

Supplementary Material

Article Title: Blood Lithium Monitoring Practices in a Population-Based Sample of Older Adults

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Supplemental Table 1: Checklist of recommendations for reporting of observational studies using the REporting of studies Conducted using Observational Routinely-collected health Data (RECORD) Statement

	Item No	STROBE items	RECORD items	Reported
Title and 1 abstract		(a) Indicate the study's design with a commonly used term in the title or the abstract.(b) Provide in the abstract an informative and balanced summary of what was done and what was found.	(1.1) The type of data used should be specified in the title or abstract. When possible, the name of the databases used should be included. (1.2) If applicable, the geographic region and time frame within which the study took place should be reported in the title or abstract. (1.3) If linkage between databases was conducted for the study, this should be clearly stated in the title or abstract.	Abstract
Introduction				
Background/rati onale	2	Explain the scientific background and rationale for the investigation being reported.		Introduction
Objectives	3	State specific objectives, including any prespecified hypotheses.		Introduction
Methods				
Study design	4	Present key elements of study design early in the paper.		Methods: Design and setting
Setting	5	Describe the setting, locations, and relevant dates, including periods of recruitment, exposure, follow-up, and data collection.		Methods
Participants	6	(a) Give the eligibility criteria, and the sources and methods of selection of participants. Describe methods of follow-up.(b) For matched studies, give matching criteria and number of exposed and unexposed.	(6.1) The methods of study population selection (such as codes or algorithms used to identify subjects) should be listed in detail. If this is not possible, an explanation should be provided. (6.2) Any validation studies of the codes or algorithms used to select the population should be referenced. If validation was conducted for this study and not published elsewhere, detailed methods and results should be provided. (6.3) If the study involved linkage of databases, consider use of a flow diagram or other graphical display to demonstrate the data linkage process, including the number of individuals with linked data at each stage.	Methods: Patients; Supplemental Table 2, 4
Variables	7	Clearly define all outcomes, exposures, predictors, potential confounders, and effect modifiers. Give diagnostic criteria, if applicable.	(7.1) A complete list of codes and algorithms used to classify exposures, outcomes, confounders, and effect modifiers should be provided. If these cannot be reported, an explanation should be provided.	Methods; Supplemental Tables 2-5

analysis
Methods; Discussion
Figure 1
Methods: Statistical analysis
(a, b) Methods: Patients, Statistical analysis; (c) Data sources; (d, e) N/A
Methods: Data sources, Patients
Methods: Data sources
Results; Figure 1
Results; Table 1
Results; Table 2
Results; Table 2
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		confidence interval). Make clear which confounders were adjusted for and why they were included. (b) Report category boundaries when continuous variables were categorized. (c) If relevant, consider translating estimates of relative risk into absolute risk for a meaningful time period.		
Other analyses	17	Report other analyses done (e.g. analyses of subgroups and interactions, and sensitivity analyses).		N/A
Key results	18	Summarize key results with reference to study objectives.		Discussion
Limitations	19	Discuss limitations of the study, taking into account sources of potential bias or imprecision. Discuss both direction and magnitude of any potential bias.	(19.1) Discuss the implications of using data that were not created or collected to answer the specific research question(s). Include discussion of misclassification bias, unmeasured confounding, missing data, and changing eligibility over time, as they pertain to the study being reported.	Discussion
Interpretation	20	Give a cautious overall interpretation of results considering objectives, limitations, multiplicity of analyses, results from similar studies, and other relevant evidence.		Discussion
Generalizability	eneralizability Discuss the generalizability (external validity) of the study results.			Discussion
Other informatio	n			
Funding	22	Give the source of funding and the role of the funders for the present study and, if applicable, for the original study on which the present article is based.		Acknowledge- ments
Accessibility of protocol, raw data, and programming code		N/A	(22.1) Authors should provide information on how to access any supplemental information such as the study protocol, raw data, or programming code.	Acknowledge- ments

