

eFigure 2: Anticholinergic medications and associated score across selected scales

Generic Name	ACB	ARS	ADS	ABC	AAS	ALS
acarbose			0			
acepromazine				3		
aceprometazine				3		
acetaminophen			0		0	0
acetaminophen/dichloralphe nazone/isometheptene			0			
acetazolamide			0			
acetic acid, TOPICAL			0			
acetylcysteine						0
acetylsalicylic					0	
acitratin						0
acyclovir			0			
adenosine			0			
albuterol			0			
alendronate			0			
alimemazine	1			2	0	
allopurinol			0		0	0
alprazolam	1		1	3		1
aluminium						0
aluminum			0			
alverine	1			2		
amantadine	2	2	1			
amiloride			0			0
amiodarone			0			0
amitriptyline	3	3	3	3	4	3
amlodipine			0		0	0
ammonium, TOPICAL			0			
amoxapine	3			3		
amoxicillin			0			0
ampicillin			1			
anagrelide			0			
anastrozole			0			0
anileridine			0			
antioxidant						0
apraclonidine, OPHTHALMIC			0			
aripiprazole	1					0
ascorbic acid			0			
asenapine	1					
aspirin			0			0
hypromellose						0
ibuprofen			0		0	0
icodextrin			0			
iloperidone	1					
imipenem			0			
imipramine	3	3	3	3		3
indapamide			0			0
indomethacin			0			0
influenza virus vaccine						0
inositol						0
insulin			0		0	0
intestinal flora						0
ipratropium			0		4	
irbesartan			0			0
iron			0			
isoniazid			0			
isosorbiddinitrat					0	
isosorbide	1		1			0
isradipine			0			
ketoconazole, TOPICAL			0			
ketoprofen			0		0	0
ketotifen, OPHTHALMIC			1			
labetalol			0			0
lactase			0			
lactic acid bacteria						0
lactobacillus						0
lactulose			0			0
lamotrigine			0			
lanolin-mineral oil, TOPICAL			0			
lansoprazole			0		1	0
latanoprost						0
latanoprost, OPHTHALMIC			0			
lercanidipine						0
leuprolide			0			
levobunolol, OPHTHALMIC			0			
levocabastine						0
levocetirizine	1					
levodopa			0		0	0

Generic Name	ACB	ARS	ADS	ABC	AAS	ALS
atenolol	1		0		0	0
atorvastatin			0		0	0
atropine	3	3	3			3
azathioprine			1			
azithromycin			0			
bacitracin, OPHTHALMIC			0			
bacitracin, TOPICAL			0			
baclofen		2	0			
balsam peru, TOPICAL			0			
beclomethasone					0	
beclomethasone, NASAL			0			
beclomethasone, NOT(NASAL)			0			
belladonna	2			3		
benazepril			0			
benefiber					0	
benzocaine, TOPICAL			0			
benzonatate			0			
benztropine	3	3	3		4	
beta carotene			0			
betahistine					0	
betaine					0	
betamethasone					0	
betamethasone, TOPICAL			0			
betaxolol					0	
betaxolol, OPHTHALMIC			0			
bethanechol			0			
bicalutamide			0			
bimatoprost					0	
bisacodyl			0		1	
bismuth subsalicylate			0			
bisoprolol			0		0	
brahmi					0	
brimonidin					0	
brimonidin, OPHTHALMIC			0			
brinzolamide					0	
brinzolamide, OPHTHALMIC			0			
bromhexine					0	
bromocriptine			1		0	
brompheniramine	3		3			
brompheniramine maleate	1					
budesonide					0	

Generic Name	ACB	ARS	ADS	ABC	AAS	ALS
levofloxacin			0			
levomepromazine				3		
levothyroxine			0			
lidocaine			0			
lindane, TOPICAL			0			
liothyronine			0			
lisinopril			0		0	0
lithium			0			
lithium carbonate						1
loperamide	1	2	1			1
loratadine	1	2	0			1
lorazepam			1			
losartan			0		0	
loteprednol, OPHTHALMIC			0			
lovastatin			0			
loxapine	2		2			
lumiracoxib						1
lysine			0			
magnesium			0			
mannitol			0			
maprotiline				3		
mebeverine						0
meclizine	3	3	3			
medroxyprogesterone			0			0
megestrol			0			
melatonin						0
meloxicam						0
melperone					0	
memantine						0
meperidine	2		2		0	
mepethidine	2					
meprobamate			0			
mesalamine			0			
mesalazine						0
metamucil						0
metaxalone			0			
metformin			0			1
methazolamide			0			
methenamine			0			
methocarbamol		1				
methotrexate			0			1
methotrimeprazine	2		2			

