

Supplementary Online Content

Noel JA, Bota SE, Petrcich W, et al. Risk of hospitalization for serious adverse gastrointestinal events associated with sodium polystyrene sulfonate use in patients of advanced age. *JAMA Intern Med.* Published online June 10, 2019.
doi:10.1001/jamainternmed.2019.0631

eTable 1. Reporting of Studies Conducted Using Observational Routinely-Collected Health Data (RECORD) Statement Checklist

eTable 2. Administrative Data Definitions

eTable 3. Ontario Drug Benefit Program Drug Identification Numbers Used to Define Exposure and Baseline Variables

eTable 4. Covariates Included in High Dimensional Propensity Score (HDPS)

eTable 5. Covariates Included in HDPS Score for Matched Subcohort With Known Baseline eGFR and Serum Potassium Values

eTable 6. Baseline Characteristics of Sodium Polystyrene Sulfonate (SPS) and Non-SPS Users Post-Matching in the Subcohort With Known Baseline eGFR and Serum Potassium Values

eTable 7. Association Between Sodium Polystyrene Sulfonate (SPS) Use and a Negative Control (Composite of Hospitalization or Emergency Room Visit for Cholecystitis, Diverticulitis or Appendicitis With 30-Day Follow-up)

eFigure. Cohort Creation Flow Diagram

eMethods.

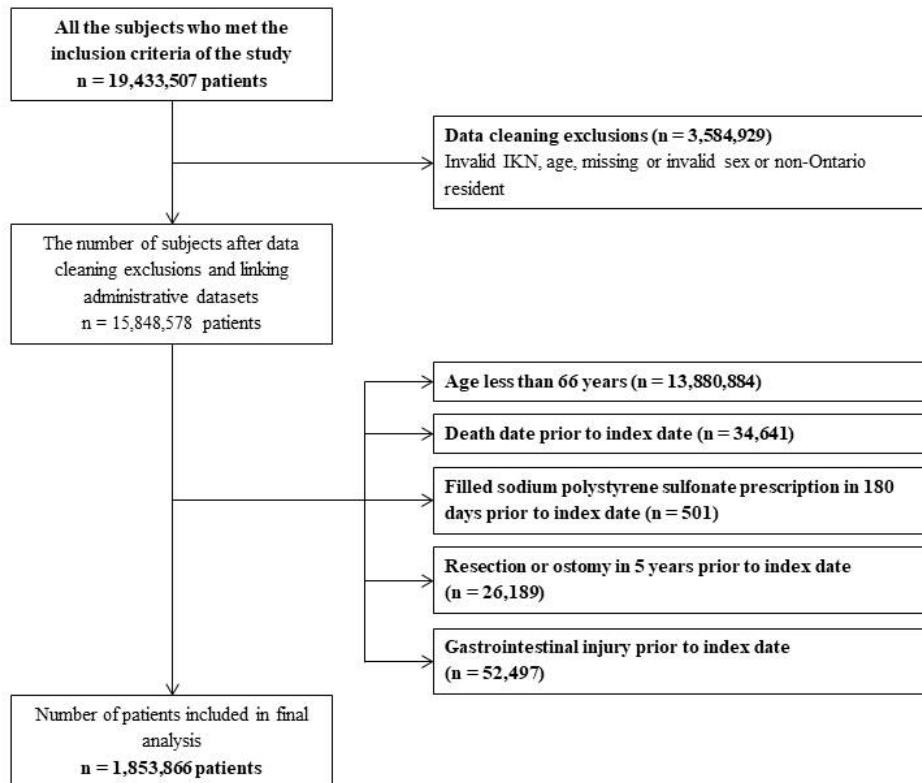
This supplementary material has been provided by the authors to give readers additional information about their work.

Additional Methodological Details

High Dimensional Propensity Score:

The databases included were DAD, NACRS, SDS, OHIP, ODB with data dimensions as follows: OHIP: feecode, dxcode, DAD-SDS, NACRS: dx10code1, incode1, and ODB: subclname. The look back windows were 1 year for all HDPS variables. For assessment of recurrence we generated binary variables as follows: occurred \geq 1 time, occurred \geq median number of times, and occurred \geq 75th percentile number of times. Prioritization and covariate selection was based on the top 200 variables as ranked by the bias term.

eFigure. Cohort Creation Flow Diagram



eTable 1. Reporting of Studies Conducted Using Observational Routinely-Collected Health Data (RECORD) Statement Checklist

	Item No	STROBE items	RECORD items	Reported
Title and abstract	1	(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.	Title page and abstract
Introduction				
Background/rationale	2	Explain the scientific background and rationale for the investigation being reported.		Introduction
Objectives	3	State specific objectives, including any pre-specified hypotheses.		Introduction
Methods				
Study design	4	Present key elements of study design early in the paper.		Methods
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.	(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	Methods

		<p>(b) For matched studies, give matching criteria and number of exposed and unexposed.</p>	<p>possible, an explanation should be provided.</p> <p>(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.</p> <p>(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.</p>	
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
Data sources/ measurement	8	For each variable of interest, give sources of data and details of methods of assessment (measurement). Describe comparability of assessment methods if there is more than one group.		Methods
Bias	9	Describe any efforts to address potential sources of bias.		Methods
Study size	10	Explain how the study size was arrived at.		Results

Quantitative variables	11	Explain how quantitative variables were handled in the analyses. If applicable, describe which groupings were chosen and why.		Methods
Statistical methods	12	(a) Describe all statistical methods, including those used to control for confounding. (b) Describe any methods used to examine subgroups and interactions. (c) Explain how missing data were addressed. (d) If applicable, explain how loss to follow-up was addressed. (e) Describe any sensitivity analyses.		Methods
Data access and cleaning methods		N/A	(12.1) Authors should describe the extent to which the investigators had access to the database population used to create the study population. (12.2) Authors should provide information on the data cleaning methods used in the study.	Methods
Linkage		N/A	(12.3) State whether the study included person-level, institutional-level, or other data linkage across two or more databases. The methods of linkage and methods of linkage quality evaluation should be provided.	Methods
Results				

Participants	13	<p>(a) Report numbers of individuals at each stage of study- e.g. numbers potentially eligible, examined for eligibility, confirmed eligible, included in the study, completing follow-up, and analyzed.</p> <p>(b) Give reasons for non-participation at each stage.</p> <p>(c) Consider use of a flow diagram.</p>	<p>(13.1) Describe in detail the selection of the persons included in the study (i.e., study population selection), including filtering based on data quality, data availability, and linkage. The selection of included persons can be described in the text and/or by means of the study flow diagram.</p>	Results, Supplemental Appendices
Descriptive data	14	<p>(a) Give characteristics of study participants (e.g. demographic, clinical, social) and information on exposures and potential confounders.</p> <p>(b) Indicate number of participants with missing data for each variable of interest.</p> <p>(c) Summarize follow-up time (e.g. average and total amount).</p>		Results
Outcome data	15	Report numbers of outcome events or summary measures over time.		Results
Main results	16	<p>(a) Give unadjusted estimates and, if applicable, confounder-adjusted estimates and their precision (e.g. 95% confidence interval). Make clear which confounders were adjusted for and why they were included.</p>		Results

		(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).		Results, Supplemental Appendices
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	21	Discuss the generalizability (external validity) of the study results.		Discussion
Other information				

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.		Acknowledgements
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.	

Reference: Benchimol EI, Smeeth L, Guttmann A, Harron K, Moher D, Petersen I, Sørensen HT, von Elm E, Langan SM; RECORD Working Committee. The REporting of studies Conducted using Observational Routinely-collected health Data (RECORD) statement. 2015. PLoS Med. 12(10):1-22.

eTable 2. Administrative Data Definitions

Concept	Data Source	Definition
Adverse gastrointestinal events (composite of intestinal ischemia, thrombosis, resection, ostomy, gastrointestinal ulcers or perforation)	Canadian Institute for Health Information Discharge Abstract Database (CIHI-DAD) Ontario Health Insurance Plan (OHIP) fee code	ICD10: K550, K551, K558, K559, K2210, K2211, K2212, K2213, K223, K250, K251, K252, K253, K260, K261, K262, K263, K270, K271, K272, K273, K280, K281, K282, K283, K290, K631, K633 OHIPfee: S149, S157, S158, S160, S164, S165, S166, S167, S168, S169, S170, S171, S172, S173, S174, S177, S181, S182, S188, S191, S192, S193, S199, Z750
Intestinal ischemia or thrombosis (ischemic colitis, acute mesenteric ischemia, mesenteric venous thrombosis)	CIHI-DAD	ICD10: K550, K551, K558, K559
Resection & ostomy	OHIP fee code	S149, S157, S158, S160, S164, S165, S166, S167, S168, S169, S170, S171, S172, S173, S174, S177, S181, S182, S188, S191, S192, S193, S199, Z750
Gastrointestinal ulcer & perforation	CIHI-DAD	ICD10: K2210, K2211, K2212, K2213, K223, K250, K251, K252, K253, K260, K261, K262, K263, K270, K271, K272, K273, K280, K281, K282, K283, K290, K631, K633
Adverse composite negative control outcome (cholecystitis, diverticulitis or appendicitis)	CIHI-DAD	K810, K811, K818, K819, K350, K351, K352, K353, K358, K359, K570, K571, K572, K573, K574, K575, K578, K579

eTable 3. Ontario Drug Benefit Program Drug Identification Numbers Used to Define Exposure and Baseline Variables

