

Table S1. Medications prescribed in Sweden, classified according to the Anatomic Therapeutic Chemical (ATC) Classification System.

First level of ATC codes	Second Level of ATC codes	Example
A Alimentary tract and metabolism	A01: Stomatological preparations A02: Drugs for acid-related disorders A07: Antidiarrheals, intestinal antiinflammatory/anti-infective agents A10: Drugs used in diabetes A03–A06, A08–A09, A11–A14, A16 [†] ; A15 [‡]	Sodium Fluoride Omeprazole Loperamide Metformin
B Blood and bloodforming organs	B01–B03, B05, B06 [†]	Epinephrine
C Cardiovascular system	C01: Cardiac therapy C02: Antihypertensives C03: Diuretics C04: Peripheral vasodilators C05: Vasoprotectives C07: β -blocking agents C08: Calcium channel blockers C09: Agents acting on the renin-angiotensin system C10: Lipid-modifying agents	Clonidine Furosemide Ergoloid mesylates Prednisolone Propranolol Amlodipine Enalapril Simvastatin
D Dermatologicals	D04: Antipruritics, including antihistamines, anesthetics D05: Antipsoriatics D06: Antibiotics and chemotherapeutics for dermatologic use D07: Corticosteroids, dermatologic preparations D11: Other dermatologic preparations D01–D03, D08–D10 [†]	Diphenhydramine Acitretin Demeclocycline Hydrocortisone Glycopyrronium
G Genitourinary system and reproductive hormones	G02: Other gynecological drugs G03: Sex hormones and modulators of the genital system G04: Urological drugs G01 [†]	Methylethergometrine Estradiol Oxybutynin
H Systemic hormonal preparations, excluding reproductive hormones and insulins	H01: Pituitary and hypothalamic hormones and analogs H02: Corticosteroids for systemic use H03: Thyroid therapy H04: Pancreatic hormones H05: Calcium homeostasis	Somatropin Hydrocortisone Thiamazole Glucagon Paricalcitol
J Antiinfectives for systemic use	J01: Antibacterials for systemic use J02: Antimycotics for systemic use J04: Antimycobacterials J05: Antivirals for systemic use J06–J07 [†]	Doxycycline Fluconazole Rifampicin Valaciclovir
L Antineoplastic and immunomodulating agents	L01: Antineoplastic agents L02: Endocrine therapy L03: Immunostimulants L04: Immunosuppressants	Bendamustine Triptorelin Filgrastim Mycophenolic acid
M Musculoskeletal system	M01: Anti-inflammatory and antirheumatic drugs M02–M05, M09 [†]	Diclofenac
N Nervous system	N01: Anesthetics N02: Analgesics N03: Antiepileptics N04: Antiparkinson drugs N05: Psycholeptics N06: Psychoanaleptics N07: Other nervous system drugs	Lidocaine Morphine Carbamazepine Carbidopa levodopa Zopiclone Sertraline Disulfiram
P Antiparasitic products, insecticides, and repellents	P01: Antiprotozoal drugs P02: Anthelmintics P03 [†]	Metronidazole Mebendazole
R Respiratory system	R01: Nasal preparations R03: Drugs for obstructive airway diseases R05: Cough and cold drugs R06: Antihistamines for systemic use R07: Other respiratory system products R02 [†]	Mometasone Terbutaline Acetylcysteine Alimemazine Nitric oxide
S Sensory organs	S01: Ophthalmologicals S02–S03 [†]	Brimonidine
V Various	V01, V03, V04, V06–V10 [†] ; V20 [‡]	

[†] Codes that were not available in the Prescribed Drug Register.

[‡] Codes for medications not used in Sweden.

Table S2. Patterns of ADHD medication prescriptions among adults in 2013, stratified by age group and sex.