Supplemental Table 2: Study Drugs From The Ontario Drug Benefit (ODB) Database

Drug Name	Drug Identification Numbers			
LITHIUM				
Lithium Carbonate	00024406, 00236683, 00328782, 00328790, 00404365, 00406775, 00461733, 00464635, 00590665, 02011239, 02013231, 02216132, 02216140, 02216159, 02231397, 02231398, 02231399, 02237006, 02237007, 02237008, 02237441, 02237442, 02237443, 02242837, 02242838, 02266695, 02304511, 02304538, 02311356, 02311364, 09852255, 09857532, 09857540, 09991107, 66123909, 80000218			
Lithium Citrate	02074834			
Lithium Gluconate	00765724			
VALPROATE				
Divalproex	02239517, 02239518, 02239519			
Divalproex Sodium	00596418, 00596426, 00596434, 02239698, 02239699, 02239700, 02239701, 02239702, 02239703, 02244138, 02244139, 02244140, 02265133, 02265141, 02265168			
Valproic Acid	02100630, 02140047, 02140055, 02140063, 02184648, 02217414, 02229628, 02230768, 02231489, 02236807, 02237830, 02238042, 02238048, 02238370, 02239713, 02239714			
Valproic Acid Sodium	00443832, 00443840, 00507989			

Supplemental Table 3: Variables included in the propensity score model

Variables included in the propensity score model			
Demographics	Age, sex, year of cohort entry, long-term care residence, income quintile, Local Health Integration Network		
Comorbidities	Angina, bipolar disorder, chronic lung disease, congestive heart failure, coronary artery disease, diabetes, hypertension, Charlson comorbidity score		
Medications	ACE inhibitors, angiotensin II blockers, antibiotics, anticonvulsants, antidepressants, COX-2 inhibitors, inhalers (combined acetylcholine, beta-agonist, corticosteroid), loop diuretics ,narcotics, potassium-sparing diuretics, statins, thiazide diuretics		
Health care use	Visits to general practitioner, visits to nephrologist, visits to neurologist, visits to psychiatrist, number of hospitalizations, number of emergency department visits		
Other	Prescriber specialty, number of unique drug names, baseline eGFR category		

Abbreviations: ACE, angiotensin converting enzyme; COX,cyclo-oxygenase; eGFR, estimated glomerular filtration rate

Supplemental Table 4: Coding definitions for baseline characteristics

Characteristic	Database	Codes / Details
DEMOGRAPHICS		
Age	RPDB	
Sex	RPDB	
Long-term care residence	ODB	
Socioeconomic status	Statistics Canada	
Local Health Integration Network	RPDB	
PRESCRIBER INFO	RMATION	
Prescribing physician	IPDB	General practitioner
		Psychiatrist
		Other/missing
COMORBIDITIES		
Angina	CIHI-DAD	ICD9: 413 ICD10: I20, I23
	OHIP	413
Bipolar disorder	CIHI-DAD	ICD9: 2960, 2961, 2964, 2965, 2966, 2967, 2968 ICD10: F300, F301, F302, F308, F309, F310, F311, F312, F313, F314, F315, F316, F317, F318, F319
	OHIP	296, Q020
	OMHRS	29600, 29601, 29602, 29603, 29604, 29605, 29606, 29640, 29641, 29642, 29643, 29644, 29645, 29646, 29650, 29651, 29652, 29653, 29654, 29655, 29656, 29660, 29661, 29662, 29663, 29664, 29665, 29666, 29670, 29680, 29689
Chronic lung disease	CIHI-DAD	ICD9: 491, 492, 493, 494, 495, 496, 500, 501, 502, 503, 504, 505, 5064, 5069, 5081, 515, 516, 517, 5185, 5188, 5198, 5199, 4168, 4169 ICD10: I272, I278, I279, J40, J41, J42, J43, J44, J45, J47,