Drug	Drug Identification Number
Sodium polystyrene sulfonate	00769541, 01902776, 02026961 00885835, 00885843, 00885851, 02273918, 02290332, 02290340, 00546283, 00546291, 00546305, 00695661, 00851639, 00851647, 00851655, 00851833, 00893595, 00893609, 00893617, 00893625, 01913824, 01913832, 01913840, 01913859, 01942964, 01942972, 01942980, 01942999, 02163551, 02163578, 02163586, 02163594, 02230203, 02230204, 02230205, 02230206, 02237861, 02237862, 02237863, 02242788, 02242789, 02242790, 02242791, 01911465, 01911473, 01911481, 02266350, 02266369, 02266377, 02280442, 02280450, 02280469, 02283778, 02283786, 02283794, 02285215, 02285223, 02291134, 02291142, 02291150, 02181479, 02284987, 02313731, 00670901, 00670928, 00708879, 00708887, 00851795, 02019884, 02019892, 02019906, 02020025, 02233005, 02233006, 02233007, 02291878, 02291886, 02291894, 02291908, 02299933, 02299941, 02299968, 02299976, 02299984, 02299992, 02300001, 02300028, 02300036, 02300044, 02300052, 02300060, 02300079, 02300087, 02300095, 02300109, 02300117, 02300125, 02300133, 02300141, 02300680, 02352230, 02352249, 02352257, 02352265, 02242733, 02242734, 02262401, 02262428, 02331004, 02331012, 01907107, 01907115, 02247802, 02247803, 02255944, 02255952, 02266008, 02266016, 02275252, 02275260, 02294524, 02294532, 02332566, 02332574, 00884375, 00884413, 02045737, 02103729, 02108194, 02261979, 02261987, 02297736, 02297744, 02301768, 02301776, 02302136, 02302144, 02302365, 02302373, 02408767, 02408783, 02237367, 02237368, 02237369, 02283131, 02283158, 02283166, 02283174, 02283182, 02342138, 02342146, 02342154, 02342162, 02342170, 02388332, 02388340, 02388359, 02388367, 02388375, 02246568, 02246569, 02321653, 00839329, 00839337, 00839388, 00839396, 00839418, 00839442, 02049333, 02049376, 02049384, 02217481, 02217503, 02217511, 02256797, 02256800, 02256819, 02271443, 02271451, 02271478, 02274833, 02274841, 02274868, 02285061, 02285088, 02285096, 02285118, 02285126, 02285134, 02289199, 02289202, 02289229, 02292203, 02292211, 02292238, 02294230, 02294249, 02294257, 02294591, 02299879, 02299887, 02299895, 02332167, 02332175, 02332183, 02361531, 02361558, 02361566, 02394472, 02394480, 02394499, 09853685, 09853960, 09854010, 09857272, 09857286, 09857287, 02123274, 02123282, 02246624, 01947664, 01947672, 01947680, 01947699, 02248499, 02248500, 02248501, 02248502, 02290987, 02290995, 02291002, 02291010, 02050943, 02050951, 02050978, 02050986, 02221829, 02221837, 02221845, 02221853, 02247917, 02247918, 02247919, 02247945, 02247946, 02247947, 02251515, 02251531, 02251574, 02251582, 02255316, 02255324, 02255332, 02283891, 02287692, 02287706, 02287714, 02287722, 02287927, 02287935, 02287943, 02291398, 02291401, 02291428, 02291436, 02295369, 02295482, 02295490, 02295504, 02295512, 02299372, 02301148, 02301156, 02301164, 02301172, 02310503, 02310511, 02310538, 02310546, 02331101, 02331128, 02331136, 02331144, 02332299, 02332302, 02332310, 02332329, 02374846, 02374854, 02374862, 02387387, 02387395, 02387409, 02387417, 02420457, 02420465, 02420473, 02420481, 02421305, 02421313, 02421321, 02438860, 02438879, 02438887, 02438895, 02231459, 02231460, 02239267
Non-potassium sparing-diuretic	00010413, 00010421, 00110108, 00291870, 00293881, 00298964, 00337447, 00337455, 00360279, 00360287, 00398365, 00398373, 00430994, 00431001, 00451789, 00451797, 00638625, 00638633, 00806145, 02049961, 02049988, 02248763, 02248764, 02302918, 02302926, 02348233, 02348241, 02397749, 02397757, 02397765, 99101026, 99101027, 00005568, 00005576, 00007560, 00007579, 00016500, 00016519, 00018392, 00018406, 00018848, 00018856, 00021474, 00021482, 00074365, 00074373, 00074381, 00074608, 00085200, 00092681, 00092703, 00112828, 00134341, 00140589, 00140597, 00140600,

	00140619, 00140627, 00156604, 00173541, 00178365, 00180408, 00181528, 00209813, 00209821, 00210110, 00232750, 00263893, 00263907, 00301523, 00307947, 00309125, 00312800, 00326844, 00341975, 00354317, 00363634, 00363642, 00403482, 00403490, 00405620, 00431060, 00431079, 00436968, 00436976, 00441708, 00441716, 00441775, 00465313, 00465321, 00487813, 00491543, 00502529, 00509353, 00519367, 00520802, 00532088, 00532657, 00568627, 00568635, 00578444, 00584967, 00584975, 00594377, 00613231, 00657182, 00657298, 00770589, 00770597, 00775313, 00775321, 00784400, 00808369, 00808377, 00865532, 00870943, 00882860, 00884375, 00884383, 00884413, 00884421, 00885746, 00886106, 00919547, 01910191, 01919547, 01937219, 02042282, 02042290, 02045729, 02045737, 02083450, 02083493, 02103729, 02108194, 02162865, 02162873, 02162881, 02170639, 02170647, 02174596, 02181479, 02230047, 02231254, 02237367, 02237368, 02237369, 02238638, 02240846, 02241007, 02241818, 02241819, 02241900, 02241901, 02242092, 02242826, 02244021, 02244344, 02246955, 02247170, 02247171, 02247386, 02247387, 02248134, 02248135, 02250659, 02250667, 02253631, 02257378, 02261979, 02261987, 02261995, 02274086, 02280213, 02282879, 02282887, 02283131, 02283158, 02283166, 02283174, 02283182, 02284987, 02297736, 02297744, 02297752, 02297841, 02300222, 02300230, 02301768, 02301776, 02301784, 02302136, 02302144, 02302152, 02302365, 02302373, 02302381, 02308908, 02308916, 02313375, 02313383, 02313731, 02316013, 02316021, 02316048, 02318709, 02319616, 02319624, 02319632, 02327856, 02327902, 02328518, 02328526, 02328534, 02330288, 02330482, 02330490, 02330504, 02330512, 02330520, 02330539, 02332728, 02332736, 02332744, 02332752, 02332922, 02332957, 02335824, 02335972, 02335980, 02335999, 02336766, 02336774, 02336782, 02337428, 02337436, 02337444, 02341786, 02341794, 02341808, 02342138, 02342146, 02342154, 02342162, 02342170, 02352923, 02352931, 02354004, 02354012, 02354020, 02354039, 02354411, 02354438, 02354446, 02356694, 02356708, 02356716, 02356724, 02356732, 02356996, 02357003, 02357011, 02357038, 02357046, 02357399, 02357402, 02357410, 02358263, 02360594, 02360608, 02360954, 02361108, 02361116, 02361124, 02361132, 02361140, 02361167, 02362449, 02362880, 02362899, 02362902, 02362945, 02362953, 02362961, 02363003, 02363011, 02363038, 02363208, 02363216, 02363224, 02363879, 02363968, 02363976, 02365162, 02365170, 02365189, 02367009, 02367017, 02367025, 02367033, 02367041, 02367068, 02367076, 02367084, 02367092, 02367106, 02367637, 02367653, 02367769, 02367777, 02367785, 02367866, 02368722, 02368935, 02368943, 02368951, 02371235, 02371243, 02371251, 02371265, 02372223, 02372231, 02372266, 02372886, 02372894, 02372908, 02373343, 02373351, 02373378, 02373564, 02373572, 02373734, 02373742, 02373750, 02373769, 02373777, 02374897, 02375656, 02375664, 02375672, 02375680, 02375699, 02376873, 02376881, 02376903, 02377144, 02377152, 02378078, 02378086, 02378094, 02379252, 02382547, 02382555, 02382563, 02382571, 02382598, 02384736, 02384744, 02384752, 02384760, 02384779, 02385317, 02385325, 02385333, 02387646, 02387654, 02387662, 02388251, 02388278, 02388286, 02388332, 02388340, 02388359, 02388367, 02388375, 02388650, 02388960, 02388979, 02388987, 02389657, 02389665, 02389673, 02390302, 02390310, 02391295, 02392224, 02392232, 02392240, 02392275, 02392992, 02393018, 02393026, 02393263, 02393271, 02393557, 02393565, 02394391, 02394405, 02394413, 02394804, 02394812, 02395126, 02395134, 02395355, 02395363, 02395525, 02395533, 02395541, 02395568, 02395576, 02396238, 02396246, 02396572, 02396580, 02401665, 02401673, 02404001, 02404028, 02404036, 02408112, 02408120, 02408139, 02408147, 02408155, 02408244, 02408252, 02408767, 02408775, 02408783, 02412640, 02412659, 02412667, 02412675, 02415887, 02415895, 02415909, 02418223, 02418231, 02418258, 02419114, 02419122, 02420023, 02420031, 02420732, 02420740, 02421038, 02421046, 02421054,
--	---

	02423642, 02423650, 02423669, 02425947, 02426196, 02426218, 02427036, 02427044, 02427052, 02427060, 02427079, 02427648, 02427656, 02427664, 02428539, 02428547, 02433214, 02433222, 02434067, 02434075, 02443112, 02443120, 02443139, 02447878, 02447886, 02447894, 02453606, 02453614, 02453622, 02456389, 02456397, 02462036, 02462044, 02462052, 02463849, 02463857, 02463865, 09857732, 22123245, 22373680, 49021474, 66999106, 92357399, 99100377, 99100460, 99100989, 99101047, 00564966, 02049341, 02153483, 02179709, 02188910, 02223597, 02223678, 02227339, 02229762, 02230030, 02230669, 02231184, 02237255, 02239619, 02239620, 02239913, 02239917, 02240067, 02240349, 02240350, 02241018, 02242125, 02245246, 02246568, 02246569, 02247229, 02247245, 02286963, 02286971, 02312530, 02312549, 02318555, 02318563, 02321653, 02337118, 02341166, 02341182, 02357321, 02362015, 02364611, 02364638, 02365324, 02373904, 02373912, 02445824, 02445832, 90800586, 00301663, 00301671, 00301698, 00888400, 00888419, 00888427, 00903780, 00728276, 00728284, 02176076, 00012548, 00012580, 00217743, 00289590, 00332275, 00337730, 00337749, 00344079, 00353612, 00362166, 00366854, 00380016, 00380024, 00387614, 00392286, 00396249, 00396788, 00397687, 00397792, 00401633, 00404489, 00431052, 00432342, 00489131, 00496723, 00502421, 00502510, 00527033, 00565040, 00667080, 00707570, 00765953, 00888176, 00896292, 01900943, 01987550, 01987585, 01987615, 01987739, 01987771, 01987798, 01988832, 01996436, 02070936, 02224690, 02224704, 02224712, 02224720, 02224739, 02224747, 02224755, 02224763, 02239224, 02239225, 02247371, 02247372, 02247493, 02247494, 02248124, 02248125, 02294389, 02294397, 02344238, 02344246, 02344254, 02348292, 02348306, 02348314, 02351420, 02351439, 02351447, 02360365, 02360446, 02364573, 02364581, 02364603, 02382539, 02384094, 02461404, 09857208, 09857724, 09857725, 80337730, 00016497, 00268313, 02258528, 99100191
Potassium-sparing diuretic	02323052, 02323060, 00027138, 00181528, 00299715, 00441775, 00532657, 00865532, 01910191, 01919547, 01919563, 01919571, 00028606, 00180408, 00285455, 00594377, 00613215, 00613223, 00613231, 00657182, 00487805, 00487813, 00784400, 00886106, 01937219, 02174596, 02249510, 02257378
Beta blocker	00002658, 00002666, 00313602, 00353914, 00353922, 00397423, 00397431, 00402540, 00402567, 00402575, 00402583, 00402605, 00402753, 00402761, 00402788, 00417270, 00417289, 00443174, 00451193, 00451207, 00456578, 00463256, 00465313, 00465321, 00483923, 00486833, 00489859, 00495611, 00496480, 00496499, 00496502, 00497827, 00504335, 00511668, 00520683, 00523372, 00523380, 00523399, 00523402, 00534560, 00534579, 00534587, 00549657, 00566950, 00568627, 00568635, 00582255, 00582263, 00582271, 00587931, 00603643, 00603651, 00607126, 00618632, 00618640, 00637661, 00638625, 00638633, 00648035, 00648043, 00658855, 00663719, 00695645, 00695653, 00695688, 00726559, 00726567, 00740675, 00749354, 00751170, 00751286, 00755826, 00755834, 00755842, 00755850, 00755869, 00755877, 00755885, 00755893, 00771333, 00771341, 00773689, 00773697, 00782467, 00782475, 00782505, 00818593, 00818607, 00818615, 00842648, 00842656, 00851663, 00851671, 00851698, 00865605, 00865613, 00869007, 00869015, 00869023, 00886009, 00886114, 00886122, 00886130, 00886149, 00893773, 00893781, 00897272, 01908448, 01910140, 01910159, 01910167, 01912054, 01912062, 01924915, 01924923, 01924931, 01926543, 01926551, 01926578, 01947796, 01947818, 01947826, 02031159, 02031167, 02036290, 02036436, 02036444, 02039532, 02039540, 02042177, 02042193, 02042207, 02042215, 02042231, 02042258, 02042266, 02042274, 02042282, 02042290, 02044609, 02044617, 02044625, 02048515, 02048523, 02049961, 02049988, 02057808, 02057816, 02057824, 02083345, 02083353, 02084228, 02084236, 02091518, 02106272, 02106280, 02123290, 02123304, 02126753, 02126761, 02145413, 02145421, 02146894, 02147432, 02147602, 02147610, 02147629, 02163772,