	Male			Female		
	Young adults [†] (N=11,220)	Middle-aged adults (N=8,931)	Older adults (N=2,339)	Young adults (N=9,409)	Middle-aged adults (N=7,958)	Older adults (N=1,983)
Type (%)						
Methylphenidate	9,951 (88.69%)	7,759 (86.88%)	1,956 (83.63%)	8,430 (89.60%)	6,913 (86.87%)	1,628 (82.10%)
Dexamfetamine	237 (2.11%)	529 (5.92%)	145 (6.20%)	205 (2.18%)	416 (5.23%)	109 (5.50%)
Amphetamine	78 (0.70%)	141 (1.58%)	87 (3.72%)	63 (0.67%)	196 (2.46%)	131 (6.61%)
Atomoxetine	1,768 (15.76%)	1,165 (13.04%)	307 (13.13%)	1,468 (15.60%)	1,067 (13.41%)	240 (12.10%)
Lisdexamfetamine	92 (0.82%)	104 (1.16%)	19 (0.81%)	45 (0.48%)	73 (0.92%)	14 (0.71%)
Guanfacine	7 (0.06%)	1 (0.01%)	1 (0.04%)	0 (0%)	0 (0%)	0 (0%)
Source (%)						
Primary care	180 (1.60%)	96 (1.07%)	42 (1.80%)	100 (1.06%)	49 (0.62%)	27 (1.36%)
Specialist care [‡]	821 (7.32%)	538 (6.02%)	218 (9.32%)	572 (6.08%)	527 (6.62%)	236 (11.90%)
Psychiatric care	10,219 (91.08%)	8,297 (92.90%)	2,079 (88.88%)	8,737 (92.86%)	7,382 (92.76%)	1,720 (86.74%)
Duration of medication (%)						
Single prescription [§]	865 (7.71%)	345 (3.86%)	99 (4.23%)	573 (6.09%)	341 (4.28%)	98 (4.94%)
Short term (\leq 6m)	1,207 (10.76%)	645 (7.22%)	146 (6.24%)	982 (10.44%)	519 (6.52%)	127 (6.40%)
Medium term (6-12m)	1,285 (11.45%)	771 (8.63%)	166 (7.10%)	1,149 (12.21%)	653 (8.21%)	144 (7.26%)
Long term ($>$ 12m)	7,863 (70.08%)	7,170 (80.28%)	1,928 (82.43%)	6,705 (71.26%)	6,445 (80.99%)	1,614 (81.39%)

[†] Young adults refer to patients aged 18-29 years, middle-aged adults refers to patients aged 30-49 years, and older adults referred to patients aged 50-64 years.

[‡] Specialist care excluding psychiatry.

[§] Single prescription here entail single dispensed prescriptions of any ADHD medication. Switching between different types of ADHD medications is not captured by this number.

Table S3. The ten most commonly dispensed respiratory system medications among individuals receiving ADHD medications by age category.

Name	ATC	Frequency	Percentage
Young adults (18-29 years)			
Alimemazine	R06AD01	2,424	11.75%
Promethazine	R06AD02	2,078	10.07%
Mometasone	R01AD09	1,628	7.89%
Opium derivatives and expectorants	R05FA02	1,528	7.41%
Terbutaline	R03AC03	1,450	7.03%
Combinations	R05CB10	1,145	5.55%
Desloratadine	R06AX27	1,112	5.39%
Budesonide	R03BA02	1,000	4.85%
Salbutamol	R03AC02	727	3.52%
Loratadine	R06AX13	616	2.99%
Middle-aged adults (30-49 years)			
Alimemazine	R06AD01	2,799	16.57%
Opium derivatives and expectorants	R05FA02	2,164	12.81%
Promethazine	R06AD02	2,065	12.23%
Mometasone	R01AD09	2,014	11.92%
Terbutaline	R03AC03	1,692	10.02%
Budesonide	R03BA02	1,249	7.40%
Combinations	R05CB10	1,098	6.50%
Desloratadine	R06AX27	1,063	6.29%
Salbutamol	R03AC02	873	5.17%
Acetylcysteine	R05CB01	831	4.92%
Older adults (50-64 years)			
Alimemazine	R06AD01	692	16.01%
Opium derivatives and expectorants	R05FA02	586	13.56%
Mometasone	R01AD09	532	12.31%
Acetylcysteine	R05CB01	461	10.67%
Promethazine	R06AD02	411	9.51%
Terbutaline	R03AC03	403	9.32%
Combinations	R05CB10	319	7.38%
Formoterol and budesonide	R03AK07	315	7.29%
Budesonide	R03BA02	305	7.06%
Salbutamol	R03AC02	292	6.76%

Table S4. The ten most commonly dispensed alimentary tract and metabolic medications among individuals receiving ADHD medications by age category.