Generic Name	ACB	ARS	ADS	ABC	AAS	ALS
budesonide, NASAL			0			
budesonide, NOT(NASAL)			0			
bumetanide			0	0		
buprenorphine				0	0	
bupropion	1		0			
buspiron			0			
butabarbital			0			
butalbital			0			
cabergoline				0		
caffeine			0			
calamin, TOPICAL			0			
calcipotriene, TOPICAL			0			
calcitonin			0			
calcitriol			0			
calcium			0			
camellose					0	
camphor-menthol, TOPICAL			0			
candesartan			0			
captopril	1		1	0	0	
carbachtol, OPHTHALMIC			0			
carbamazepine	2		2	0	0	
carbamide, AURICULAR (OTIC)			0			
carbidopa		1	0			1
carbimazole					0	
carbinoxamine	3		3			
carisoprodol		3	0			
caritine					0	
carvedilol			0		0	
casanthranol			0			
cascara sagrada			0			
castor oil			0			
cefaclor			0			
cefadroxil			1			
cefamandole			1			
cefazolin			0			
cefixime			0			
cefoxitin			1			
ceftibuten			0			
ceftriaxone			0			
cefuroxime			0			

Generic Name	ACB	ARS	ADS	ABC	AAS	ALS
methylclothiazide			0			
methylcellulose			0			
methyl dopa			0			
methylene blue			0			
methylphenidate			0			
methylprednisolone						0
methylprednisolone, NOT(TOPICAL)			1			
methylprednisolone, TOPICAL			0			
methyltestosterone			0			
metoclopramide		1	0	0	1	
metolazone			0			
metoprolol	1		0	0	0	
metronidazole			0			0
mexiletine			0			
mianserin				0		
miconazole, TOPICAL			0			
midazolam			1			
midodrine			0			
mineral oil			0			0
minocycline			0			
mirtazapine		1	0			
misoprostol			0			
moclobemide				0		
mocobleamide						0
modafinil						0
moexipril			0			
molindone	2		2			
mometasone						0
mometasone, NASAL			0			
montelukast			0			
morphine	1		1			
moxifloxacin			0			
moxonidine						0
multiple actives						0
multivitamin			0			0
mupirocin, TOPICAL			0			
nabumetone			0			
nadolol			0			
naloxone			0			
naproxen			0	0	0	

Generic Name	ACB	ARS	ADS	ABC	AAS	ALS
celecoxib			0			1
candesartan						0
cephalexin			0			0
cerivastatin			0			
Cetirizine	1	2	0			2
cetylpyridinium, TOPICAL			0			
charcoal						0
chloral hydrate			0			
chlorambucil			0	0		
chloramphenicol						0
chlordiazepoxide			1			
chlorhexidine, TOPICAL			0			
chlorothiazide			0			
chlorpheniramine	3	3	3	3		3
chlorpromazine	3	3	3			
chlorpropamide			0			
chlorprothixene				0		
chlorthalidone	1		1			0
chlorzoxazone			0			
cholestyramine			0			
choline						0
chondroitin			0			
choral						0
ciclopirox, TOPICAL			0			
cilastatin			0			
cilostazol			0			
cimetidine	1	2	2			
ciprofloxacin			0			
cisapride			0			
citalopram			0		2	1
clarithromycin			0			
clavulanate			0			
clemastine	3		3			
clidinium	1					
clindamycin, NOT (TOPICAL)			1			
clindamycin, TOPICAL			0			
clobazam			0			
clodronate			0			
clomethiazole					0	
clomipramine	3		3	3		
clonazepam			1			1
clonidine			0			0
naratriptan						1
nateglinide			0			
nefazodone			0			
nefopam	2					
neomycin, OPTHALMIC			0			
niacin			0			
nifedipine	1		1	0	0	
nisoldipine			0			
nitrazepam					0	0
nitrofurantoin			0			
nitroglycerin			0		0	0
nizatidine			1			0
norepinephrine			0			
norethisterone						0
norfloxacin			0			0
nortriptyline	3	2	3		3	
nutrapathic						0
nystatin			0			
octreotide			0			
ofloxacin			0			
olanzapine	3	2	1		3	
olmesartan						0
olopatadine, OPTHALMIC			0			
omega-3						0
omeprazole			0		0	0
opipramol				3		
orphenadrine	3		3	3	4	
oxazepam			1		0	1
oxcarbazepine	2		2			
oxybutynin	3	3	3	3	4	2
oxycodone			1			1
oxymetazoline, NASAL			0			
paliperidone	1					
pamidronate			0			
pancrelipase			0			0
pancuronium			1			
pantoprazole			0			0
papaverine			0			
paroxetine	3	1	1		3	2
penicillin			0			
pentazocine					0	
pentoxifylline			0			