	02165546, 02165554, 02165562, 02166712, 02166720, 02167794, 02170841, 02171791, 02171805, 02171880, 02171899, 02174545, 02174553, 02204517, 02204525, 02204533, 02210428, 02220679, 02220687, 02229650, 02229651, 02229652, 02229653, 02229778, 02229779, 02229780, 02230076, 02230077, 02230448, 02230449, 02230650, 02230803, 02230804, 02231181, 02231182, 02231536, 02231537, 02231539, 02231714, 02231715, 02231731, 02231733, 02234013, 02237600, 02237601, 02237721, 02237722, 02237723, 02237885, 02237886, 02237887, 02237991, 02238316, 02238326, 02238327, 02238415, 02240249, 02240808, 02240809, 02240810, 02240811, 02241148, 02241149, 02241574, 02241575, 02241715, 02241716, 02242275, 02242276, 02243538, 02243539, 02245914, 02245915, 02245916, 02245917, 02246010, 02246529, 02246530, 02246531, 02246532, 02247439, 02247440, 02247875, 02247876, 02247933, 02247934, 02247935, 02247936, 02248347, 02248752, 02248753, 02248755, 02248763, 02248764, 02252309, 02252317, 02252325, 02252333, 02253518, 02253526, 02255545, 02255553, 02256134, 02256177, 02257599, 02257602, 02257610, 02257858, 02261782, 02261790, 02261804, 02267470, 02267489, 02267985, 02267993, 02268027, 02268035, 02268043, 02268051, 02270625, 02270633, 02278251, 02285169, 02285177, 02286246, 02286254, 02286262, 02290812, 02302632, 02302640, 02302918, 02302926, 02303396, 02303418, 02331624, 02347512, 02347520, 02347555, 02347571, 02354187, 02354195, 02356821, 02356848, 02364913, 02364948, 02367564, 02367572, 02368021, 02368048, 02368625, 02368641, 02368668, 02368897, 02368900, 02368919, 02368927, 02371987, 02371995, 02384418, 02384426, 02418495, 02418509, 02418517, 02418525, 09851453, 09857298, 09857333, 09857512, 09857513
Angiotensin II receptor blocker (ARB)	02371022, 02371030, 02371049, 02371057, 02313049, 02339080, 02351218, 02361418, 02379104, 02379562, 02393573, 02239090, 02239091, 02239092, 02311658, 02326957, 02326965, 02326973, 02365340, 02365359, 02365367, 02366312, 02366320, 02366339, 02376520, 02376539, 02376547, 02376555, 02379120, 02379139, 02379147, 02379155, 02379260, 02379279, 02379287, 02379295, 02380684, 02380692, 02380706, 02380714, 02386496, 02386518, 02386526, 02386534, 02391171, 02391198, 02391201, 02391228, 02392267, 02399105, 02417340, 02244021, 02327902, 02332922, 02332957, 02367866, 02374897, 02388650, 02391295, 02395126, 02395134, 02395541, 02395568, 02395576, 02420732, 02420740, 02421038, 02421046, 02421054, 02240431, 02240432, 02243942, 02253631, 02241818, 02241819, 02280213, 02316013, 02316021, 02316048, 02328518, 02328526, 02328534, 02330512, 02330520, 02330539, 02337428, 02337436, 02337444, 02357399, 02357402, 02357410, 02363208, 02363216, 02363224, 02387646, 02387654, 02387662, 02392992, 02393018, 02393026, 02418223, 02418231, 02418258, 02230047, 02241007, 02297841, 02313375, 02313383, 02358263, 02362449, 02371235, 02371243, 02371251, 02377144, 02377152, 02378078, 02378086, 02378094, 02388251, 02388278, 02388286, 02389657, 02389665, 02389673, 02392224, 02392232, 02392240, 02408244, 02408252, 02423642, 02423650, 02423669, 02319616, 02319624, 02319632, 02408775, 02244344, 02318709, 02330288, 02373564, 02373572, 02379252, 02393263, 02393271, 02393557, 02393565, 02401665, 02401673, 02419114, 02419122, 02420023, 02420031, 02433214, 02433222, 02241900, 02241901, 02246955, 02308908, 02308916, 02356694, 02356708, 02356716, 02356724, 02356732, 02356996, 02357003, 02357011, 02357038, 02357046, 02373734, 02373742, 02373750, 02373769, 02373777, 02382547, 02382555, 02382563, 02382571, 02382598, 02408112, 02408120, 02408139, 02408147, 02408155, 02237923, 02237924, 02237925, 02315971, 02315998, 02316005, 02316390, 02316404, 02316412, 02317060, 02317079, 02317087, 02328070, 02328089, 02328100, 02328461, 02328488, 02328496, 02347296, 02347318, 02347326, 02386968, 02386976, 02386984, 02406098, 02406101, 02406128, 02406810, 02406829, 02406837, 02418193, 02418207, 02418215,

	02422980, 02422999, 02423006, 02427087, 02427095, 02427109, 02182815, 02182874, 02182882, 02309750, 02309769, 02309777, 02313332, 02313340, 02313359, 02353504, 02353512, 02354829, 02354837, 02354845, 02357968, 02357976, 02368277, 02368285, 02368293, 02379058, 02380838, 02398834, 02398842, 02398850, 02403323, 02403331, 02403358, 02404451, 02404478, 02404486, 02405733, 02405741, 02405768, 02422468, 02422484, 02424967, 02424975, 02424983, 02426595, 02426609, 02426617, 02318660, 02318679, 02240769, 02240770, 02320177, 02320185, 02375958, 02375966, 02376717, 02376725, 02391236, 02391244, 02393247, 02393255, 02407485, 02407493, 02420082, 02420090, 02432897, 02432900, 02434164, 02236808, 02236809, 02244781, 02244782, 02289504, 02313006, 02313014, 02337495, 02337509, 02337517, 02344564, 02356651, 02356678, 02356686, 02356759, 02356767, 02356775, 02363100, 02363119, 02371529, 02371537, 02371545, 02383535, 02383543, 02383551, 02414228, 02414236, 02414244
Aldosterone receptor antagonist	00028606, 00180408, 00285455, 00594377, 00613215, 00613223, 00613231, 00657182, 02323052, 02323060
Non-steroidal anti-inflammatory agent	00010332, 00010340, 00036145, 00040851, 00092754, 00216666, 00229296, 00315117, 00315133, 00377961, 00419508, 00451738, 00451746, 00785547, 01905392, 02046253, 02150352, 02208156, 02237726, 02242281, 09857146, 09857147, 00226327, 00275328, 00176192, 00176206, 00608203, 00095508, 00095516, 00108103, 00604496, 00604518, 00219843, 02238645, 00406104, 00406112, 02266121, 02239941, 02239942, 02288915, 02288923, 02291975, 02291983, 02321246, 02321254, 02355442, 02355450, 02399881, 02412373, 02412381, 02412497, 02412500, 02418932, 02418940, 02420058, 02420066, 02420155, 02420163, 02423278, 02424533, 02424541, 02435632, 02435640, 02442639, 02442647, 02445670, 02445689, 02048698, 02158582, 00990296, 00514004, 00514012, 00590827, 00632724, 00632732, 00782459, 00808539, 00808547, 00839175, 00839183, 00886017, 00886025, 01910175, 01910183, 01940414, 02091194, 02162814, 02174677, 02174685, 02228203, 02228211, 02231502, 02231503, 02231504, 02231505, 02231506, 02231508, 02237786, 02237787, 02241224, 02241225, 02247265, 02261901, 02261928, 02261936, 02261944, 02261960, 02302616, 02302624, 02441020, 02454807, 01917056, 02229837, 02341689, 02341697, 02397145, 02397153, 00576131, 00587699, 02039486, 02039494, 02048493, 02048507, 02142023, 02142031, 02232318, 00328642, 00345504, 00638668, 00754153, 01902717, 01902725, 02017628, 02017636, 02244680, 02244681, 00593346, 00593354, 00600792, 00647942, 00675199, 00675202, 01912038, 01912046, 02020661, 02020688, 02100509, 02100517, 02223066, 02223074, 00766046, 00990291, 00252409, 00327794, 00364142, 00441643, 00441651, 00443182, 00443190, 00443204, 00484911, 00506052, 00585114, 00606197, 00606200, 00606219, 00606227, 00629324, 00629332, 00629340, 00629359, 00016039, 00016047, 00016233, 00337420, 00337439, 00463248, 00594458, 00594466, 00597805, 00611158, 00611166, 00865850, 00865869, 01934139, 01934147, 02143364, 02143372, 02146932, 02146940, 02176130, 02176149, 02204541, 02204568, 02231799, 02231800, 00336440, 00499544, 00566888, 00663735, 00761664, 00761672, 00761680, 00761699, 00790427, 00790435, 00817201, 00842664, 01913050, 01913069, 01926365, 01926373, 01926381, 01926403, 01926411, 01981528, 01981536, 02015951, 02031175, 02150808, 02150816, 02150824, 02156083, 02165481, 02172577, 00864048, 00882917, 01968300, 02162644, 02162652, 02162660, 02230201, 02245821, 02247461, 02369362, 00155225, 02229452, 02229569, 02231208, 02242785, 02242786, 02247889, 02248031, 02248267, 02248268, 02248607, 02248608, 02248973, 02248974, 02250012, 02250020, 02255987, 02255995, 02258315, 02258323, 02353148, 02353156, 02390884, 02390892, 02083531, 02083558, 02238639, 02240867, 02244563, 00299413, 00335193, 00522651, 00522678, 00525537, 00531022, 00565350, 00565369, 00583367, 00587923, 00589861, 00592277, 00600806, 00615307, 00615315, 00615323,