		J60, J61, J62, J63, J64, J65, J66, J67, J68, J701, J703, J704, J708, J709, J82, J84, J92, J941, J949, J953, J961, J969, J984, J988, J989, J99
	OHIP	491, 492, 493, 494, 496, 501, 502, 515, 518, 519, J889, J689
Congestive heart failure	CIHI-DAD	ICD9: 425, 5184, 514, 428 ICD10: I500, I501, I509, I255, J81
	ССР	4961, 4962, 4963, 4964
	CCI	1HP53, 1HP55, 1HZ53GRFR, 1HZ53LAFR, 1HZ53SYFR
	OHIP	R701, R702, Z429, 428
Coronary artery disease (excluding	CIHI-DAD	ICD9: 412, 410, 411 ICD10: I21, I22, Z955, T822
angina)	CCP	4801, 4802, 4803, 4804, 4805, 481, 482, 483
	CCI	1IJ50, 1IJ76
	OHIP	R741, R742, R743, G298, E646, E651, E652, E654, E655, Z434, Z448, 410, 412
Diabetes	ODB	Insulin and combinations, Acarbose, Acetohexamide, Chlorpropamide, Glicazide, Glimepiride, Linagliptin, Linagliptin, Metformin HCl, Metformin, Metformin HCl, Nateglinide, Pioglitazone HCl, Repaglinide, RepaglinideHCl, Rosiglitazone Maleate, SaxagliptinHCl, Sitagliptin Phosphate, Tolbutamide
Hypertension	ODB	ACE inhibitors, angiotensin II blockers, beta blockers, calcium channel blockers, thiazide diuretics
Lithium toxicity	CIHI-DAD	ICD9: 9698, 9859 ICD10: T438, T439, T568, T569
Obesity	CIHI-DAD	ICD9: 2780 ICD10: E660, E661, E662, E668, E669
	OHIP	278
Parkinson's disease	CIHI-DAD	ICD9: 332 ICD10: G20, F023
	OHIP	332
Peripheral vascular disease	CIHI-DAD	ICD9: 4402, 4408, 4409, 5571, 4439, 444
		ICD10: I700, I702, I708, I709, I731, I738, I739, K551
	ССР	5125, 5129, 5014, 5016, 5018, 5028, 5038, 5126, 5159

	CCI	1KA76, 1KA50, 1KE76, 1KG50, 1KG57, 1KG76MI, 1KG87, 1IA87LA, 1IB87LA, 1IC87LA, 1ID87, 1KA87LA, 1KE57
	OHIP	R787, R780, R797, R804, R809, R875, R815, R936, R783, R784,R785, E626, R814, R786, R937, R860, R861, R855, R856, R933, R934, R791, E672, R794, R813, R867, E649
Prostatic hyperplasia	CIHI-DAD	ICD9: 600 ICD10: N40
	OHIP	600
Prostatitis	CIHI-DAD	ICD9: 6010, 6011, 6012 ICD10: N410, N411, N412
	OHIP	601
Schizophrenia or other psychotic disorders	CIHI-DAD	ICD9: 2950, 2951, 2952, 2953, 2954, 2955, 2956, 2957, 2958, 2959, 2970, 2971, 2972, 2973, 2978, 2979, 2980, 2981, 2983, 2984, 2988, 2989 ICD10: F060, F062, F105, F107, F115, F117, F125, F127, F135, F137, F145, F147, F155, F157, F165, F167, F175, F177, F185, F187, F195, F197, F200, F201, F202, F203, F204, F205, F206, F208, F209, F220, F228, F229, F230, F231, F232, F233, F238, F239, F24, F250, F251, F252, F258, F259, F28, F29
	OHIP	291, 292, 295, 297, 298, Q021
	OMHRS	29130, 29150, 29211, 29212, 29381, 29382, 29510, 29520, 29530, 29540, 29560, 29570, 29590, 29710, 29730, 29880, 29890
Stroke – hemorrhagic	CIHI-DAD	ICD9: 430, 431 ICD10: I600, I601, I602, I603, I604, I605, I606, I607, I609, I61
Stroke – ischemic	CIHI-DAD	ICD9: 436, 4340, 4341, 4349, 3623 ICD10: I630, I631, I632, I633, I634, I635, I638, I639, I64, H341
Stroke – transient ischemic	CIHI-DAD	ICD9: 435 ICD10: G450, G451, G452, G453, G458, G459, H340
Unipolar depression and/or anxiety disorder	CIHI-DAD	ICD-9: 2962, 2963, 3000, 3002, 3003, 3004, 3091, 311 ICD-10: F063, F064, F320, F321, F322, F323, F328, F329, F330, F331, F332, F333, F334, F338, F339, F341, F400, F401, F402, F408, F409, F410, F411, F412, F413, F418, F419, F420, F421, F422, F428, F429, F430, F431
	OHIP	311
	OMHRS	29189, 29284, 29289, 29383, 29384, 29620, 29621, 29622, 29623, 29624, 29625, 29626, 29630, 29631,