Name	ATC	Frequency	Percentage
Young adults (18-29 years)			
Omeprazole	A02BC01	1,951	9.46%
Sodium fluoride	A01AA01	1,214	5.88%
Combinations of sodium fluoride and sodium monofluorophosphate	A01AA30	561	2.72%
Esomeprazole	A02BC05	225	1.09%
Insulin aspart	A10AB05	173	0.84%
Loperamide	A07DA03	167	0.81%
Insulin glargine	A10AE04	136	0.66%
Ranitidine	A02BA02	128	0.62%
Benzydamine	A01AD02	127	0.62%
Nystatin	A07AA02	119	0.58%
Middle-aged adults (30-49 years)			
Omeprazole	A02BC01	3,169	18.76%
Sodium fluoride	A01AA01	1,410	8.35%
Combinations of sodium fluoride and sodium monofluorophosphate	A01AA30	989	5.86%
Esomeprazole	A02BC05	468	2.77%
Metformin	A10BA02	328	1.94%
Loperamide	A07DA03	310	1.84%
Nystatin	A07AA02	224	1.33%
Insulin aspart	A10AB05	145	0.86%
Ranitidine	A02BA02	142	0.84%
Insulin glargine	A10AE04	140	0.83%
Older adults (50-64 years)			
Omeprazole	A02BC01	1,238	28.64%
Sodium fluoride	A01AA01	463	10.71%
Combinations of sodium fluoride and sodium monofluorophosphate	A01AA30	324	7.50%
Metformin	A10BA02	216	5.00%
Esomeprazole	A02BC05	191	4.42%
Loperamide	A07DA03	148	3.42%
Nystatin	A07AA02	120	2.78%
Ranitidine	A02BA02	71	1.64%
Insulin (human)	A10AC01	68	1.57%
Insulin aspart	A10AB05	54	1.25%

Table S5. The ten most commonly dispensed cardiovascular system medications among individuals receiving ADHD medications by age category.

Name	ATC	Frequency	Percentage
Young adults (18-29 years)			
Propranolol	C07AA05	615	2.98%
Epinephrine	C01CA24	243	1.18%
Metoprolol	C07AB02	241	1.17%
Hydrocortisone	C05AA01	195	0.95%
Prednisolone	C05AA04	178	0.86%
Enalapril	C09AA02	71	0.34%
Bisoprolol	C07AB07	64	0.31%
Atenolol	C07AB03	57	0.28%
Furosemide	C03CA01	55	0.27%
Glyceryl trinitrate	C05AE01	36	0.17%
Middle-aged adults (30-49 years)			
Propranolol	C07AA05	871	5.16%
Metoprolol	C07AB02	710	4.20%
Enalapril	C09AA02	638	3.78%
Amlodipine	C08CA01	417	2.47%
Furosemide	C03CA01	374	2.21%
Simvastatin	C10AA01	359	2.13%
Losartan	C09CA01	284	1.68%
Prednisolone	C05AA04	240	1.42%
Hydrocortisone	C05AA01	214	1.27%
Epinephrine	C01CA24	203	1.20%
Older adults (50-64 years)			
Enalapril	C09AA02	484	11.20%
Metoprolol	C07AB02	425	9.83%
Simvastatin	C10AA01	385	8.91%
Amlodipine	C08CA01	329	7.61%
Propranolol	C07AA05	271	6.27%
Furosemide	C03CA01	239	5.53%
Losartan	C09CA01	211	4.88%
Atorvastatin	C10AA05	143	3.31%
Felodipine	C08CA02	135	3.12%
Candesartan	C09CA06	131	3.03%

Table S6. The prescription of antipsychotics among individuals receiving ADHD medications by age category.

Name	ATC	Frequency	Percentage
Young adults (18-29 years)			
Quetiapine	N05AH04	1,556	7.54%
Olanzapine	N05AH03	897	4.35%
Aripiprazole	N05AX12	715	3.47%
Levomepromazine	N05AA02	530	2.57%
Risperidone	N05AX08	512	2.48%
Lithium	N05AN01	341	1.65%
Chlorprothixene	N05AF03	145	0.70%
Haloperidol	N05AD01	121	0.59%
Flupentixol	N05AF01	83	0.40%
Zuclopenthixol	N05AF05	79	0.38%
Paliperidone	N05AX13	43	0.21%
Ziprasidone	N05AE04	42	0.20%
Clozapine	N05AH02	33	0.16%
Melperone	N05AD03	32	0.16%
Perphenazine	N05AB03	21	0.10%
Pimozide	N05AG02	5	0.02%
Amisulpride	N05AL05	1	<0.01%
Middle-aged adults (30-49 years)			
Quetiapine	N05AH04	1,873	11.09%
Olanzapine	N05AH03	1,158	6.86%
Aripiprazole	N05AX12	821	4.86%
Levomepromazine	N05AA02	661	3.91%
Lithium	N05AN01	571	3.38%
Risperidone	N05AX08	429	2.54%
Haloperidol	N05AD01	161	0.95%
Zuclopenthixol	N05AF05	141	0.83%
Chlorprothixene	N05AF03	132	0.78%
Flupentixol	N05AF01	117	0.69%
Paliperidone	N05AX13	72	0.43%
Clozapine	N05AH02	57	0.34%
Perphenazine	N05AB03	56	0.33%
Ziprasidone	N05AE04	50	0.30%
Melperone	N05AD03	28	0.17%
Pimozide	N05AG02	2	0.01%
Older adults (50-64 years)			
Quetiapine	N05AH04	440	10.18%
Olanzapine	N05AH03	236	5.46%
Aripiprazole	N05AX12	174	4.03%
Levomepromazine	N05AA02	150	3.47%
Lithium	N05AN01	121	2.80%
Risperidone	N05AX08	91	2.11%
Flupentixol	N05AF01	51	1.18%
Zuclopenthixol	N05AF05	47	1.09%
Haloperidol	N05AD01	39	0.90%
Chlorprothixene	N05AF03	25	0.58%
Perphenazine	N05AB03	22	0.51%
Paliperidone	N05AX13	19	0.44%
Clozapine	N05AH02	14	0.32%
Ziprasidone	N05AE04	7	0.16%
Melperone	N05AD03	6	0.14%
Pimozide	N05AG02	2	0.05%
Prochlorperazine	N05AB04	1	0.02%