Generic Name	ACB	ARS	ADS	ABC	AAS	ALS
clopidogrel			0			0
clorazepate	1		1	3		
clotrimazole			0			
cloxacillin			0			
clozapine	3	2	3		4	
codeine	1		1	2	0	1
colchicine	1		0	3		0
colestipol			0			
collagenase, TOPICAL			0			
colostrums					0	
conjugated					0	
conjugated estrogens			0			
cortisone			1			
coumadin	1					
cranberry			0			
cromolyn			0			
cyanocobalamin			0			
cyclobenzaprine	2	2	2			
cyclophosphamide			0			
cycloserine			1			
cyclosporine			1			
cyproheptadine	2	3	2		3	
danazol			0		0	
dantrolene			0			
darifenacin	3		3			
deferasirox					0	
demeclocycline			0			
desipramine	3	2	3			
desloratadine	1					
desmopressin			0			
desonide, TOPICAL			0			
desoximetasone, TOPICAL			0			
dexamethasone					0	
dexamethasone, NASAL			0			
dexamethasone, NOT(TOPICAL NASAL OPHTHALMIC TOPICAL)			1			
dexamethasone, OPTHALMIC			0			
dexamethasone, TOPICAL			0			
dexchlorpheniramine				3		3

Generic Name	ACB	ARS	ADS	ABC	AAS	ALS
pergolide			0	0		
perindopril			0			0
permethrin, TOPICAL			0			
perphenazine	3	3	1	0		
petrolatum, TOPICAL			0			
phenazopyridine			0			
phenelzine			1			
phenobarbital			0	1		
phenyl salicylate			0			
phenylephrine			0			
phenylpropanolamine			0			
phenytoin			0			
phytonadione			0			
pilocarpine						0
pilocarpine, OPTHALMIC			0			
pimozide	2		2			
pindolol			0			
pioglitazone			0		0	
piperacillin			1			
pirbuterol			0			
piroxicam			0	0	0	
pivampicillin			0			
pizotyline						0
polycarbophil			0			
polyethylene						0
polyethylene glycol			0			
polymyxin b, OPTHALMIC			0			
polyvinyl						0
potassium			0			
pramipexole		1	0	0		
pramoxine, TOPICAL			0			
pravastatin			0			0
prazosin			0			0
prednisolone				0	0	
prednisolone, NOT(OPHTHALMIC)			1			
prednisolone, OPTHALMIC			0			
prednisone	1		1			
primidone			0			