		29632, 29633, 29634, 29635, 29636, 30000, 30001, 30002, 30021, 30022, 30023, 30029, 30030, 30040, 30113
MEDICATION USE		
ACE inhibitors	ODB	Cilazapril& Hydrochlorothiazide, Hydrochlorothiazide & Lisinopril, Hydrochlorothiazide & Quinapril HCl, Hydrochlorothiazide & Ramipril, Indapamide& Perindopril Tert.Butylamine, Benazepril Chlorohydrate, Benazepril HCl, Captopril, Cilazapril, Enalapril Sodium, Fosinopril, Fosinopril Sodium, Lisinopril, Perindopril Tert.Butylamine, Quinapril, Ramipril, Trandolapril, Cilazapril& Hydrochlorothiazide, Hydrochlorothiazide & Lisinopril, Hydrochlorothiazide & Quinapril HCl, Hydrochlorothiazide & Ramipril, Indapamide& Perindopril Tert.Butylamine
Angiotensin II blockers	ODB	Amlodipine Besylate&Telmisartan, Candesartan Cilexetil, Candesartan Cilexetil& Hydrochlorothiazide, EprosartanMesylate, EprosartanMesylate& Hydrochlorothiazide, Hydrochlorothiazide &Irbesartan, Hydrochlorothiazide & Losartan Potassium, Hydrochlorothiazide &OlmesartanMedoxomil, Hydrochlorothiazide &Telmisartan, Hydrochlorothiazide & Valsartan, Irbesartan, Losartan Potassium, OlmesartanMedoxomil, Telmisartan, Valsartan
Antibiotics	ODB	Amikacin, Amikacin Sulfate, Amoxicillin, Amoxicillin &Clavulanic Acid Potassium, Amoxicillin Trihydrate, Amoxicillin Trihydrate& Clarithromycin & Lansoprazole, Amoxicillin Trihydrate& Clavulanic Acid Potassium, Ampicillin, Ampicillin Sodium, Ampicillin Trihydrate, Azithromycin, Azithromycin Dihydrate, Aztreonam, BacampicillinHCl, Bacitracin, Bacitracin Zinc & Cysteine & Glycine & Neomycin Sulfate & Threonine, Bacitracin Zinc & Neomycin Sulfate &Polymyxin B Sulfate, Bacitracin Zinc &Polymyxin B Sulfate, Carbenicillin, Carbenicillin Disodium, Cefaclor, Cefadroxil, Cefadroxil Monohydrate, Cefazolin Sodium, CefepimeHCl, Cefixime, Cefoperazone Sodium, Cefotaxime Sodium, Cefoxitin Sodium, Cefuroxime, Ceftazidime Hydrate, Ceftriaxone Sodium, Cefuroxime, Cefuroxime Axetil, Cephalexin, Cephalexin Monohydrate, Cephalothin Sodium, Cephradine, Ciprofloxacin, Ciprofloxacin HCl, Ciprofloxacin HCl& Dexamethasone, Clarithromycin, Clindamycin, Clindamycin Phosphate, Clindamycin Phosphate Glycolic Acid, Cloxacillin, Cloxacillin Sodium, Colistin Sodium Methanesulfonate, Daptomycin, Dicloxacillin Sodium,