Sertindole	N05AE03	1	0.02%
------------	---------	---	-------

Table S7. The prescription of anxiolytics, hypnotics, and sedative medications among individuals receiving ADHD medications by age category.

Name	ATC	Frequency	Percentage
Young adults (18-29 years)			
Hydroxyzine	N05BB01	3,333	16.16%
Zopiclone	N05CF01	3,108	15.07%
Melatonin	N05CH01	2,977	14.43%
Propiomazine	N05CM06	2,549	12.36%
Zolpidem	N05CF02	1,905	9.23%
Oxazepam	N05BA04	1,439	6.98%
Diazepam	N05BA01	1,014	4.92%
Alprazolam	N05BA12	504	2.44%
Nitrazepam	N05CD02	234	1.13%
Buspirone	N05BE01	223	1.08%
Zaleplon	N05CF03	99	0.48%
Flunitrazepam	N05CD03	69	0.33%
Lorazepam	N05BA06	45	0.22%
Triazolam	N05CD05	45	0.22%
Clomethiazole	N05CM02	38	0.18%
Midazolam	N05CD08	22	0.11%
Clobazam	N05BA09	6	0.03%
Valerianae radix	N05CM09	2	0.01%
Middle-aged adults (30-49 years)			
Zopiclone	N05CF01	4,717	27.93%
Hydroxyzine	N05BB01	3,378	20.00%
Propiomazine	N05CM06	3,065	18.15%
Zolpidem	N05CF02	2,799	16.57%
Oxazepam	N05BA04	2,459	14.56%
Diazepam	N05BA01	1,921	11.37%
Melatonin	N05CH01	1,707	10.11%
Alprazolam	N05BA12	1,000	5.92%
Nitrazepam	N05CD02	485	2.87%
Buspirone	N05BE01	316	1.87%
Flunitrazepam	N05CD03	189	1.12%
Zaleplon	N05CF03	186	1.10%
Clomethiazole	N05CM02	64	0.38%
Lorazepam	N05BA06	51	0.30%
Triazolam	N05CD05	47	0.28%
Midazolam	N05CD08	2	0.01%
Valerianae radix	N05CM09	2	0.01%
Clobazam	N05BA09	1	0.01%
Older adults (50-64 years)			
Zopiclone	N05CF01	1,319	30.52%
Hydroxyzine	N05BB01	844	19.53%
Propiomazine	N05CM06	784	18.14%
Zolpidem	N05CF02	771	17.84%
Oxazepam	N05BA04	741	17.14%
Diazepam	N05BA01	566	13.10%
Melatonin	N05CH01	351	8.12%
Alprazolam	N05BA12	241	5.58%
Nitrazepam	N05CD02	148	3.42%
Flunitrazepam	N05CD03	86	1.99%
Buspirone	N05BE01	63	1.46%

Zaleplon	N05CF03	57	1.32%
Clomethiazole	N05CM02	19	0.44%
Triazolam	N05CD05	15	0.35%
Lorazepam	N05BA06	14	0.32%
Midazolam	N05CD08	2	0.05%

Table S8. The prescription of antiepileptics among individuals receiving ADHD medications by age category.