Generic Name	ACB	ARS	ADS	ABC	AAS	ALS
dextran						0
dextromethorphan			0			
dextropropoxepene						0
diazepam	1		1		1	1
diclofenac			0			0
dicyclomine	3	3	3			
dienestrol, TOPICAL			0			
diflunisal			0			
digitoxin			1		1	
digoxin	1		1	3	1	1
dihydroepiandrosterone						0
dihydroxyaluminum			0			
diltiazem			1			0
dimenhydrinate	3		3			
dimeticone				0		
diphenhydramine	3	3	3			
diphenoxylate			0			0
dipivefrin, OPTHALMIC			0			
dipyridamole	1		1		0	
dirithromycin			0			
disopyramide	1		2		0	0
disulfuram						0
divalproex			1			
dobutamine			0			
docusate			0			0
domperidone						1
donepezil			0	0	0	
dopamine			0			
dorzolamide						0
dorzolamide, OPTHALMIC			0			
dothiepin						2
doxazosin			0			
doxepin	3		3		4	3
doxycycline			0			0
doxylamine	3					0
ducosate						0
duloxetine			0			0
dydrogesterone						0
econazole, TOPICAL			0			
edrophonium			0			
emepromium					4	
empracet	2					
enalapril			0	0	0	
enoxaparin			0			0

Generic Name	ACB	ARS	ADS	ABC	AAS	ALS
probenecid			0			0
procainamide			0			
prochlorperazine		2	1		0	2
procyclidine	3		3			
progesterone			0			0
promazine	3				3	
promethazine	3	3	3			0
propafenone			0			
propantheline	3		3			
propiverine	3					
propoxyphene			0		1	
propranolol			0			0
propylene						0
propylthiouracil			0			
protamine						0
protriptyline			3			3
pseudoephedrine		2	0			2
psyllium			0			
pyrazinamide			0			
pyridostigmine			0			
pyridoxine						0
pyrilamine	3		3			
quetiapine	3	1	0		2	
quinapril			0			0
quinidine	1		0			
quinine			0			0
rabeprazole			0			0
raloxifene			0			
ramipril			0			0
ranitidine	1	1	2		2	1
reboxetine						0
repaglinide			0			
reserpine			0			
rifampin			0			
rimantadine			0			
rimexolone, OPTHALMIC			0			
risedronate			0			0
risperidone	1	1	0			1
rivastigmine						0
rofecoxib			0			
ropinirole			0		0	0
rosiglitazone			0			0
rosuvastatin						0
roxithromycin						0

Generic Name	ACB	ARS	ADS	ABC	AAS	ALS
entacapone	1	0				
epinephrine					0	
epoetin alfa		0				
eprosartan					0	
ergocalciferol		0				
ergoloid		0				
erythromycin		0		0		
escitalopram		0			1	
esomeprazole		0			0	
estazolam		1				
esterified estrogens		0				
estradiol					0	
estradiol, NOT(TOPICAL)		0				
estradiol, TOPICAL		0				
estriol				0	0	
estrogen					0	
estropipate		0			0	
ethambutol		0				
ethinyl estradiol		0				
etidronate		0				
etodolac		0				
ezetimibe					0	
famciclovir					0	
famotidine		1			0	
felbamate		0				
felodipine		0			0	
fenofibrate		0			0	
fentanyl	1	1			0	
ferrous		0				
fesoterodine	3					
fexofenadine		0			2	
filgrastim		0				
finasteride		0			0	
fish oil					0	
flavoxate	3	3				
flecainide		0			0	
flucloxacillin					0	
fluconazole		0				
fludrocortisone		0				
flumazenil		0				
flunisolide		0				
salbutamol					0	0
salicylic, TOPICAL			0			
salmeterol			0			0
salsalate			0			
scopolamine	3		3			
selegiline		1	0		0	
selenium, TOPICAL			0			
senna			0			0
sennoside						0
senokot						0
sertraline			1		0	0
sildenafil						0
silver, TOPICAL			0			
simethicone			0			0
simvastatin			0		0	0
sodium						0
sodium, NOT(OPHTHALMIC)			0			
sodium, OPHTHALMIC			0			
solifenacin	3					0
sotalol			0			0
spironolactone			0		0	0
sterculia						0
succinylcholine			0			
sucralfate			0			
sulfacetamide						0
sulfamethizole			0			
sulfamethoxazole			0			
sulfasalazine						0
sulindac			0		0	
sumatriptan						1
tacrine			0			
tadalafil						0
tamoxifen			0		0	0
tamsulosin			0			0
telmisartan						0
temazepam			1			1
terazosin			0			
terbinafine						0
terbinafine, TOPICAL			0			
terbutaline			0		0	0
terconazole, TOPICAL			0			