	00615331, 00627097, 00756814, 00788767, 00865621, 00865648, 00865656, 00865664, 02017237, 02162415, 02162423, 02162431, 02162458, 02162474, 02162482, 02162490, 02177072, 02229690, 02230477, 02231327, 00491772, 02027860, 00010502, 00021660, 00093041, 00258377, 00312789, 00525596, 00525618, 00632708, 00632716, 00642886, 00642894, 00695696, 00695718, 00836230, 00836249, 00865761, 00865788, 02139952, 02139960, 02144212, 02144220, 02154420, 02154463, 02171813, 02171821, 02230066, 02230067, 02238028, 02241107, 02241108, 02241109, 02027917, 00432369, 00456888, 00745588, 00745596, 00778354, 00778362, 02042576, 02042584, 00884367, 00589926, 00589934, 00893714, 01924613, 01924621, 01989774, 01989782, 01989790, 02136112, 02136120, 02179679, 02179687, 02221950, 02221969, 02230827, 02230828, 00364126, 00484938, 00632740, 02076233, 02246621, 02246622
Low molecular weight heparin	02012472, 02132621, 02132648, 02132656, 02132664, 02167840, 02229515, 02229755, 02231171, 02231478, 02236564, 02236883, 02236913, 02240114, 02242692, 02352648, 02352656, 02352664, 02352672, 02352680, 02358158, 02358166, 02358174, 02358182, 02377454, 02378426, 02378434, 02378442, 02378469, 02429462, 02429470, 02429489, 02430789, 09852468, 09852476, 09852484, 09853790, 09853820, 09853880, 09853898, 09853901, 09853910, 09853928, 09853936, 09853944, 09853952, 09853979, 09853987, 09854100, 09854118, 09857137, 09857205, 09857367

eTable 4. Covariates Included in High Dimensional Propensity Score (HDPS)

Type of Code	Exact Code Label	Frequency	Rank	Bias Multiplier	Code description
feecode_ohip_fee	L251	166674	1	1.7157	LAB.MED.-BIOCHEM.-UREA NITROGEN (B.U.N.)
feecode_ohip_fee	L700	1254713	2	1.6668	LAB. MED.-PATIENT DOCUMENTATION & SPECIMEN COLLECTION FEE
feecode_ohip_fee	L251	166674	3	1.6631	LAB.MED.-BIOCHEM.-UREA NITROGEN (B.U.N.)
feecode_ohip_fee	L053	744496	4	1.6548	LAB. MED.-BIOCHEM.-CHLORIDE
feecode_ohip_fee	L226	899632	5	1.6374	LAB. MED.-BIOCHEM.-SODIUM
feecode_ohip_fee	L204	936324	6	1.6299	LAB. MED.-BIOCHEM.-POTASSIUM
feecode_ohip_fee	X091	420294	7	1.6113	DIAGNOSTIC RADIOLOGY CHEST 2 VIEWS
drcode_ohip_dx	428	70502	8	1.5937	Congestive heart failure
drcode_ohip_dx	584	14702	9	1.5768	Acute renal failure
feecode_ohip_fee	X090	99519	10	1.5432	DIAGNOSTIC RADIOLOGY CHEST SINGLE VIEW
feecode_ohip_fee	C124	108303	11	1.5421	DAY OF DISCHARGE VISIT - MOST RESPONSIBLE PHYS
drcode_ohip_dx	428	70502	12	1.5355	Congestive heart failure
feecode_ohip_fee	C002	71601	14	1.5314	SUBSEQ.VISITS-TO 5WKS-F.P./G.P.-HOSP.
drcode_ohip_dx	437	7846	14	1.5314	Chronic arteriosclerotic cerebrovascular disease, hypertensive encephalopathy
incode1_dad_incode	1VG53LAPNN	1042	14	1.5314	Implantation of internal device, knee joint with synthetic material (e.g. bone paste, cement, Dynagraft, Osteoset) using dual component prosthetic device
dx10code1_dad_icd10	H409	1490	17	1.5153	Glaucoma, unspecified
incode1_dad_incode	1PM59BAAG	301	17	1.5153	Destruction, bladder endoscopic per orifice approach using laser
incode1_nacrs_incode	3GY10VA	138556	17	1.5153	Xray, thoracic cavity NEC without contrast (with or without fluoroscopy)
subclnam_odb_hdps	IRON PREPARATIONS	95479	20	1.4940	IRON PREPARATIONS
incode1_dad_incode	1NQ87BAFA	696	20	1.4940	Excision partial, rectum endoscopic per orifice approach encirclage device
incode1_nacrs_incode	1ZZ35HAK0	375	20	1.4940	Pharmacotherapy, total body general antiinfective agents percutaneous approach [intramuscular, intravenous, subcutaneous, intradermal] antiinfective NOS
feecode_ohip_fee	L067	1105505	22	1.4678	LAB. MED.-BIOCHEM-CREATININE (NOT WITH L068).
subclnam_odb_hdps	ANTIPSYCHOTIC AGENTS	66382	25	1.4585	ANTIPSYCHOTIC AGENTS
feecode_ohip_fee	A135	217035	25	1.4585	CONSULT.-INTERNAL MED.

dx10code1_dad_icd10	C541	617	25	1.4585	Malignant neoplasm of endometrium
incode1_dad_incode	1FU89NZ	479	25	1.4585	Excision total, thyroid gland open approach [e.g. neck incision] using device NEC
incode1_nacrs_incode	1TV73JA	840	25	1.4585	Reduction, radius and ulna using closed (external) approach
feecode_ohip_fee	X091	420294	28	1.4533	DIAGNOSTIC RADIOLOGY CHEST 2 VIEWS
feecode_ohip_fee	L393	1055280	29	1.4465	LAB.MED-HEMATOLOGY-COMPLETE BLOOD COUNT
feecode_ohip_fee	L800	41796	30	1.4452	LAB.MED.-ANAT PATH,HIST,CYTO- BLOOD FILM INTERPRETATION
feecode_ohip_fee	E083	83542	31	1.4302	Subsequent visit by the MRP, to subsequent visit, C122, C123, C124, C142, C143, C882 or C982
dxcod_ohip_dx	584	14702	32	1.4264	Acute renal failure
dxcod_ohip_dx	428	70502	33	1.4224	Congestive heart failure
subclnam_odb_hdps	IRON PREPARATIONS	95479	35	1.4184	IRON PREPARATIONS
incode1_dad_incode	1NQ87BAFA	696	35	1.4184	Excision partial, rectum endoscopic per orifice approach encirclage device
incode1_nacrs_incode	1ZZ35HAK0	375	35	1.4184	Pharmacotherapy, total body general antinefective agents percutaneous approach [intramuscular, intravenous, subcutaneous, intradermal] antinefective NOS
feecode_ohip_fee	E083	83542	37	1.3942	Subsequent visit by the MRP, to subsequent visit, C122, C123, C124, C142, C143, C882 or C982
feecode_ohip_fee	C002	71601	39	1.3929	SUBSEQ.VISITS-TO 5WKS-F.P./G.P.-HOSP.
dxcod_ohip_dx	437	7846	39	1.3929	Chronic arteriosclerotic cerebrovascular disease, hypertensive encephalopathy
incode1_dad_incode	1VG53LAPNN	1042	39	1.3929	Implantation of internal device, knee joint with synthetic material (e.g. bone paste, cement, Dynagraft, Osteoset) using dual component prosthetic device
feecode_ohip_fee	W010	43651	41	1.3908	MONTHLY MANAGEMENT FEE - LTC
feecode_ohip_fee	G313	689643	42	1.3876	D./T.PROC CARDIOV ECG PROF.COMP-G.P.
feecode_ohip_fee	X090	99519	43	1.3864	DIAGNOSTIC RADIOLOGY CHEST SINGLE VIEW
feecode_ohip_fee	L061	50668	44	1.3584	LAB. MED.-BIOCHEM.-CO2 CONTENT, CO2 COMBINING POWER BICARB.
feecode_ohip_fee	L045	185370	45	1.3368	LAB. MED.-BIOCHEM.-CALCIUM
feecode_ohip_fee	H105	43180	46	1.3241	INTERIM INPATIENT ADMISSION ORDERS
feecode_ohip_fee	L700	1254713	47	1.3196	LAB. MED.-PATIENT DOCUMENTATION & SPECIMEN COLLECTION FEE
subclnam_odb_hdps	PROTON PUMP INHIBITORS	414010	48	1.3171	PROTON PUMP INHIBITORS