Name	ATC	Frequency	Percentage
Young adults (18-29 years)			
Lamotrigine	N03AX09	1,318	6.39%
Pregabalin	N03AX16	927	4.49%
Valproic acid	N03AG01	501	2.43%
Gabapentin	N03AX12	223	1.08%
Carbamazepine	N03AF01	218	1.06%
Clonazepam	N03AE01	170	0.82%
Topiramate	N03AX11	122	0.59%
Levetiracetam	N03AX14	54	0.26%
Oxcarbazepine	N03AF02	18	0.09%
Zonisamide	N03AX15	10	0.05%
Lacosamide	N03AX18	7	0.03%
Phenobarbital	N03AA02	3	0.01%
Ethosuximide	N03AD01	3	0.01%
Sultiame	N03AX03	3	0.01%
Phenytoin	N03AB02	1	<0.01%
Rufinamide	N03AF03	1	<0.01%
Vigabatrin	N03AG04	1	<0.01%
Perampanel	N03AX22	1	<0.01%
Middle-aged adults (30-49 years)			
Lamotrigine	N03AX09	1,596	9.45%
Pregabalin	N03AX16	1,539	9.11%
Valproic acid	N03AG01	645	3.82%
Gabapentin	N03AX12	473	2.80%
Clonazepam	N03AE01	336	1.99%
Carbamazepine	N03AF01	305	1.81%
Topiramate	N03AX11	175	1.04%
Levetiracetam	N03AX14	54	0.32%
Oxcarbazepine	N03AF02	11	0.07%
Phenobarbital	N03AA02	6	0.04%
Phenytoin	N03AB02	6	0.04%
Primidone	N03AA03	2	0.01%
Zonisamide	N03AX15	2	0.01%
Rufinamide	N03AF03	1	0.01%
Vigabatrin	N03AG04	1	0.01%
Lacosamide	N03AX18	1	0.01%
Perampanel	N03AX22	1	0.01%
Older adults (50-64 years)			
Pregabalin	N03AX16	396	9.16%
Lamotrigine	N03AX09	362	8.38%
Gabapentin	N03AX12	136	3.15%
Valproic acid	N03AG01	127	2.94%
Clonazepam	N03AE01	94	2.17%
Carbamazepine	N03AF01	92	2.13%
Topiramate	N03AX11	43	0.99%
Levetiracetam	N03AX14	14	0.32%

Phenytoin	N03AB02	4	0.09%
Oxcarbazepine	N03AF02	3	0.07%
Phenobarbital	N03AA02	2	0.05%
Primidone	N03AA03	1	0.02%
Perampanel	N03AX22	1	0.02%

Table S9. The prescription of antidepressants among individuals receiving ADHD medications by age category.

Name	ATC	Frequency	Percentage
Young adults (18-29 years)			
Sertraline	N06AB06	2,794	13.54%
Mirtazapine	N06AX11	1,617	7.84%
Fluoxetine	N06AB03	1,457	7.06%
Escitalopram	N06AB10	1,167	5.66%
Bupropion	N06AX12	1,131	5.48%
Venlafaxine	N06AX16	1,111	5.39%
Citalopram	N06AB04	868	4.21%
Duloxetine	N06AX21	572	2.77%
Agomelatine	N06AX22	383	1.86%
Amitriptyline	N06AA09	221	1.07%
Paroxetine	N06AB05	218	1.06%
Clomipramine	N06AA04	148	0.72%
Mianserin	N06AX03	131	0.64%
Reboxetine	N06AX18	76	0.37%
Moclobemide	N06AG02	16	0.08%
Nortriptyline	N06AA10	6	0.03%
Fluvoxamine	N06AB08	3	0.01%
Tranlycypromine	N06AF04	2	0.01%
Maprotiline	N06AA21	1	<0.01%
Tryptophan	N06AX02	1	<0.01%
Middle-aged adults (30-49 years)			
Sertraline	N06AB06	2,244	13.29%
Mirtazapine	N06AX11	1,849	10.95%
Venlafaxine	N06AX16	1,668	9.88%
Escitalopram	N06AB10	1,602	9.49%
Bupropion	N06AX12	1,599	9.47%
Citalopram	N06AB04	1,231	7.29%
Fluoxetine	N06AB03	1,198	7.09%
Duloxetine	N06AX21	1,077	6.38%
Agomelatine	N06AX22	507	3.00%
Amitriptyline	N06AA09	478	2.83%
Paroxetine	N06AB05	350	2.07%
Clomipramine	N06AA04	272	1.61%
Mianserin	N06AX03	201	1.19%
Reboxetine	N06AX18	169	1.00%
Moclobemide	N06AG02	32	0.19%
Nortriptyline	N06AA10	19	0.11%
Fluvoxamine	N06AB08	6	0.04%
Tranlycypromine	N06AF04	4	0.02%
Tryptophan	N06AX02	4	0.02%
Trimipramine	N06AA06	2	0.01%
Desvenlafaxine	N06AX23	2	0.01%
Lofepamine	N06AA07	1	0.01%
Maprotiline	N06AA21	1	0.01%