Generic Name	ACB	ARS	ADS	ABC	AAS	ALS
flunitrazepam					1	
fluocinonide, TOPICAL			0			
fluoride, TOPICAL			0			
fluorometholone						0
fluorometholone, OPTHALMIC			0			
fluorouracil						0
fluoxetine			1	2	1	
fluphenazine		3	1			3
flurazepam			1			
flutamide			0			
fluticasone			0			0
fluticasone-salmeterol			1			
fluvastatin			0			0
fluvoxamine	1		1	2	1	
folic acid			0			
formetolol						0
fosinopril			0			0
framycetin						0
frangula						0
furosemide	1		1	3	1	0
gabapentin			0			0
galantamin					0	
galantamine			0			0
gemfibrozil			0			0
gentamicin			1			
gentamicin, OPTHALMIC			0			
gentamicin, TOPICAL			0			
ginkgo			0			0
ginkgo biloba						0
ginseng						0
gliclazide						0
glimepiride			0			0
glipizide			0	0	0	
glucagon			0			
glucosamine			0			0
glucose						0
glyburide			0	0	0	
glyceryl						0
glycerin, TOPICAL			0			
testosterone						0
tetracycline			0			
theophylline	1		1	2	2	2
thiamine			0			
thioridazine	3	3	3		4	
thiothixene		3	1			
thyroid desiccated			0			
thyroid supplement						0
thyroxin					0	0
tiaprofenic						0
tibolone						0
ticlopidine			0			
tilactase						0
timolol			0		0	0
tiotropium						0
tizanidine		3				
tobramycin, OPTHALMIC			0			
tolbutamide			0			
tolcapone			0		0	
tolterodine	3	2	3			3
topiramate			0			
torseamide			0			
tramadol			1			2
trandolapril			0			0
travoprost						0
trazodone	1	1	0			
triamcinolone						0
triamcinolone, NASAL			0			
triamcinolone, NOT(NASAL TOPICAL)					1	
triamcinolone, TOPICAL			0			
triamterene	1		1			0
triazolam			1			
trichlormethiazide			0			
triethanolamine, AURICULAR (OTIC)			0			
trifluoperazine	3	3	1			
trihexyphenidyl	3		3	3	4	
trimethoprim			0			0
trimipramine	3		3	3	4	
troglitazone			0			

Generic Name	ACB	ARS	ADS	ABC	AAS	ALS	Generic Name	ACB	ARS	ADS	ABC	AAS	ALS
goserelin						0	tropatepine				3		
gramicidine						0	trospium	3					
guaifenesin			0				trypsin			0			
guanfacine			0				tuberculin			0			
halcinonide, TOPICAL			0				ubidecarenone						0
haloperidol	1	1	0		0	2	urea						0
heparin			0				ursodiol			0			
herb						0	valproic			1			
histidine						0	valsartan			0			
hormone replacement therapy						0	vancomycin			1			
hydralazine	1		1			0	vardenafil						0
hydrochlorothiazide			0		0	0	varenicline						0
hydrocodone			0				vecuronium			0			
hydrocortisone	1					0	venlafaxine	1		0		0	1
hydrocortisone, AURICULAR (OTIC)			0				verapamil			0		0	0
hydrocortisone, NOT(OPHTHALMIC AURICULAR (OTIC) TOPICAL)			1				vitamin						0
hydrocortisone, OPTHALMIC			0				vitamine			0			
hydrocortisone, TOPICAL			0				warfarin			1		0	0
hydromorphone			0				zafirlukast			0			
hydroxychloroquine			0			0	zaleplon			0			
hydroxyethylrutosides						0	zinc			0			
hydroxypropyl						0	ziprasidone		1				
hydroxypropyl, OPTHALMIC			0				zolmitriptan						1
hydroxyurea			0				zolpidem			0			0
hydroxyzine	3	3	3	3			zopiclone			0		0	0
hyoscyamine	3	3	3										

Key: Anticholinergic Activity Scale (AAS); Anticholinergic Burden Classification (ABC); Anticholinergic Cognitive Burden (ACB); Anticholinergic Drug Scale (ADS); Anticholinergic Loading Scale (ALS); Anticholinergic Risk Scale (ARS)