feecode_ohip_fee	E083	83542	49	1.3132	Subsequent visit by the MRP, to subsequent visit, C122, C123, C124, C142, C143, C882 or C982
feecode_ohip_fee	L061	50668	50	1.3041	LAB. MED.-BIOCHEM.-CO2 CONTENT, CO2 COMBINING POWER BICARB.
subclnam_odb_hdps	STOOL SOFTENERS	130707	52	1.3029	STOOL SOFTENERS
incode1_dad_incode	1QT87BAGX	981	52	1.3029	Excision partial, prostate endoscopic per orifice approach [transurethral] using device NEC
incode1_nacrs_incode	3OT30DA	7539	52	1.3029	Ultrasound, abdominal cavity alone
feecode_ohip_fee	L194	88378	54	1.3022	LAB. MED.-BIOCHEM.-PHOSPHORUS
subclnam_odb_hdps	INSULINS	61768	56	1.2957	INSULINS
incode1_dad_incode	1NQ87BA	3537	56	1.2957	Excision partial, rectum endoscopic per orifice approach closure by apposition technique [e.g. suturing, stapling] or no closure required (for tissue regeneration)
incode1_nacrs_incode	1ZZ35HAJ2	154	56	1.2957	Pharmacotherapy, total body hormonal agents, excluding sex hormones percutaneous approach [intramuscular, intravenous, subcutaneous, intradermal] corticosteroid agent (systemic)
feecode_ohip_fee	L053	744496	58	1.2842	LAB. MED.-BIOCHEM.-CHLORIDE
feecode_ohip_fee	L045	185370	59	1.2741	LAB. MED.-BIOCHEM.-CALCIUM
feecode_ohip_fee	L628	60796	60	1.2667	LAB. MED.-MICROBIOL.-CULTURES-OTHER SWABS-CULT. AND SMEAR
subclnam_odb_hdps	IRON PREPARATIONS	95479	62	1.2659	IRON PREPARATIONS
incode1_dad_incode	1NQ87BAFA	696	62	1.2659	Excision partial, rectum endoscopic per orifice approach encirclage device
incode1_nacrs_incode	1ZZ35HAK0	375	62	1.2659	Pharmacotherapy, total body general antiinfective agents percutaneous approach [intramuscular, intravenous, subcutaneous, intradermal] antiinfective NOS
dicode_ohip_dx	584	14702	64	1.2552	Acute renal failure
feecode_ohip_fee	C002	71601	66	1.2501	SUBSEQ.VISITS-TO 5WKS-F.P./G.P.-HOSP.
dicode_ohip_dx	437	7846	66	1.2501	Chronic arteriosclerotic cerebrovascular disease, hypertensive encephalopathy
incode1_dad_incode	1VG53LAPNN	1042	66	1.2501	Implantation of internal device, knee joint with synthetic material (e.g. bone paste, cement, Dynagraft, Osteoset) using dual component prosthetic device
feecode_ohip_fee	L208	47045	68	1.2490	LAB. MED.-BIOCHEM.PROTEIN TOTAL NOT WITH L085 OR L086
feecode_ohip_fee	L194	88378	69	1.2489	LAB. MED.-BIOCHEM.-PHOSPHORUS
feecode_ohip_fee	L226	899632	70	1.2428	LAB. MED.-BIOCHEM.-SODIUM

feecode_ohip_fee	G313	689643	71	1.2394	D./T.PROC CARDIOV ECG PROF.COMP-G.P.
feecode_ohip_fee	L204	936324	72	1.2314	LAB. MED.-BIOCHEM.- POTASSIUM
subclnam_odb_hdps	NARCOTICS: OPIATE AGONISTS	345857	74	1.2255	NARCOTICS: OPIATE AGONISTS
dx10code1_nacrs_icd1	I471	1207	74	1.2255	Supraventricular tachycardia
incode1_nacrs_incode	2HZ24JAXJ	25058	74	1.2255	Electrophysiological measurement, heart external application using recording electrodes (or ECG NOS)
feecode_ohip_fee	G395	37845	76	1.2228	D./T. PROC-OTHER RESUSCITATION-1ST 1/4HR. PER PHYS.
feecode_ohip_fee	E078	160286	77	1.2143	MEDSPECASSESS&RE-ASSESS,COMPLEXMEDSPEC RE-ASSESS&PART ASSES
subclnam_odb_hdps	PROTON PUMP INHIBITORS	414010	78	1.2111	PROTON PUMP INHIBITORS
subclnam_odb_hdps	STOOL SOFTENERS	130707	80	1.2109	STOOL SOFTENERS
incode1_dad_incode	1QT87BAGX	981	80	1.2109	Excision partial, prostate endoscopic per orifice approach [transurethral] using device NEC
incode1_nacrs_incode	3OT30DA	7539	80	1.2109	Ultrasound, abdominal cavity alone
subclnam_odb_hdps	NARCOTICS: OPIATE AGONISTS	345857	83	1.2078	NARCOTICS: OPIATE AGONISTS
dx10code1_nacrs_icd1	I471	1207	83	1.2078	Supraventricular tachycardia
incode1_nacrs_incode	2HZ24JAXJ	25058	83	1.2078	Electrophysiological measurement, heart external application using recording electrodes (or ECG NOS)
dicode_ohip_dx	486	61513	86	1.2051	Pneumonia - all types
dx10code1_nacrs_icd1	K922	5157	86	1.2051	Gastrointestinal haemorrhage, unspecified
incode1_dad_incode	IYB87LA	355	86	1.2051	Excision partial, skin of forehead open [excisional] approach without tissue repair
subclnam_odb_hdps	NARCOTICS: OPIATE AGONISTS	345857	89	1.2046	NARCOTICS: OPIATE AGONISTS
dx10code1_nacrs_icd1	I471	1207	89	1.2046	Supraventricular tachycardia
incode1_nacrs_incode	2HZ24JAXJ	25058	89	1.2046	Electrophysiological measurement, heart external application using recording electrodes (or ECG NOS)
feecode_ohip_fee	L329	431924	91	1.2033	LAB. MED.-RADIO ASSAYS-FERRITIN
feecode_ohip_fee	H103	153763	92	1.2006	MULTIPLE SYSTEMS ASSESSMENT-G.P.- EMERGENCY-DR. ON DUTY
feecode_ohip_fee	K070	52771	93	1.1925	HOME CARE APPLICATION
feecode_ohip_fee	E078	160286	94	1.1921	MEDSPECASSESS&RE-ASSESS,COMPLEXMEDSPEC RE-ASSESS&PART ASSES
feecode_ohip_fee	L445	159426	95	1.1916	LAB. MED.-HEMATOLOGY- PROTHROMBIN TIME

feecode_ohip_fee	E078	160286	96	1.1903	MEDSPECASSESS&RE-ASSESS,COMPLEXMEDSPEC RE-ASSESS&PART ASSES
feecode_ohip_fee	W010	43651	97	1.1864	MONTHLY MANAGEMENT FEE - LTC
feecode_ohip_fee	G310	655073	98	1.1842	D./T.PROC.CARDIOV.ECG TECHNICAL COMP.
feecode_ohip_fee	L005	437299	99	1.1835	LAB. MED.-BIOCHEM.-ALBUMIN, QUANTITATIVE
subclnam_odb_hdps	ANTI-CHOLINERGICS	94866	101	1.1819	ANTI-CHOLINERGICS
incode1_dad_incode	1CL59LAAG	3097	101	1.1819	Destruction, lens using open approach and laser
incode1_nacrs_incode	1GZ35CAR3	4745	101	1.1819	Pharmacotherapy (local), respiratory system NEC using antiasthmatic agent
subclnam_odb_hdps	DIABETES DIAGNOSTIC	243477	104	1.1818	DIABETES DIAGNOSTIC
dx10code1_dad_icd10	D126	4060	104	1.1818	Benign neoplasm of colon, unspecified
incode1_nacrs_incode	1YT80LA	941	104	1.1818	Repair, skin of arm using apposition technique [suture]
subclnam_odb_hdps	DIABETES DIAGNOSTIC	243477	107	1.1782	DIABETES DIAGNOSTIC
dx10code1_dad_icd10	D126	4060	107	1.1782	Benign neoplasm of colon, unspecified
incode1_nacrs_incode	1YT80LA	941	107	1.1782	Repair, skin of arm using apposition technique [suture]
subclnam_odb_hdps	PROTON PUMP INHIBITORS	414010	109	1.1737	PROTON PUMP INHIBITORS
dicode_ohip_dx	486	61513	111	1.1726	Pneumonia - all types
dx10code1_nacrs_icd1	K922	5157	111	1.1726	Gastrointestinal haemorrhage, unspecified
incode1_dad_incode	1YB87LA	355	111	1.1726	Excision partial, skin of forehead open [excisional] approach without tissue repair
feecode_ohip_fee	X101	43926	113	1.1715	DIAG.RADIOLOGY ABDOMEN TWO/MORE VIEWS
feecode_ohip_fee	L005	437299	114	1.1702	LAB. MED.-BIOCHEM.-ALBUMIN, QUANTITATIVE
feecode_ohip_fee	L111	1046611	115	1.1678	LAB.MED-BIOCHEM.GLUCOSE QUANTITATIVE (NOT DIPSTICK)
feecode_ohip_fee	L208	47045	116	1.1641	LAB. MED.-BIOCHEM.PROTEIN TOTAL NOT WITH L085 OR L086
subclnam_odb_hdps	STOOL SOFTENERS	130707	118	1.1636	STOOL SOFTENERS
incode1_dad_incode	1QT87BAGX	981	118	1.1636	Excision partial, prostate endoscopic per orifice approach [transurethral] using device NEC
incode1_nacrs_incode	3OT30DA	7539	118	1.1636	Ultrasound, abdominal cavity alone
subclnam_odb_hdps	NUTRITIONAL PRODUCTS	4509	122	1.1575	NUTRITIONAL PRODUCTS
dicode_ohip_dx	277	13103	122	1.1575	Other metabolic disorders
dx10code1_dad_icd10	H250	650	122	1.1575	Senile incipient cataract
dx10code1_nacrs_icd1	I500	13231	122	1.1575	Congestive heart failure
incode1_nacrs_incode	3AN20WA	20601	122	1.1575	Computerized tomography [CT], brain without enhancement (contrast)

feecode_ohip_fee	L067	1105505	125	1.1568	LAB. MED.-BIOCHEM-CREATININE (NOT WITH L068).
feecode_ohip_fee	H133	85680	126	1.1565	PHYSICIAN ON DUTY IN ER - EVENINGS (18:00-24:00)
subclnam_odb_hdps	INSULINS	61768	128	1.1562	INSULINS
incode1_dad_incode	1NQ87BA	3537	128	1.1562	Excision partial, rectum endoscopic per orifice approach closure by apposition technique [e.g. suturing, stapling] or no closure required (for tissue regeneration)
incode1_nacrs_incode	1ZZ35HAJ2	154	128	1.1562	Pharmacotherapy, total body hormonal agents, excluding sex hormones percutaneous approach [intramuscular, intravenous, subcutaneous, intradermal] corticosteroid agent (systemic)
feecode_ohip_fee	H153	111275	130	1.1537	EMERG.DEPT.PHYS.ON DUTY SAT./SUN/HOLIDAY MULT.SYST.ASESS.
subclnam_odb_hdps	DIABETES DIAGNOSTIC	243477	132	1.1517	DIABETES DIAGNOSTIC
dx10code1_dad_icd10	D126	4060	132	1.1517	Benign neoplasm of colon, unspecified
incode1_nacrs_incode	1YT80LA	941	132	1.1517	Repair, skin of arm using apposition technique [suture]
feecode_ohip_fee	W010	43651	134	1.1474	MONTHLY MANAGEMENT FEE - LTC
feecode_ohip_fee	X400	83852	135	1.1473	DIAG.RADIOLOGY-COMPUTED TOMOGRAPHY-HEAD-WITHOUT I.V.CONTRAST
feecode_ohip_fee	X407	47339	136	1.1469	DIAG. RADIOLOGY-COMPUTED TOMOGRAPHY-THORAX-WITH I.V.CONTR.
feecode_ohip_fee	J128	57753	137	1.1447	DIAG. ULTRASOUND-ABDOMEN-ABDOMINAL SCAN - LIMITED STUDY.
feecode_ohip_fee	L700	1254713	138	1.1432	LAB. MED.-PATIENT DOCUMENTATION & SPECIMEN COLLECTION FEE
feecode_ohip_fee	X410	61440	139	1.1426	DIAG. RADIOLOGY-COMPUTED TOMOGRAPHY-ABDOMEN-WITH I.V.CONTR.
dicode_ohip_dx	785	240003	140	1.1409	Chest pain, tachycardia, syncope, shock, edema, masses
feecode_ohip_fee	G310	655073	141	1.1402	D./T.PROC.CARDIOV.ECG TECHNICAL COMP.
feecode_ohip_fee	H102	42462	142	1.1398	COMPREHENSIVE ASSESS. & CARE
subclnam_odb_hdps	ANTILIPEMIC: STATINS	717706	144	1.1396	ANTILIPEMIC: STATINS
incode1_dad_incode	1FE89LA	764	144	1.1396	Excision total, tooth using incision [to remove erupted or soft tissue covered tooth]
incode1_nacrs_incode	1TA03JASQ	213	144	1.1396	Immobilization, shoulder joint using sling
dx10code1_nacrs_icd1	N179	2364	146	1.1394	Acute renal failure, unspecified
feecode_ohip_fee	L634	309103	147	1.1376	LAB.MED-MICROBIOL.- CULTURES- URINE,INCL.CALIBR.LOOP QUANTITN.