Phenelzine	N06AF03	1	0.01%
Older adults (50-64 years)			
Mirtazapine	N06AX11	507	11.73%
Sertraline	N06AB06	464	10.74%
Bupropion	N06AX12	453	10.48%
Venlafaxine	N06AX16	407	9.42%
Escitalopram	N06AB10	371	8.58%
Citalopram	N06AB04	363	8.40%
Duloxetine	N06AX21	330	7.64%
Fluoxetine	N06AB03	258	5.97%
Amitriptyline	N06AA09	190	4.40%
Agomelatine	N06AX22	125	2.89%
Paroxetine	N06AB05	103	2.38%
Clomipramine	N06AA04	96	2.22%
Mianserin	N06AX03	72	1.67%
Reboxetine	N06AX18	51	1.18%
Moclobemide	N06AG02	11	0.25%
Nortriptyline	N06AA10	9	0.21%
Tryptophan	N06AX02	2	0.05%
Trimipramine	N06AA06	1	0.02%
Fluvoxamine	N06AB08	1	0.02%
Trazodone	N06AX05	1	0.02%

Table S10. The prescription of drugs used in addictive disorders among individuals receiving ADHD medications by age category.

Name	ATC	Frequency	Percentage
Young adults (18-29 years)			
Disulfiram	N07BB01	307	1.49%
Naltrexone	N07BB04	162	0.79%
Varenicline	N07BA03	137	0.66%
Acamprosate	N07BB03	116	0.56%
Buprenorphine. combinations	N07BC51	37	0.18%
Buprenorphine	N07BC01	36	0.17%
Nicotine	N07BA01	32	0.16%
Methadone	N07BC02	30	0.15%
Nalmefene	N07BB05	3	0.01%
Drugs used in opioid dependence	N07BC	1	<0.01%
Middle-aged adults (30-49 years)			
Disulfiram	N07BB01	568	3.36%
Varenicline	N07BA03	366	2.17%
Naltrexone	N07BB04	316	1.87%
Acamprosate	N07BB03	265	1.57%
Methadone	N07BC02	165	0.98%
Buprenorphine	N07BC01	130	0.77%
Buprenorphine. combinations	N07BC51	100	0.59%
Nicotine	N07BA01	71	0.42%
Nalmefene	N07BB05	5	0.03%
Drugs used in opioid dependence	N07BC	1	0.01%
Older adults (50-64 years)			
Disulfiram	N07BB01	149	3.45%
Varenicline	N07BA03	114	2.64%
Naltrexone	N07BB04	113	2.61%
Acamprosate	N07BB03	73	1.69%
Methadone	N07BC02	46	1.06%
Nicotine	N07BA01	39	0.90%
Buprenorphine	N07BC01	32	0.74%
Buprenorphine. combinations	N07BC51	14	0.32%
Nalmefene	N07BB05	2	0.05%

Table S11. The prescription of opioids among individuals receiving ADHD medications by age category.

Name	ATC	Frequency	Percentage
Young adults (18-29 years)			
Codeine. combinations excl. psycholeptics	N02AA59	1,821	8.83%
Tramadol	N02AX02	927	4.49%
Oxycodone	N02AA05	539	2.61%
Morphine	N02AA01	139	0.67%
Morphine and antispasmodics	N02AG01	129	0.63%
Buprenorphine	N02AE01	74	0.36%
Ketobemidone	N02AB01	40	0.19%
Oxycodone and naloxone	N02AA55	25	0.12%
Fentanyl	N02AB03	13	0.06%
Tapentadol	N02AX06	11	0.05%
Ketobemidone and antispasmodics	N02AG02	5	0.02%
Middle-aged adults (30-49 years)			
Codeine. combinations excl. psycholeptics	N02AA59	2,904	17.19%
Tramadol	N02AX02	1,978	11.71%
Oxycodone	N02AA05	949	5.62%
Morphine	N02AA01	337	2.00%
Buprenorphine	N02AE01	221	1.31%
Morphine and antispasmodics	N02AG01	181	1.07%
Ketobemidone	N02AB01	116	0.69%
Oxycodone and naloxone	N02AA55	64	0.38%
Fentanyl	N02AB03	47	0.28%
Tapentadol	N02AX06	41	0.24%
Ketobemidone and antispasmodics	N02AG02	14	0.08%
Hydromorphone	N02AA03	2	0.01%
Pethidine	N02AB02	1	0.01%
Older adults (50-64 years)			
Codeine. combinations excl. psycholeptics	N02AA59	832	19.25%
Tramadol	N02AX02	611	14.14%
Oxycodone	N02AA05	291	6.73%
Morphine	N02AA01	132	3.05%
Buprenorphine	N02AE01	95	2.20%
Morphine and antispasmodics	N02AG01	45	1.04%
Ketobemidone	N02AB01	44	1.02%
Oxycodone and naloxone	N02AA55	42	0.97%
Fentanyl	N02AB03	26	0.60%
Tapentadol	N02AX06	10	0.23%
Ketobemidone and antispasmodics	N02AG02	7	0.16%
Hydromorphone	N02AA03	1	0.02%
Dextropropoxyphene	N02AC04	1	0.02%
Pentazocine	N02AD01	1	0.02%

