

Supplementary Table 1

ADHD	Attention deficit disorder	314.0
	Attention deficit disorder without mention of hyperactivity	314.00
	Attention deficit disorder with hyperactivity	314.01
Constipation	Constipation	564.0
	Slow transit constipation	564.01
	Outlet dysfunction constipation	564.02
Dyspepsia	Dyspepsia	536.8
	Unspecified functional disorder of stomach	536.9
IBS	Functional digestive disorders, not elsewhere classified	564
	Irritable bowel syndrome (IBS)	564.1
	Postoperative functional disorder	564.4
	Irritable colon	564.10
Abdominal pain	Abdominal pain, unspecified	789.0
	Abdominal pain, unspecified site	789.00
	Abdominal pain, RUQ	789.01
	Abdominal pain, RLQ	789.03
	Abdominal pain, LLQ	789.04
	Abdominal pain, periumbilical	789.05
	Abdominal pain, epigastric	789.06
	Abdominal pain, generalized	789.07
	Abdominal pain, other specified site	789.09
	Abdominal tenderness, other specified site	789.69
	Abdominal colic	789.001
	Abdominal cramps	789.003
Abdominal mass	Abdominal/ pelvic mass, unspecified	789.3
	Abdominal/ pelvic mass, RLQ	789.33
	Abdominal/ pelvic mass, LLQ	789.34
	Abdominal or pelvic swelling, mass, or lump, periumbilical	789.35
Heartburn and GERD	Heartburn	787.1
	Gastroesophageal reflux (GERD)	530.81
	GERD- gastroesophageal reflux	530.810
Diarrhea	Diarrhea	787.91
	Secondary diarrhea	787.911
	Functional diarrhea	564.5
	Enteritis	558.93
	Gastroenteritis	558.94
Rectal bleeding, melena and hematemesis	Hematemesis	578.0
	Melena	578.1
	Blood in stool, melena	578.1
	Melena	578.10
	Gastrointestinal hemorrhage	578.9
	Gastrointestinal tract bleeding, upper	578.91

		Gastrointestinal tract bleeding, lower	578.92
		Bleeding, rectal	569.3
		Blood in stool, occult	792.1
Abdominal gas and bloating		Gas/ bloating, flatulence	787.3
		Abdominal distention (gaseous)	787.30
		Bloating	787.31
Perianal symptoms		Hemorrhoids, internal without complication	455.0
		Hemorrhoids, internal, thrombosed	455.1
		Hemorrhoids, internal with complication	455.2
		Hemorrhoids, external without complication	455.3
		Hemorrhoids, external, thrombosed	455.4
		Hemorrhoids, external, with other complication	455.5
		Hemorrhoids, unspecified	455.6
		Hemorrhoids, unspecified, thrombosed	455.7
		Hemorrhoids, unspecified, with other complication	455.8
		Hemorrhoidal residual skin tags	455.9
		Anal spasm	564.6
		Anal fissure and fistula	565
		Anal fissure, nontraumatic	565.0
		Anus and rectum ulcer	569.41
		Tenesmus (rectal)	787.992
Nausea and vomiting		Persistent vomiting	536.2
		Vomiting, uncontrollable	536.22
		Vomiting, uncontrollable, in oncologic patient	536.220
		Vomiting following gastrointestinal surgery	564.3
		Postoperative vomiting disorder	564.4
		Excessive vomiting in pregnancy	643
		Hyperemesis gravidarum, mild	643.0
		Hyperemesis gravidarum, mild	643.00
		Hyperemesis gravidarum, mild, delivered	643.01
		Late vomiting of pregnancy	643.2
		Late vomiting of pregnancy, unspecified	643.20
		Other vomiting complicating pregnancy	643.8
		Vomiting of pregnancy, unspecified	643.9
		Hyperemesis gravidarum, with metabolic disturbance, antepartum	643.13
		Nausea and vomiting	787.0
		Nausea with vomiting	787.01
		Nausea, alone	787.02
		Vomiting, alone	787.03
Weight loss		Abnormal loss of weight and underweight	783.2
		Underweight	783.22
		Weight gaining failure	783.42
Bowel changes	habits	Bowel habits changes	787.991

Others	Anorexia	783.0
	Halitosis	784.9
	Hiccups	786.8
	Abnormal bowel sounds	787.5
	Digestive system symptoms, other	787.99
	Appetite loss	796.41

ADHD: Attention deficit hyperactivity disorder; GERD: Gastroesophageal reflux disease.