feecode_ohip_fee	J135	123328	148	1.1351	DIAG.ULTRASOUND ABD./RETROPERIT-ABDOMIN SCAN COMPLETE
feecode_ohip_fee	J202	67876	149	1.1350	DIAG.ULTRASOUND-DUPLEX SCAN SIMULT.REAL TIME.B MOD.PERIP.ART
feecode_ohip_fee	L393	1055280	150	1.1346	LAB.MED-HEMATOLOGY-COMPLETE BLOOD COUNT
feecode_ohip_fee	X232	60551	151	1.1346	DIAG.RAD.-PELVIS WITH I.V. CONTRAST
feecode_ohip_fee	L309	83329	152	1.1326	LAB.MED-RADIOASSAYS-FOLATE INC.SERUM FOLATE + HEMATOCRIT
feecode_ohip_fee	L634	309103	153	1.1311	LAB.MED-MICROBIOL.-CULTURES-URINE,INCL.CALIBR LOOP QUANTITN.
feecode_ohip_fee	H123	65147	154	1.1292	EMERG.DEPT.PHYS.ON DUTY 12MN-8AM MULT.SYST.ASESS.
feecode_ohip_fee	H104	38460	155	1.1278	GP-REASSESS-EMERG DEPT-PHYSICIAN ON DUTY M-F DAYS
subclnam_odb_hdps	SULFONAMID ES, TRIMETROPRIM AND COMBINATIO N	66971	157	1.1275	SULFONAMIDES, TRIMETROPRIM AND COMBINATION
dx10code1_nacrs_icd1	J069	7293	157	1.1275	Acute upper respiratory infection, unspecified
incode1_nacrs_incode	3PC20WA	656	157	1.1275	Computerized tomography [CT], kidney without enhancement (contrast)
feecode_ohip_fee	L329	431924	159	1.1263	LAB. MED.-RADIO ASSAYS-FERRITIN
feecode_ohip_fee	G571	218907	160	1.1253	ECHOCARDIOGRAPHY COMPL.STUDY 1&2DIM PROF.COMP.P1
feecode_ohip_fee	G578	218726	161	1.1242	CARD.DOPPLER&COMPL.1&2DI M ECHOCARDIOGRAPHY PRO.COMP.P1
feecode_ohip_fee	L165	62715	162	1.1130	LAB. MED.-BIOCHEM.-MAGNESIUM
subclnam_odb_hdps	ANTIBIOTICS	110145	164	1.1086	ANTIBIOTICS
incode1_dad_incode	1CL89VRLN	1613	164	1.1086	Excision total, lens extracapsular phacoemulsification technique with insertion of rigid posterior chamber lens prosthesis (e.g. sulcus fixated)
incode1_nacrs_incode	1KX53HAFT	1364	164	1.1086	Implantation of internal device, vein NEC of intravenous catheter using percutaneous approach
subclnam_odb_hdps	ANTI-CHOLINERGIC S	94866	167	1.1072	ANTI-CHOLINERGICS
incode1_dad_incode	1CL59LAAG	3097	167	1.1072	Destruction, lens using open approach and laser
incode1_nacrs_incode	1GZ35CAR3	4745	167	1.1072	Pharmacotherapy (local), respiratory system NEC using antiasthmatic agent
feecode_ohip_fee	L253	589846	169	1.1048	LAB. MED.-BIOCHEM.-URINALYSIS, ROUTINE

subclnam_odb_hdps	ANTIDIARRHEA	12570	170	1.1044	ANTIDIARRHEA
feecode_ohip_fee	L191	646231	171	1.1018	LAB. MED.-BIOCHEM.-PHOSPHATASE, ALKALINE
feecode_ohip_fee	L252	462605	172	1.1003	LAB. MED.-BIOCHEM.-URIC ACID
dicode_ohip_dx	785	240003	173	1.0963	Chest pain, tachycardia, syncope, shock, edema, masses
feecode_ohip_fee	L341	821271	174	1.0957	LAB. MED.-RADIOASSAYS-TSH
feecode_ohip_fee	L222	493911	175	1.0956	LAB. MED.-BIOCHEM.-SGOT
dx10code1_nacrs_icd1	N19	1027	176	1.0938	Unspecified kidney failure
subclnam_odb_hdps	ANTI-CHOLINERGICS	94866	178	1.0929	ANTI-CHOLINERGICS
incode1_dad_incode	1CL59LAAG	3097	178	1.0929	Destruction, lens using open approach and laser
incode1_nacrs_incode	1GZ35CAR3	4745	178	1.0929	Pharmacotherapy (local), respiratory system NEC using antiasthmatic agent
feecode_ohip_fee	L445	159426	180	1.0922	LAB. MED.-HEMATOLOGY-PROTHROMBIN TIME
dicode_ohip_dx	427	122502	181	1.0918	Paroxysmal tachycardia, atrial or ventricular flutter or fibrillation, cardiac arrest, other arrhythmias
subclnam_odb_hdps	BRONCHODILATOR AND ANTI-INFLAMMATORY COMBINATION	102306	183	1.0903	BRONCHODILATOR AND ANTI-INFLAMMATORY COMBINATION
dicode_ohip_dx	162	11934	183	1.0903	Bronchus, lung
incode1_nacrs_incode	1YB80LA	1944	183	1.0903	Repair, skin of forehead using apposition technique [e.g. suturing, stapling]
subclnam_odb_hdps	SULFONAMIDES, TRIMETROPRIM AND COMBINATION	66971	186	1.0890	SULFONAMIDES, TRIMETROPRIM AND COMBINATION
dx10code1_nacrs_icd1	J069	7293	186	1.0890	Acute upper respiratory infection, unspecified
incode1_nacrs_incode	3PC20WA	656	186	1.0890	Computerized tomography [CT], kidney without enhancement (contrast)
feecode_ohip_fee	L093	602368	188	1.0886	LAB. MED.-BIOCHEM. GLYCOSYLATED HAEMOGLOBIN
subclnam_odb_hdps	INSULINS	61768	190	1.0874	INSULINS
incode1_dad_incode	1NQ87BA	3537	190	1.0874	Excision partial, rectum endoscopic per orifice approach closure by apposition technique [e.g. suturing, stapling] or no closure required (for tissue regeneration)
incode1_nacrs_incode	1ZZ35HAJ2	154	190	1.0874	Pharmacotherapy, total body hormonal agents, excluding sex hormones percutaneous approach [intramuscular, intravenous,

					subcutaneous, intradermal] corticosteroid agent (systemic)
subclnam_odb_hdps	BRONCHODILATOR AND ANTI-INFLAMMATORY COMBINATION	102306	193	1.0858	BRONCHODILATOR AND ANTI-INFLAMMATORY COMBINATION
dicode_ohip_dx	162	11934	193	1.0858	Bronchus, lung
incode1_nacrs_incode	1YB80LA	1944	193	1.0858	Repair, skin of forehead using apposition technique [e.g. suturing, stapling]
dicode_ohip_dx	496	52396	196	1.0848	Other chronic obstructive pulmonary disease
dx10code1_nacrs_icd1	L0300	836	196	1.0848	Cellulitis of finger
incode1_dad_incode	1YD87LAXXE	511	196	1.0848	Excision partial, skin of nose open [excisional] approach using local flap [e.g. advancement, transposition or rotation flap]
subclnam_odb_hdps	ANTIBIOTICS	110145	199	1.0848	ANTIBIOTICS
incode1_dad_incode	1CL89VRLN	1613	199	1.0848	Excision total, lens extracapsular phacoemulsification technique with insertion of rigid posterior chamber lens prosthesis (e.g. sulcus fixated)
incode1_nacrs_incode	1KX53HAFT	1364	199	1.0848	Implantation of internal device, vein NEC of intravenous catheter using percutaneous approach

eTable 5. Covariates Included in HDPS Score for Matched Subcohort With Known Baseline eGFR and Serum Potassium Values