Figure S1. Dispensation of somatic medications (according to ATC classes) among individuals diagnosed with ADHD and dispensed with ADHD medications, by age group.

Co-medication	ADHD drug users (N = 35,443)	Control group (N = 35,443)	Odds ratio (95% CI)	
A Alimentary tract and metabolism				
Young adults (18-29 years)	3,595 (19.9%)	954 (5.3%)	4.6 (4.2, 4.9)	
Middle-aged adults (30-49 years)	4,775 (34.0%)	1,386 (9.9%)	4.8 (4.5, 5.1)	
Older adults (50-64 years)	1,578 (47.8%)	609 (18.5%)	4.1 (3.7, 4.6)	
C Cardiovascular System				
Young adults (18-29 years)	1,576 (8.7%)	382 (2.1%)	4.5 (4.0, 5.0)	
Middle-aged adults (30-49 years)	3,320 (23.6%)	1,058 (7.5%)	3.9 (3.6, 4.2)	
Older adults (50-64 years)	1,494 (45.3%)	899 (27.3%)	2.2 (2.0, 2.5)	
D Dermatologicals				
Young adults (18-29 years)	2,263 (12.5%)	933 (5.2%)	2.6 (2.4, 2.9)	
Middle-aged adults (30-49 years)	2,272 (16.2%)	836 (5.9%)	3.1 (2.8, 3.3)	
Older adults (50-64 years)	717 (21.7%)	298 (9.0%)	2.8 (2.4, 3.3)	
G Genitourinary system and reproductive hormones				
Young adults (18-29 years)	5,239 (29.0%)	4,120 (22.8%)	1.7 (1.6, 1.8)	
Middle-aged adults (30-49 years)	3,134 (22.3%)	1,908 (13.6%)	2.0 (1.8, 2.1)	
Older adults (50-64 years)	921 (27.9%)	413 (12.5%)	2.8 (2.4, 3.2)	
H Systemic hormonal preparations				
Young adults (18-29 years)	1,477 (8.2%)	609 (3.4%)	2.6 (2.3, 2.8)	
Middle-aged adults (30-49 years)	2,097 (14.9%)	982 (7.0%)	2.4 (2.2, 2.6)	
Older adults (50-64 years)	640 (19.4%)	293 (8.9%)	2.5 (2.2, 3.0)	
J Antiinfectives for systemic use				
Young adults (18-29 years)	7,268 (40.2%)	3,442 (19.0%)	3.0 (2.9, 3.2)	
Middle-aged adults (30-49 years)	6,569 (46.7%)	2,753 (19.6%)	3.7 (3.5, 4.0)	
Older adults (50-64 years)	1,600 (48.5%)	658 (19.9%)	3.9 (3.5, 4.3)	
L Antineoplastic and immunomodulating agents				
Young adults (18-29 years)	155 (0.9%)	106 (0.6%)	1.5 (1.1, 1.9)	
Middle-aged adults (30-49 years)	246 (1.8%)	196 (1.4%)	1.3 (1.0, 1.5)	
Older adults (50-64 years)	98 (3.0%)	64 (1.9%)	1.5 (1.1, 2.1)	
M Musculoskeletal system				
Young adults (18-29 years)	3,479 (19.2%)	1,218 (6.7%)	3.4 (3.1, 3.6)	
Middle-aged adults (30-49 years)	4,860 (34.6%)	1,737 (12.4%)	3.8 (3.6, 4.0)	
Older adults (50-64 years)	1,345 (40.8%)	601 (18.2%)	3.1 (2.8, 3.5)	
P Antiparasitic products, insecticides and repellents				
Young adults (18-29 years)	735 (4.1%)	338 (1.9%)	2.3 (2.0, 2.6)	
Middle-aged adults (30-49 years)	639 (4.5%)	249 (1.8%)	2.7 (2.3, 3.1)	
Older adults (50-64 years)	149 (4.5%)	66 (2.0%)	2.3 (1.7, 3.1)	
R Respiratory system				
Young adults (18-29 years)	7,766 (42.9%)	2,474 (13.7%)	4.9 (4.7, 5.2)	
Middle-aged adults (30-49 years)	7,931 (56.4%)	2,601 (18.5%)	5.9 (5.6, 6.3)	
Older adults (50-64 years)	1,994 (60.4%)	729 (22.1%)	5.5 (4.9, 6.1)	
S Sensory organs				
Young adults (18-29 years)	1,300 (7.2%)	570 (3.2%)	2.4 (2.2, 2.6)	
Middle-aged adults (30-49 years)	1,422 (10.1%)	586 (4.2%)	2.6 (2.4, 2.9)	
Older adults (50-64 years)	446 (13.5%)	197 (6.0%)	2.5 (2.1, 3.0)	