		Erythromycin, Erythromycin Estolate, Erythromycin Ethyl Succinate, Erythromycin Ethyl Succinate &Sulfisoxazole, Erythromycin Gluceptate, Erythromycin Lactobionate, Erythromycin Stearate, Fidaxomicin, Flucloxacillin Sodium, FluocinoloneAcetonide& Neomycin Sulfate &Polymyxin B Sulfate, Framycetin Sulfate, Fusidic Acid, Fusidic Acid Sodium, Gatifloxacin, Gentamicin, Gentamicin &Colistin, Gentamicin Sulfate, Gramicidin & Neomycin Sulfate &Polymyxin B Sulfate, Gramicidin &Polymyxin B Sulfate, GrepafloxacinHCl, Levofloxacin, Linezolid, Moxifloxacin HCl, Mupirocin, Neomycin Sulfate, Neomycin Sulfate &Polymyxin B Sulfate, Netilmicin Sulfate, Norfloxacin, Ofloxacin, Paromomycin, Penicillin G Benzathine, Penicillin G Potassium, Penicillin G Procain Salt, Penicillin G Sodium, Penicillin V, Penicillin V Benzathine, Piperacillin, Piperacillin Sodium &Tazobactam Sodium, Pivampicillin, Pivmecillinam, Polymyxin B Sulfate & Trimethoprim, SpectinomycinHCl, Spiramycin, Streptomycin, Streptomycin Sulfate, Sulfacetamide Sodium, Sulfadiazine, Sulfadiazine & Trimethoprim, Sulfamethoxazole, Sulfamethoxazole & Trimethoprim, Sulfapyridine, Sulfisoxazole, Telithromycin, Tobramycin, Tobramycin, Sulfate, Trimethoprim
Anticonvulsants	ODB	Carbamazepine, Ethosuximide, Fosphenytoin Sodium, Gabapentin, Lacosamide, LacosamideHCl, Lamotrigine, Levetiracetam, Magnesium, Magnesium Sulfate, Mephenytoin, Methsuximide, Methylphenobarbital, Oxcarbazepine, Perampanel, Phenobarbital, Phensuximide, Phenytoin Sodium, Pregabalin, Primidone, Rufinamide, Secobarbital Sodium, Stiripentol, Topiramate, Vigabatrin
Antidepressants	ODB	Amitriptyline, Amitriptyline HCl, Amitriptyline HCl&Perphenazine, Amoxapine, Bupropion HCl, Citalopram HBr, Clomipramine, Clomipramine HCl, DesipramineHCl, Doxepin HCl, Duloxetine, Imipramine HCl, Isocarboxazid, MaprotilineHCl, Mirtazapine, Moclobemide, Nortriptyline, Nortriptyline HCl, Phenelzine Sulfate, ProtriptylineHCl, Tranylcypromine Sulfate, Trazodone HCl, Trimipramine, Trimipramine Maleate
COX-2 inhibitors	ODB	Celecoxin, Rofexoxib, Valdecoxib
Inhalers (acetylcholine or beta-agonist or	ODB	Albuterol, Albuterol & Albuterol Sulfate, Albuterol Sulfate, Beclomethasone Dipropionate, Budesonide, Budesonide &