Type of Code	Exact Code Label	Frequency	Rank	Bias Multiplier	Code description
feecode_ohip_fee	L251	166674	1	1.4779	LAB.MED.-BIOCHEM.-UREA NITROGEN (B.U.N.)
feecode_ohip_fee	E083	83542	2	1.4683	Subsequent visit by the MRP, to subsequent visit, C122, C123, C124, C142, C143, C882 or C982
feecode_ohip_fee	C124	108303	3	1.4445	DAY OF DISCHARGE VISIT - MOST RESPONSIBLE PHYS
feecode_ohip_fee	X091	420294	4	1.4305	DIAGNOSTIC RADIOLOGY CHEST 2 VIEWS
feecode_ohip_fee	E083	83542	5	1.4190	Subsequent visit by the MRP, to subsequent visit, C122, C123, C124, C142, C143, C882 or C982
feecode_ohip_fee	L251	166674	6	1.4110	LAB.MED.-BIOCHEM.-UREA NITROGEN (B.U.N.)
feecode_ohip_fee	X090	99519	7	1.3888	DIAGNOSTIC RADIOLOGY CHEST SINGLE VIEW
dicode_ohip_dx	584	14702	8	1.3836	Acute renal failure
feecode_ohip_fee	L800	41796	9	1.3731	LAB.MED.-ANAT PATH,HIST,CYTO- BLOOD FILM INTERPRETATION
subclnam_odb_hdps	IRON PREPARATIONS	95479	11	1.3567	IRON PREPARATIONS
incode1_dad_incode	1NQ87BAFA	696	11	1.3567	Excision partial, rectum endoscopic per orifice approach encirclage device
incode1_nacrs_incode	1ZZ35HAK0	375	11	1.3567	Pharmacotherapy, total body general antiinfective agents percutaneous approach [intramuscular, intravenous, subcutaneous, intradermal] antiinfective NOS
feecode_ohip_fee	W010	43651	13	1.3510	MONTHLY MANAGEMENT FEE - LTC
feecode_ohip_fee	E083	83542	14	1.3457	Subsequent visit by the MRP, to subsequent visit, C122, C123, C124, C142, C143, C882 or C982
dicode_ohip_dx	428	70502	15	1.3423	Congestive heart failure
subclnam_odb_hdps	IRON PREPARATIONS	95479	17	1.3218	IRON PREPARATIONS
incode1_dad_incode	1NQ87BAFA	696	17	1.3218	Excision partial, rectum endoscopic per orifice approach encirclage device
incode1_nacrs_incode	1ZZ35HAK0	375	17	1.3218	Pharmacotherapy, total body general antiinfective agents percutaneous approach [intramuscular, intravenous, subcutaneous, intradermal] antiinfective NOS

feecode_ohip_fee	C002	71601	20	1.3181	SUBSEQ.VISITS-TO 5WKS-F.P./G.P.-HOSP.
dicode_ohip_dx	437	7846	20	1.3181	Chronic arteriosclerotic cerebrovascular disease, hypertensive encephalopathy
incode1_dad_incode	1VG53LAPNN	1042	20	1.3181	Implantation of internal device, knee joint with synthetic material (e.g. bone paste, cement, Dynagraft, Osteoset) using dual component prosthetic device
dx10code1_dad_icd10	H409	1490	23	1.3123	Glaucoma, unspecified
incode1_dad_incode	1PM59BAAG	301	23	1.3123	Destruction, bladder endoscopic per orifice approach using laser
incode1_nacrs_incode	3GY10VA	138556	23	1.3123	Xray, thoracic cavity NEC without contrast (with or without fluoroscopy)
dicode_ohip_dx	428	70502	25	1.3118	Congestive heart failure
feecode_ohip_fee	X090	99519	26	1.3052	DIAGNOSTIC RADIOLOGY CHEST SINGLE VIEW
dicode_ohip_dx	584	14702	27	1.2885	Acute renal failure
subclnam_odb_hdps	ANTIPSYCHOTIC AGENTS	66382	30	1.2636	ANTIPSYCHOTIC AGENTS
feecode_ohip_fee	A135	217035	30	1.2636	CONSULT.-INTERNAL MED.
dx10code1_dad_icd10	C541	617	30	1.2636	Malignant neoplasm of endometrium
incode1_dad_incode	1FU89NZ	479	30	1.2636	Excision total, thyroid gland open approach [e.g. neck incision] using device NEC
incode1_nacrs_incode	1TV73JA	840	30	1.2636	Reduction, radius and ulna using closed (external) approach
dicode_ohip_dx	428	70502	33	1.2619	Congestive heart failure
feecode_ohip_fee	X091	420294	34	1.2586	DIAGNOSTIC RADIOLOGY CHEST 2 VIEWS
feecode_ohip_fee	L045	185370	35	1.2436	LAB. MED.-BIOCHEM.-CALCIUM
feecode_ohip_fee	L061	50668	36	1.2389	LAB. MED.-BIOCHEM.-CO2 CONTENT, CO2 COMBINING POWER BICARB.
feecode_ohip_fee	L061	50668	37	1.2336	LAB. MED.-BIOCHEM.-CO2 CONTENT, CO2 COMBINING POWER BICARB.
feecode_ohip_fee	C002	71601	39	1.2286	SUBSEQ.VISITS-TO 5WKS-F.P./G.P.-HOSP.
dicode_ohip_dx	437	7846	39	1.2286	Chronic arteriosclerotic cerebrovascular disease, hypertensive encephalopathy
incode1_dad_incode	1VG53LAPNN	1042	39	1.2286	Implantation of internal device, knee joint with synthetic material (e.g. bone paste, cement, Dynagraft, Osteoset) using dual component prosthetic device
subclnam_odb_hdps	PROTON PUMP INHIBITORS	414010	41	1.2282	PROTON PUMP INHIBITORS

feecode_ohip_fee	H105	43180	42	1.2280	INTERIM INPATIENT ADMISSION ORDERS
feecode_ohip_fee	L194	88378	43	1.2278	LAB. MED.-BIOCHEM.-PHOSPHORUS
subclnam_odb_hdps	IRON PREPARATIONS	95479	45	1.2268	IRON PREPARATIONS
incode1_dad_incode	1NQ87BAFA	696	45	1.2268	Excision partial, rectum endoscopic per orifice approach encirclage device
incode1_nacrs_incode	1ZZ35HAK0	375	45	1.2268	Pharmacotherapy, total body general antiinfective agents percutaneous approach [intramuscular, intravenous, subcutaneous, intradermal] antiinfective NOS
feecode_ohip_fee	L628	60796	47	1.1993	LAB. MED.-MICROBIOL.-CULTURES-OTHER SWABS-CULT. AND SMEAR
subclnam_odb_hdps	STOOL SOFTENERS	130707	49	1.1895	STOOL SOFTENERS
incode1_dad_incode	1QT87BAGX	981	49	1.1895	Excision partial, prostate endoscopic per orifice approach [transurethral] using device NEC
incode1_nacrs_incode	3OT30DA	7539	49	1.1895	Ultrasound, abdominal cavity alone
dicode_ohip_dx	584	14702	51	1.1844	Acute renal failure
feecode_ohip_fee	W010	43651	52	1.1765	MONTHLY MANAGEMENT FEE - LTC
feecode_ohip_fee	E078	160286	53	1.1714	MEDSPECASSESS&RE-ASSESS,COMPLEXMEDSPEC RE-ASSESS&PART ASSES
subclnam_odb_hdps	INSULINS	61768	55	1.1711	INSULINS
incode1_dad_incode	1NQ87BA	3537	55	1.1711	Excision partial, rectum endoscopic per orifice approach closure by apposition technique [e.g. suturing, stapling] or no closure required (for tissue regeneration)
incode1_nacrs_incode	1ZZ35HAJ2	154	55	1.1711	Pharmacotherapy, total body hormonal agents, excluding sex hormones percutaneous approach [intramuscular, intravenous, subcutaneous, intradermal] corticosteroid agent (systemic)
feecode_ohip_fee	E078	160286	57	1.1645	MEDSPECASSESS&RE-ASSESS,COMPLEXMEDSPEC RE-ASSESS&PART ASSES
feecode_ohip_fee	E078	160286	58	1.1613	MEDSPECASSESS&RE-ASSESS,COMPLEXMEDSPEC RE-ASSESS&PART ASSES
feecode_ohip_fee	L194	88378	59	1.1608	LAB. MED.-BIOCHEM.-PHOSPHORUS
feecode_ohip_fee	L045	185370	60	1.1558	LAB. MED.-BIOCHEM.-CALCIUM

feecode_ohip_fee	G395	37845	61	1.1558	D./T. PROC-OTHER RESUSCITATION-1ST 1/4HR. PER PHYS.
feecode_ohip_fee	C002	71601	63	1.1463	SUBSEQ.VISITS-TO 5WKS-F.P./G.P.-HOSP.
dxcode_ohip_dx	437	7846	63	1.1463	Chronic arteriosclerotic cerebrovascular disease, hypertensive encephalopathy
incode1_dad_incode	1VG53LAPNN	1042	63	1.1463	Implantation of internal device, knee joint with synthetic material (e.g. bone paste, cement, Dynagraft, Osteoset) using dual component prosthetic device
subclnam_odb_hdps	STOOL SOFTENERS	130707	66	1.1461	STOOL SOFTENERS
incode1_dad_incode	1QT87BAGX	981	66	1.1461	Excision partial, prostate endoscopic per orifice approach [transurethral] using device NEC
incode1_nacrs_incode	3OT30DA	7539	66	1.1461	Ultrasound, abdominal cavity alone
feecode_ohip_fee	K002	35038	68	1.1454	INTERVIEWS-RELATIVES ON BEHALF OF PATIENT PER 1/2 HOUR
feecode_ohip_fee	L208	47045	69	1.1413	LAB. MED.-BIOCHEM.PROTEIN TOTAL NOT WITH L085 OR L086
feecode_ohip_fee	W010	43651	70	1.1403	MONTHLY MANAGEMENT FEE - LTC
feecode_ohip_fee	L812	79646	71	0.8774	LAB MED.CYTOLGY-CERVICOVAG SPEC
feecode_ohip_fee	L733	75160	72	0.8792	CERVICOVAGINAL SPECIMEN (MONOLAYER CELL METHODOLOGY)
feecode_ohip_fee	X178	57838	73	0.8828	01OCT1992 - [DIAG. RAD. Intravenous angiography - with quantification] 01OCT2010 - [Mammogram - No Signs or Symptoms - bilateral]
feecode_ohip_fee	K070	52771	74	1.1316	HOME CARE APPLICATION
feecode_ohip_fee	X101	43926	75	1.1309	DIAG.RADIOLOGY ABDOMEN TWO/MORE VIEWS
subclnam_odb_hdps	NARCOTICS: OPIATE AGONISTS	345857	77	1.1277	NARCOTICS: OPIATE AGONISTS
dx10code1_nacrs_icd1	I471	1207	77	1.1277	Supraventricular tachycardia
incode1_nacrs_incode	2HZ24JAXJ	25058	77	1.1277	Electrophysiological measurement, heart external application using recording electrodes (or ECG NOS)
subclnam_odb_hdps	PROTON PUMP INHIBITORS	414010	79	1.1272	PROTON PUMP INHIBITORS
subclnam_odb_hdps	STOOL SOFTENERS	130707	81	1.1267	STOOL SOFTENERS

