

Supplementary material

Table S1. Standard triple treatment regimens for Helicobacter pylori eradication.

1	Proton pump inhibitor + clarithromycin + amoxicillin
2	Proton pump inhibitor + clarithromycin + metronidazole
3	Proton pump inhibitor + amoxicillin + metronidazole
4*	Combination package (including the proton pump inhibitor esomeprazole + two of the antibiotics amoxicillin, clarithromycin, or metronidazole)

* Not available in Denmark, Iceland, or Norway.

Table S2. Versions 8, 9, and 10 of the International Classification of Disease (ICD) used for coding diagnoses in the national patient registries over time in the five Nordic countries.

	ICD 8	ICD 9	ICD 10
Country (calendar- period)	Denmark (1977-1993) Finland (1969-1986) Iceland (No use) Norway (No use) Sweden (1964-1986)	Denmark (No use) Finland (1987-1995) Iceland (No use) Norway (No use) Sweden (1987-1996)	Denmark (1993-) Finland (1996-) Iceland (1999-) Norway (1997-) Sweden (1997-)

Table S3. Anatomical Therapeutic Chemical Classification (ATC) codes for identifying drug prescriptions intended for *Helicobacter pylori* eradication.

Medication	ATC-code
Proton pump inhibitor	A02BC*
Clarithromycin	J01FA09
Amoxicillin	J01CA04
Metronidazole	P01AB01
Combination package	A02BD*

* And all positions that follow.

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Table S4. Diagnoses and codes in the versions 8, 9, and 10 of the International Classification of Disease (ICD) used for defining the Charlson comorbidity index.

	ICD 8	ICD 9	ICD 10
Myocardial infarction	410*, 412*	410*, 412*	I21*-I23*, I252*
Congestive heart failure	427*, 428*	402*, 425*, 428*, 429D*¥	I11*, I13*, I255*, I42*-I43*, I50*, I517*
Peripheral vascular disease	440*- 445*	440*-447*, V43E*¥, 785E*¥	I70*-I73*, I770*-I771*, K551*, K558*- K559*, R02*, Z958*-Z959*
Cerebrovascular disease	430*- 438*	430*-438*, 362D*¥	G45*-G46*, I60*-I69*
Dementia	290*	290*, 294B*¥	A810*, F00*-F03*, F051*, G30*-G31*
Chronic pulmonary disease	490*- 493*, 515*- 518*	490*-496*, 500*-505*, 416*, 506E*¥	I26*-I27*, J40*-J47, J60*-J67*, J684*, J701*, J703*
Rheumatic disease	710*-712*, 734*	710*-714*, 725*	M05*-M06*, M09*, M120*, M315*, M32*-M36*
Liver disease	070*, 4560*, 571*, 573*	070*, 571* - 573*, 456A*¥-456C*¥	B18*, I85*, I864, I982*, K70*-K71*, K721*, K729*, K76*, R162*, Z944*
Diabetes mellitus	250*	250*	E10*-E14*
Hemiplegia	344*	342*-344*	G114*, G81*-G83*
Renal disease	403* - 404*, 580* - 583*, 792*	403*- 404*, 580-588*, V42A*¥, V45B*¥	I12*-I13*, N01*, N03*, N05*, N07*-N08*, N171*-N172*, N18*, N19*, N25*, Z49*, Z940*, Z992*
Any malignancy	140*- 172*, 174* - 195*, 200*-207*	140*-172*, 174*-195*, 200*-208*	C00*-C26*, C30*-C34*, C37*-C41*, C43*, C45*-C58*, C60-C76*, C80*-C85*, C88*, C90*-C97*
Metastatic tumours	196* - 199*	196*-199*	C77*-C79*
Acquired immunodeficiency syndrome (AIDS)	-	279K*¥	B20*-B24*

* And all positions that follow.

¥ The corresponding code in Finland may differ.

Table S5. Diagnoses and codes according in versions 7, 8, 9, and 10 of the International Classification of Disease (ICD) used for defining malignancies in the cancer registries.

	ICD-7	ICD-8	ICD-9	ICD-10 / -O2 / -O3
Any malignancy (except non-melanoma skin cancer)	140*- 190*, 192* - 195*, 200*-207*	140*- 172*, 174* - 195*, 200*-207*	140*- 172*, 174*- 195*, 200*- 208*	C00*-C26*, C30*-C34*, C37*-C41*, C43*, C45*-C58*, C60*-C76*, C80*-C85*, C88*, C90*-C97*
Any gastrointestinal cancer	150*-157*, 159*	150*-157*, 159A	150*- 157*, 159A	C15*-C26*

* And all positions that follow.

Figure S1. Timeline examples showing date of eradication treatment(s) of *Helicobacter pylori* (HP) and date of cohort inclusion (baseline) for three example cohort participants (A, B and C).

(A) Date of cohort inclusion at the date of first eradication treatment. Only treatment recorded at age ≥ 18 years, with at least 12 months of available follow-up left in the prescribed drug register were included.

(B) Example of *unsuccessful* HP eradication treatment(s) (additional eradication treatments dispensed within 12 months of a previous one) with the date of cohort inclusion set to the date of the last dispensed treatment.

(C) Example of *HP re-infection* (additional eradication treatments dispensed 12 months after a previous one) with the date of cohort inclusion set to the first eradication treatment.