Supplementary Table 2 Sociodemographic characteristics of young adults with attention deficit hyperactivity disorder with and without functional gastrointestinal disorders ($n = 33380$)

		FGID (%)		<i>P</i> value
		No	Yes	
	Number of participants	31136	2244	
Gender	Female	42.0%	61.1%	Ref
	Male	58.0%	38.9%	< 0.001
Socioeconomic status	Low	14.9%	13.0%	0.046
	Medium	50.2%	51.7%	NS
	High	34.9%	35.3%	NS
Education	12	93.0%	95.2%	< 0.001
	< 12	6.9%	4.6%	< 0.001
	> 12	0.1%	0.1%	NS
Comorbidities	None or mild	63.8%	55.4%	< 0.001
	Mild to moderate	9.7%	11.5%	< 0.001
	Moderate to severe	26.6%	33.1%	< 0.001
Country of origin	Western countries	25.7%	23.2%	0.005
	Africa	21.7%	22.4%	NS
	Asia	25.4%	27.7%	0.005
	Former Soviet Union	12.9%	13.5%	NS
	Ethiopia	1.2%	0.6%	0.005
	Other	0.6%	1.0%	NS
	Israel	12.6%	11.6%	NS

Methylphenidate	-	88.3%	85.0%	Ref
	+	11.7%	15.0%	< 0.001
BMI, mean \pm SD	Females	21.96 \pm 0.14	21.68 \pm 0.10	0.047
	Males	22.41 \pm 0.03	22.54 \pm 0.15	NS
Height (cm), mean \pm SD	Females	162.2 \pm 0.05	161.9 \pm 0.16	NS
	Males	174.4 \pm 0.05	174.2 \pm 0.24	NS

ADHD: Attention deficit hyperactivity disorder; GI: Gastrointestinal; FGID: Functional gastrointestinal disorder; BMI: body mass index.

Supplementary Table 3 Association of gastrointestinal-related symptoms by primary care physician visits

Visits in a primary care clinic	RR	CI 95%	p-value
Perianal symptoms	1.26	1.23-1.29	< 0.001
Heartburn and GERD	1.51	1.43-1.59	< 0.001
Bowel habit changes	1.32	1.04-1.68	0.023
Nausea and vomiting	1.27	1.24-1.30	< 0.001
Weight loss	1.22	1.17-1.28	< 0.001
Abdominal pain	1.21	1.20-1.23	< 0.001
Rectal bleeding and melena	1.30	1.24-1.36	< 0.001
Abdominal gas and bloating	1.28	1.11-1.47	0.001
Diarrhea	1.25	1.23-1.28	< 0.001
Abdominal mass	1.19	0.99-1.44	0.067
Others	1.97	1.61-2.42	< 0.001
Overall	1.25	1.24-1.26	< 0.001

GERD: Gastroesophageal reflux disease.

Supplementary Table 4 Association of attention deficit hyperactivity disorder and recurrent gastrointestinal complaints

Recurrent complaints	RR	CI 95%	P-value
Perianal symptoms	1.10	0.91-1.34	0.328
Heartburn and GERD	1.52	1.04-2.22	0.031
Bowel habit changes	3.57	0.35-36.04	0.280
Nausea and vomiting	1.55	1.22-1.98	< 0.001
Weight loss	1.04	0.71-1.51	0.854
Abdominal pain	1.30	1.19-1.42	< 0.001
Rectal bleeding and melena	1.33	0.77-2.28	0.306
Abdominal gas and bloating	1.06	0.13-8.55	0.959
Diarrhea	1.45	1.22-1.72	< 0.001
Abdominal mass	-	-	-
Others	2.04	0.23-17.87	0.520
Overall	1.29	1.21-1.38	< 0.001

GERD: Gastroesophageal reflux disease.