corticosteroid)		Formoterol Fumarate, Ciclesonide, FenoterolHBr, Flunisolide, Fluticasone Propionate, Fluticasone Propionate & Salmeterol Xinafoate, Formoterol & Mometasone, Formoterol Fumarate, Glycopyrrolate Bromide, Indacaterol Maleate, Ipratropium Bromide, Metaproterenol Sulfate, Pirbuterol Acetate, ProcaterolHCl, Salmeterol Xinafoate, Terbutaline Sulfate, Tiotropium Bromide, Triamcinolone Acetonide
Loop diuretics	ODB	Bumetanide, Ethacrynic Acid, Furosemide
Narcotics	ODB	Acetaminophen & Caffeine & Codeine Phosphate, Acetaminophen & Caffeine Citrate & Codeine Phosphate, Acetaminophen & Codeine Phosphate, Acetaminophen & Oxycodone HCl, Acetylsalicylic Acid & Oxycodone HCl, AnileridineHCl, Belladona& Opium, Belladona Extract For Oral Use & Opium Powder, Butorphanol Tartrate, Codeine Phosphate, Codeine Sulfate, DextropropoxypheneHCl, DextropropoxypheneNapsylate, Fentanyl, Fentanyl Citrate, Hydromorphone, Hydromorphone HBr, Hydromorphone HCl, Levorphanol Tartrate, Meperidine HCl, Morphine, Morphine HCl, Morphine Sulfate, Naloxone HCl, Opium, Oxycodone HCl, OxymorphoneHCl, PentazocineHCl, Pentazocine Lactate, Propoxyphene HCl, Sufentanil Citrate
Potassium-sparing diuretics	ODB	AmilorideHCl, AmilorideHCl& Hydrochlorothiazide, Eplerenone, Hydrochlorothiazide &Spirnolactone, Hydrochlorothiazide & Triamterene, Spirnolactone, Triamterene
Statins	ODB	Atorvastatin Calcium, Cerivastatin Sodium, Fluvastatin, Fluvastatin Sodium, Lovastatin, Pravastatin, Pravastatin Sodium, Rosuvastatin Calcium, Simvastatin
Thiazide diuretics	ODB	Chlorthalidone, Hydrochlorothiazide, Hydrochlorothiazide & Timolol Maleate, Indapamide, Metolazone
HEALTHCARE USE		
Family physician visits	OHIP IPDB	
Nephrologist visits	OHIP	
repinologist visits	IPDB	

Neurologist visits	OHIP
	IPDB
Psychiatrist visits	OHIP
	IPDB
Number of	CIHI-DAD
hospitalizations	
Number of emergency	NACRS
department visits	
eGFR	Gamma
	Dynacare

Abbreviations: ACE, angiotensin converting enzyme; CCI, Canadian Classification of Health Interventions; CCP, Canadian Classification of Diagnostic, Therapeutic and Surgical Procedures; CIHI-DAD, Canadian Institutes for Health Information Discharge Abstract Database; COX, cyclo-oxygenase; eGFR, estimated glomerular filtration rate; ICD-9, International Statistical Classification of Diseases, Ninth Revision; ICD-10, International Statistical Classification of Diseases, Tenth Revision; IPDB: Institute for Clinical Evaluative Sciences Physicians Database; NACRS, National Ambulatory Care Reporting System; ODB: Ontario Drug Database; OHIP, Ontario Health Insurance Plan; OMHRS, Ontario Mental Health Reporting System; RPDB, Registered Persons Database

Supplemental Table 5: Coding definitions for laboratory testing outcomes

Test	Database	Codes
Lithium	OHIP fee codes	L157
Serum creatinine	OHIP fee codes	L065, L067, L068
Thyroid stimulating hormone	OHIP fee codes	G016, L341
Calcium	OHIP fee codes	L045, L046

Abbreviations: OHIP – Ontario Health Insurance Plan

Supplemental Table 6: All baseline characteristics of chronic valproate and chronic lithium users post-matching

Characteristic	Chronic valproate users (referent)		Chronic lithium users		Standard- ized
	N	%	N	%	difference
Total patients	5503		5503		
DEMOGRAPHICS					
Age at cohort entry					
Mean (SD)	70.59	5.84	70.66	5.93	1%
Median (IQR)	68	(66-74)	68	(66-74)	
66-69 years	3194	58.0%	3178	57.8%	0%
70-74 years	1069	19.4%	1030	18.7%	2%
75-79 years	710	12.9%	727	13.2%	1%
80-84 years	357	6.5%	379	6.9%	2%
85-89 years	123	2.2%	142	2.6%	3%
90+ years	50	0.9%	47	0.9%	0%
Sex					
Female	3266	59.3%	3231	58.7%	1%
Male	2237	40.7%	2272	41.3%	1%
Year of cohort entry	<u>.</u>				
2002-2003	1720	31.3%	1939	35.2%	8%
2004-2005	786	14.3%	640	11.6%	8%
2006-2007	821	14.9%	660	12.0%	9%
2008-2009	726	13.2%	747	13.6%	1%
2010-2011	651	11.8%	655	11.9%	0%
2012-2014	799	14.5%	862	15.7%	3%
Long-term care residence	267	4.9%	258	4.7%	1%
Neighbourhood income quintile	<u>.</u>				
1 (lowest)	1275	23.2%	1226	22.3%	2%
2	1101	20.0%	1087	19.8%	1%
3	1040	18.9%	1071	19.5%	2%
4	995	18.1%	999	18.2%	0%
5 (highest)	1092	19.8%	1120	20.4%	1%
Local Health Integration Network					
1	310	5.6%	326	5.9%	1%
2	484	8.8%	484	8.8%	0%
3	313	5.7%	299	5.4%	1%
4	759	13.8%	739	13.4%	1%
5	176	3.2%	176	3.2%	0%
6	283	5.1%	281	5.1%	0%
7	505	9.2%	513	9.3%	0%

