Supplementary Table 1. The diagnosis codes used to identify patients with esophageal and gastric cancer. The use of ICD-9 and ICD-10 overlapped, and therefore, both codes are used for searching for patients in 1995-1997.

	ICD-9 (before 1997)	ICD-10 (1995 and after)
	170	~
Oesophageal cancer	150	C15
	171	2112
Gastric cardia cancer	151A	C16.0
Gastric cancer	151B - 151X	C16.1 - C16.9

Supplementary Table 2. The surgical codes used to identify patients undergoing surgical treatment for esophago-gastric cancer.

	THL Surgical Codes (1983-	NOMESCO classification
	1996)	(1996 -)
Oesophageal resection	6201, 6202, 6203, 6204,	JCC00, JCC10, JCC11,
	6205, 6209	JCC12, JCC20, JCC30,
		JCC96, JCC97
Resection of the cardia	6301, 6320	Not applicable
Gastric resection:	6314, 6315, 6316, 6317,	JDC00, JDC10, JDC11,
	6318, 6321, 6322, 6323,	JDC20, JDC30, JDC40,
	6329	JDC96, JDC97, JDD00,
		JDD96
Endoscopic mucosal	Not applicable	JCA45, JCA52, JDA45,
resection / Endoscopic		JDA52, JDH52
submucosal dissection		

Supplementary Table 3. The definition of Charlson's comorbidity index.

The Charlson's comorbidity index will be calculated according to Armitage et al. using hospital admissions up to 3 years before the index admission (surgery), and the index admission, and will exclude esophago-gastric malignancies.

Disease	ICD-10 codes	
Myocardial infarction	I21*, I22*, I23*, I252	
Congestive cardiac failure	I11, I13, I255, I42, I43, I50, I517	
Peripheral vascular disease	I70–I73, I770, I771, K551, K558, K559, R02, Z958, Z959	
Cerebrovascular disease	G45, G46, I60–I69	
Dementia	A810, F00–F03, F051, G30, G31	
Chronic pulmonary disease	I26, I27, J40–J45, J46*, J47, J60–J67, J684, J701,	
	J703	
Rheumatological disease	M05, M06, M09, M120, M315, M32–M36	
Liver disease	B18, I85, I864, I982, K70, K71, K721, K729, K76,	
	R162, Z944	
Diabetes mellitus	E10-E14	
Hemiplegia or paraplegia	G114, G81–G83	
Renal disease	I12, I13, N01, N03, N05, N07, N08, N171*,	
	N172*, N18, N19*, N25, Z49, Z940, Z992	
Any malignancy	C00-C14, C17-C26, C30-C34, C37-C41, C43,	
	C45–C58, C60–C76, C80–C85, C88, C90–C97	
Metastatic solid tumour	C77–C79	
AIDS/HIV infection	B20-B24	

^{*}Will be only taken into account for previous, not current, hospital admissions, because these are common complications after surgery and cause confounding to the comorbidity index.

References

1. Armitage JN, van der Meulen JH, Royal College of Surgeons Co-morbidity Consensus G. Identifying co-morbidity in surgical patients using administrative data with the Royal College of Surgeons Charlson Score. *Br J Surg* 2010;97(5):772-81. doi: 10.1002/bjs.6930