Figure S2. Dispensation of additional classes of medications (according to ATC codes) among individuals using ADHD medications, stratified by sex.

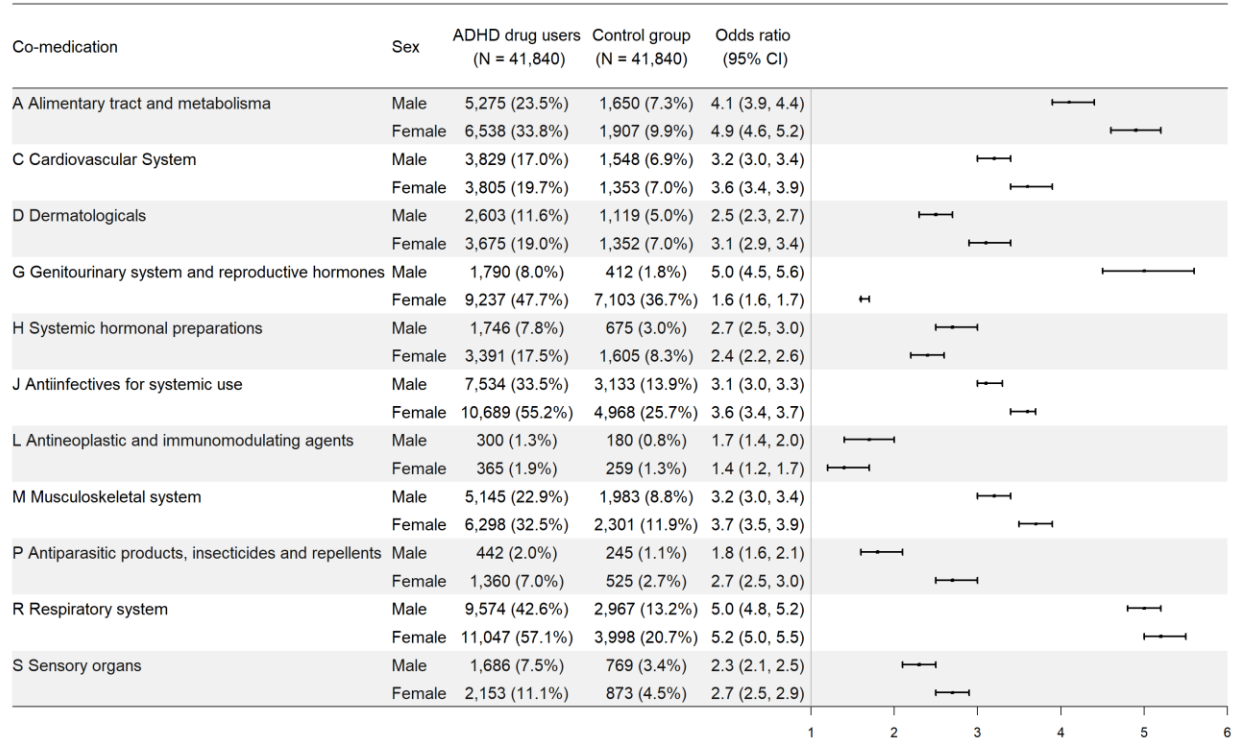


Figure S3. Dispensation of common psychotropic medications among individuals diagnosed with ADHD and dispensed with ADHD medications, by age group.