8	506	9.2%	512	9.3%	0%
9	494	9.2%	508	9.3%	1%
10	335	6.1%	337	6.1%	0%
11	657	11.9%	648	11.8%	0%
12	241	4.4%	239	4.3%	0%
13	327	5.9%	332	6.0%	0%
14	113	2.1%	109	2.0%	1%
PRESCRIBER SPECIALTY	T		T	1	
General practitioner	2932	53.3%	2937	53.4%	0%
Psychiatrist	1611	29.3%	1596	29.0%	1%
Other	960	17.4%	970	17.6%	1%
COMORBIDITIES					
Angina	812	14.8%	810	14.7%	0%
Bipolar disorder	2986	54.3%	2967	53.9%	1%
Chronic lung disease	1453	26.4%	1455	26.4%	0%
Congestive heart failure	433	7.9%	437	7.9%	0%
Coronary artery disease (excluding	1049	19.1%	1058	19.2%	0%
angina)					
Diabetes mellitus	831	15.1%	804	14.6%	1%
Hypertension	2636	47.9%	2615	47.5%	1%
Charlson comorbidity index	ı		ı	,	
0	5090	92.5%	5081	92.3%	1%
1	211	3.8%	223	4.1%	2%
2	127	2.3%	116	2.1%	1%
3+	75	1.4%	83	1.5%	1%
MEDICATION USE (120 days prio	or to index d	late)			
ACE inhibitors	1287	23.4%	1288	23.4%	0%
Angiotensin II blockers	498	9.0%	475	8.6%	1%
Antibiotics	1228	22.3%	1241	22.6%	1%
Anticonvulsants	349	6.3%	390	7.1%	3%
Antidepressants	1397	25.4%	1421	25.8%	1%
COX-2 inhibitors	269	4.9%	263	4.8%	0%
Inhaler - acetylcholine	255	4.6%	250	4.5%	0%
Inhaler - beta-agonist	502	9.1%	488	8.9%	1%
Inhaler - corticosteroid	246	4.5%	257	4.7%	1%
Loop diuretics	372	6.8%	374	6.8%	0%
Narcotics	814	14.8%	797	14.5%	1%
Potassium-sparing diuretics	160	2.9%	173	3.1%	1%
Statins	1636	29.7%	1629	29.6%	0%
Thiazide diuretics	517	9.4%	511	9.3%	0%
Number of unique drug names	J 1,	2.1/0		7.570	- · · · ·
Mean (SD)	7.15	4.01	7.11	4.15	1%
Mican (DD)	1.13	7.01	/ • 1 1	7.13	1 / 0

