD9 533 = peptic ulcer, site unspecified ICD9 534 = gastrojejunal ulcer Acetylsalicylic acid or and oral anticoagulants/ without PPI carbasalate calcium oral corticosteroid / (low dose) and age > 70 SSRI/ **Variables** years Patients age > 70 years B01AC06 = B01AA = A02BC = acetylsalicylic acid proton pump Vitamin K antagonists B01AC30 = inhibitors acetylsalicylic acid + H02 = clopidogrel/ corticosteroids for dipyridamol systemic use B01AC08 = carbasalate calcium

dipyridamol

			N06AB = selective serotonin reuptake inhibitors				
D 3 c	Acetylsalicylic acid or carbasalate calcium (low dose) and age > 80 years	without	PPI			Variables Patients age > 80 years	
	B01AC06 = acetylsalicylic acid B01AC30 = acetylsalicylic acid + clopidogrel/ dipyridamol B01AC08 = carbasalate calcium		A02BC = proton pump inhibitors				
D 4	Chronic symptomatic diverticular disease	and	constipation	without	fiber supplement		
	ICPC D92 = diverticulosis/ diverticulitis		ICPC D12 = constipation		A06AC = bulk -producers		
	ICD9 562 = diverticula of intestine		IDC9 564.0 = constipation				
E 1	Active moderate-severe rheumatoid disease (> 4 weeks)	without	DMARD			Variables	
	ICPC L88.01 = reumatoïd arthritis		L04AX01 = azathioprine L04AX03 =			> 4 weeks active (rheumatoid disease)	
	ICD9 714.0 = Rheumatoid arthritis ICD9 714.2 = Other rheumatoid arthritis with visceral or systematic		methotrexate L04AA13 = leflunomide L04AD01 = Ciclosporin A07EC01 = sulfasalazine				

	involvement		P01BA = aminoquinolines M01CB01 = sodium aurothiomalate M01CB03 = auranofin		
E 2	Maintenance corticosteroid therapy (> 3 months)	without	bisphosphonates		1) Excluding dermatologic and inhaled corticosteroids. Variables > 3 months (use of corticosteroids)
	H02A = corticosteroids for systemic use H02B = corticosteroids for systemic use, combinations		M05BA = bisphosphonates M05BB = bisphosphonates, combinations		
E 3 a	Osteoporosis	or	high risk for osteoporosis	calcium	 If < 4 dairy consumptions a day. Excluding ICD9 codes for fracture of phalanges of hand (ICD9 816) and foot (ICD9 826) and excluding fracture of the skull. (ICD9 800-804)
	ICPC L95 = osteoporosis		ICPC L72 = fracture radius/ulna ICPC L73 =	A12AA = calcium	3) Excluding ICPC L74, Fracture hand/foot.
	ICD9 733.0 = osteoporosis		fracture tibia/fibula ICPC L75 = fracture of femur ICPC L76.03 = fracture of clavicula ICPC L76.04 = fracture of humerus ICPC L76.05 = fracture of rib ICPC L76.06 = fracture of spine ICPC L76.07 = fracture of pelvis ICPC L76.08 = fracture of patella	A12AX = calciumcarbonate + colecalciferol A12AX = calcium triphosfate + colcalciferol A11JB = calciumcarbonate + vitamins (calcevita)	





metformin +
lingliptin
A10BD13 =
metformin +
alogliptin

F 2	Diabetes mellitus	and	cardiovascular disease	without	antiplatelet therapy
2	ICPC T90 = diabetes mellitus (type 1 + 2) ICD9 250 = diabetes mellitus (type 1 + 2)		ICPC K74 = angina pectoris ICPC K75 = acute myocardial infarction ICPC K76 = ischemic heart disease ICPC K89 = transient cerebral ischemia ICPC K90.03 = cerebrovascular disease ICPC 92.01 = intermittent claudication		B01AC = platelet aggregation inhibitors excl. heparin
			ICD9 410 – 414 = ischemic heart disease ICD9 433 – 437 = cerebrovascular disease ICD9 444 = arterial embolism and thrombosis ICD9 445 = atheroembolism		

F 3	Diabetes mellitus	without	statin therapy			
	ICPC T90 = diabetes mellitus		C10AA = HMG CoA reductase			
	(type 1 + 2)		inhibitors			
			C10B =			
	ICD9 250 = diabetes mellitus (type 1 + 2)		lipid modifying agents, combinations			
G 1	Opiates	without	laxatives			1) Codeine, cough suppressant also included because of the risk of constipation
	N02A = Opioids R05DA04 =			A06A = drugs for constipation		
	Codeine		1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1			