Median (IQR)	7	(4-9)	6	(4-9)	
0-4	1544	28.1%	1587	28.8%	2%
5-8	2197	39.9%	2163	39.3%	1%
9-12	1217	22.1%	1185	21.5%	1%
13-16	408	7.4%	418	7.6%	1%
17+	137	2.5%	150	2.7%	1%
HEALTHCARE USE (365 d	ays prior to index	date)	•		
Visits to general practitioner					
Mean (SD)	11.77	11.8	11.72	11.49	0%
Median (IQR)	9	(5-15)	9	(5-15)	
0	189	3.4%	204	3.7%	2%
1-2	495	9.0%	513	9.3%	1%
3-4	679	12.3%	652	11.8%	2%
5-6	745	13.5%	723	13.1%	1%
7-8	604	11.0%	646	11.7%	2%
9-10	534	9.7%	512	9.3%	1%
11+	2257	41.0%	2253	40.9%	0%
Visits to nephrologist	1		•		
Mean (SD)	0.12	0.69	0.11	1.02	1%
Median (IQR)	0	(0-0)	0	(0-0)	
0	5188	94.3%	5255	95.5%	5%
1	165	3.0%	147	2.7%	2%
2	68	1.2%	55	1.0%	2%
3+	82	1.5%	46	0.8%	7%
Visits to neurologist	<u>.</u>				
Mean (SD)	0.26	1.05	0.23	1.2	3%
Median (IQR)	0	(0-0)	0	(0-0)	
0	4762	86.5%	4957	90.1%	11%
1	415	7.5%	259	4.7%	12%
2	178	3.2%	158	2.9%	2%
3+	148	2.7%	129	2.3%	3%
Visits to psychiatrist	<u>.</u>				
Mean (SD)	6.14	13.68	5.96	14.85	1%
Median (IQR)	0	(0-6)	0	(0-5)	
0	2901	52.7%	2847	51.7%	2%
1	298	5.4%	308	5.6%	1%
2	229	4.2%	278	5.1%	4%
3+	2075	37.7%	2070	37.6%	0%
Number of hospitalizations		•			
Mean (SD)	0.27	0.68	0.26	0.69	1%
Median (IQR)	0	(0-0)	0	(0-0)	

4467	81.2%	4547	82.6%	4%
738	13.4%	648	11.8%	5%
202	3.7%	196	3.6%	1%
96	1.7%	112	2.0%	2%
sits				
0.64	1.19	0.63	1.55	1%
0	(0-1)	0	(0-1)	
3300	60.0%	3476	63.2%	7%
1608	29.2%	1483	26.9%	5%
285	5.2%	240	4.4%	4%
310	5.6%	304	5.5%	0%
ent value in t	he 7-365 days	prior to ind	ex date)	
915	16.6%	932	16.9%	1%
74.56	17.74	72.15	16.15	14%
77	(62-90)	73	(62-85)	
718	13.0%	725	13.2%	1%
145	2.6%	153	2.8%	1%
41	0.7%	40	0.7%	0%
11	0.2%	14	0.3%	1%
4588	83.4%	4571	83.1%	1%
	738 202 96 sits 0.64 0 3300 1608 285 310 ent value in t 915 74.56 77 718 145 41 11	738	738 13.4% 648 202 3.7% 196 96 1.7% 112 sits 0.64 1.19 0.63 0 (0-1) 0 3300 60.0% 3476 1608 29.2% 1483 285 5.2% 240 310 5.6% 304 ent value in the 7-365 days prior to ind 932 74.56 17.74 72.15 77 (62-90) 73 718 13.0% 725 145 2.6% 153 41 0.7% 40 11 0.2% 14	738 13.4% 648 11.8% 202 3.7% 196 3.6% 96 1.7% 112 2.0% sits 0.64 1.19 0.63 1.55 0 (0-1) 0 (0-1) 3300 60.0% 3476 63.2% 1608 29.2% 1483 26.9% 285 5.2% 240 4.4% 310 5.6% 304 5.5% ent value in the 7-365 days prior to index date) 915 16.6% 932 16.9% 74.56 17.74 72.15 16.15 77 (62-90) 73 (62-85) 718 13.0% 725 13.2% 145 2.6% 153 2.8% 41 0.7% 40 0.7% 11 0.2% 14 0.3%

Abbreviations: ACE, angiotensin-converting enzyme; COX, cyclo-oxygenase; eGFR, estimated glomerular filtration rate; IQR, interquartile range; SD, standard deviation