incode1_dad_incode	1QT87BAGX	981	81	1.1267	Excision partial, prostate endoscopic per orifice approach [transurethral] using device NEC
incode1_nacrs_incode	3OT30DA	7539	81	1.1267	Ultrasound, abdominal cavity alone
subclnam_odb_hdps	NARCOTICS: OPIATE AGONISTS	345857	84	1.1225	NARCOTICS: OPIATE AGONISTS
dx10code1_nacrs_icd1	I471	1207	84	1.1225	Supraventricular tachycardia
incode1_nacrs_incode	2HZ24JAXJ	25058	84	1.1225	Electrophysiological measurement, heart external application using recording electrodes (or ECG NOS)
feecode_ohip_fee	L329	431924	86	1.1223	LAB. MED.-RADIO ASSAYS-FERRITIN
dxcode_ohip_dx	486	61513	88	1.1222	Pneumonia - all types
dx10code1_nacrs_icd1	K922	5157	88	1.1222	Gastrointestinal haemorrhage, unspecified
incode1_dad_incode	1YB87LA	355	88	1.1222	Excision partial, skin of forehead open [excisional] approach without tissue repair
dxcode_ohip_dx	486	61513	91	1.1177	Pneumonia - all types
dx10code1_nacrs_icd1	K922	5157	91	1.1177	Gastrointestinal haemorrhage, unspecified
incode1_dad_incode	1YB87LA	355	91	1.1177	Excision partial, skin of forehead open [excisional] approach without tissue repair
subclnam_odb_hdps	ANTI-CHOLINERGICS	94866	94	1.1158	ANTI-CHOLINERGICS
incode1_dad_incode	1CL59LAAG	3097	94	1.1158	Destruction, lens using open approach and laser
incode1_nacrs_incode	1GZ35CAR3	4745	94	1.1158	Pharmacotherapy (local), respiratory system NEC using antiasthmatic agent
feecode_ohip_fee	J128	57753	96	1.1143	DIAG. ULTRASOUND-ABDOMEN-ABDOMINAL SCAN -LIMITED STUDY.
dx10code1_nacrs_icd1	N179	2364	97	1.1108	Acute renal failure, unspecified
subclnam_odb_hdps	NUTRITIONAL PRODUCTS	4509	100	1.1097	NUTRITIONAL PRODUCTS
dxcode_ohip_dx	277	13103	100	1.1097	Other metabolic disorders
dx10code1_dad_icd10	H250	650	100	1.1097	Senile incipient cataract
dx10code1_nacrs_icd1	I500	13231	100	1.1097	Congestive heart failure
incode1_nacrs_incode	3AN20WA	20601	100	1.1097	Computerized tomography [CT], brain without enhancement (contrast)

feecode_ohip_fee	E430	66310	103	0.9030	D/T PROC-PAP SMEAR PERFORMED OUTSIDE OF HOSP- ADD
feecode_ohip_fee	L445	159426	104	1.1044	LAB. MED.-HEMATOLOGY- PROTHROMBIN TIME
feecode_ohip_fee	L330	37384	105	1.1036	LAB. MED.-RADIOASSAYS- PARATHYROID HORMONE
subclnam_odb_hdps	NARCOTICS: OPIATE AGONISTS	345857	107	1.1026	NARCOTICS: OPIATE AGONISTS
dx10code1_nacrs_icd_1	I471	1207	107	1.1026	Supraventricular tachycardia
incode1_nacrs_incode	2HZ24JAXJ	25058	107	1.1026	Electrophysiological measurement, heart external application using recording electrodes (or ECG NOS)
feecode_ohip_fee	H103	153763	109	1.1014	MULTIPLE SYSTEMS ASSESSMENT-G.P.-EMERGENCY- DR. ON DUTY
feecode_ohip_fee	H102	42462	110	1.0983	COMPREHENSIVE ASSESS. & CARE
feecode_ohip_fee	L208	47045	111	1.0980	LAB. MED.-BIOCHEM.PROTEIN TOTAL NOT WITH L085 OR L086
feecode_ohip_fee	L005	437299	112	1.0979	LAB. MED.-BIOCHEM.-ALBUMIN, QUANTITATIVE
feecode_ohip_fee	J202	67876	113	1.0903	DIAG.ULTRASOUND-DUPLEX SCAN SIMULT.REAL TIME.B MOD.PERIP.ART
feecode_ohip_fee	X400	83852	114	1.0885	DIAG.RADIOLOGY-COMPUTED TOMOGRAPHY-HEAD-WITHOUT I.V.CONTRAST
feecode_ohip_fee	H133	85680	115	1.0881	PHYSICIAN ON DUTY IN ER - EVENINGS (18:00-24:00)
feecode_ohip_fee	H104	38460	116	1.0877	GP-REASSESS-EMERG DEPT- PHYSICIAN ON DUTY M-F DAYS
subclnam_odb_hdps	SULFONAMIDES, TRIMETROPRIM AND COMBINATION	66971	118	1.0876	SULFONAMIDES, TRIMETROPRIM AND COMBINATION
dx10code1_nacrs_icd_1	J069	7293	118	1.0876	Acute upper respiratory infection, unspecified
incode1_nacrs_incode	3PC20WA	656	118	1.0876	Computerized tomography [CT], kidney without enhancement (contrast)
subclnam_odb_hdps	INSULINS	61768	121	1.0868	INSULINS
incode1_dad_incode	1NQ87BA	3537	121	1.0868	Excision partial, rectum endoscopic per orifice approach closure by apposition technique [e.g. suturing, stapling] or no closure required (for tissue regeneration)
incode1_nacrs_incode	1ZZ35HAJ2	154	121	1.0868	Pharmacotherapy, total body hormonal agents, excluding sex hormones percutaneous approach [intramuscular,

					intravenous, subcutaneous, intradermal] corticosteroid agent (systemic)
feecode_ohip_fee	L330	37384	123	1.0864	LAB. MED.-RADIOASSAYS-PARATHYROID HORMONE
subclnam_odb_hdps	PROTON PUMP INHIBITORS	414010	124	1.0839	PROTON PUMP INHIBITORS
subclnam_odb_hdps	ACE INHIBITORS COMBINATION	47144	126	0.9231	ACE INHIBITORS COMBINATION
feecode_ohip_fee	A003	452298	126	0.9231	GEN. ASSESS. -F.P./G.P.
incode1_nacrs_incode	1CL59LAAG	183	126	0.9231	Destruction, lens using open approach and laser
feecode_ohip_fee	X407	47339	128	1.0827	DIAG. RADIOLOGY-COMPUTED TOMOGRAPHY-THORAX-WITH I.V.CONTR.
subclnam_odb_hdps	DIABETES DIAGNOSTIC	243477	130	1.0817	DIABETES DIAGNOSTIC
dx10code1_dad_icd10	D126	4060	130	1.0817	Benign neoplasm of colon, unspecified
incode1_nacrs_incode	1YT80LA	941	130	1.0817	Repair, skin of arm using apposition technique [suture]
subclnam_odb_hdps	DIABETES DIAGNOSTIC	243477	133	1.0816	DIABETES DIAGNOSTIC
dx10code1_dad_icd10	D126	4060	133	1.0816	Benign neoplasm of colon, unspecified
incode1_nacrs_incode	1YT80LA	941	133	1.0816	Repair, skin of arm using apposition technique [suture]
feecode_ohip_fee	H153	111275	135	1.0801	EMERG.DEPT.PHYS.ON DUTY SAT./SUN/HOLIDAY MULT.SYST.ASSESS.
feecode_ohip_fee	X410	61440	136	1.0755	DIAG. RADIOLOGY-COMPUTED TOMOGRAPHY-ABDOMEN-WITH I.V.CONTR.
feecode_ohip_fee	L634	309103	137	1.0755	LAB.MED-MICROBIOL.-CULTURES-URINE,INCL.CALIBR LOOP QUANTITN.
feecode_ohip_fee	J135	123328	138	1.0752	DIAG.ULTRASOUND ABD./RETROPERIT-ABDOMIN SCAN COMPLETE
subclnam_odb_hdps	ANTI-CHOLINERGICS	94866	140	1.0734	ANTI-CHOLINERGICS
incode1_dad_incode	1CL59LAAG	3097	140	1.0734	Destruction, lens using open approach and laser
incode1_nacrs_incode	1GZ35CAR3	4745	140	1.0734	Pharmacotherapy (local), respiratory system NEC using antiasthmatic agent
feecode_ohip_fee	Q131	42841	142	0.9323	MAMMOGRAM TRACKING CODE
feecode_ohip_fee	L179	109551	143	0.9323	TRACKING CODE-COLON CANCER CHECK

feecode_ohip_fee	X232	60551	144	1.0717	DIAG.RAD.-PELVIS WITH I.V. CONTRAST
subclnam_odb_hdps	ANTI-CHOLINERGICS	94866	146	1.0717	ANTI-CHOLINERGICS
incode1_dad_incode	1CL59LAAG	3097	146	1.0717	Destruction, lens using open approach and laser
incode1_nacrs_incode	1GZ35CAR3	4745	146	1.0717	Pharmacotherapy (local), respiratory system NEC using antiasthmatic agent
feecode_ohip_fee	L165	62715	148	1.0714	LAB. MED.-BIOCHEM.-MAGNESIUM
subclnam_odb_hdps	SULFONAMIDES, TRIMETROPRIM AND COMBINATION	66971	150	1.0710	SULFONAMIDES, TRIMETROPRIM AND COMBINATION
dx10code1_nacrs_icd1	J069	7293	150	1.0710	Acute upper respiratory infection, unspecified
incode1_nacrs_incode	3PC20WA	656	150	1.0710	Computerized tomography [CT], kidney without enhancement (contrast)
subclnam_odb_hdps	DIABETES DIAGNOSTIC	243477	153	1.0694	DIABETES DIAGNOSTIC
dx10code1_dad_icd10	D126	4060	153	1.0694	Benign neoplasm of colon, unspecified
incode1_nacrs_incode	1YT80LA	941	153	1.0694	Repair, skin of arm using apposition technique [suture]
feecode_ohip_fee	H123	65147	155	1.0670	EMERG.DEPT.PHYS.ON DUTY 12MN-8AM MULT.SYST.ASSESS.
subclnam_odb_hdps	ANTIDIARRHEA	12570	156	1.0668	ANTIDIARRHEA
feecode_ohip_fee	L309	83329	157	1.0660	LAB.MED-RADIOASSAYS-FOLATE INC.SERUM FOLATE + HEMATOCRIT
feecode_ohip_fee	G571	218907	158	1.0642	ECHOCARDIOGRAPHY COMPL.STUDY 1&2DIM PROF.COMP.P1
feecode_ohip_fee	G578	218726	159	1.0623	CARD.DOPPLER&COMPL.1&2DIM ECHOCARDIOGRAPHY PRO.COMP.P1
feecode_ohip_fee	X155	127658	160	0.9417	BONE MINERAL DENSITY HIGH RISK 2+SITES
feecode_ohip_fee	Q150	81854	161	0.9421	FOBT DISTRIBUTION AND COUNSELLING FEE
feecode_ohip_fee	K132	61948	162	0.9434	Periodic health visit - adult 65 years of age and older
feecode_ohip_fee	L634	309103	163	1.0577	LAB.MED-MICROBIOL.-CULTURES-URINE,INCL.CALIBR.LOOP QUANTITN.
subclnam_odb_hdps	NUTRITIONAL PRODUCTS	4509	166	1.0560	NUTRITIONAL PRODUCTS

dxcode_ohip_dx	277	13103	166	1.0560	Other metabolic disorders
dx10code1_dad_icd10	H250	650	166	1.0560	Senile incipient cataract
dx10code1_nacrs_icd1	I500	13231	166	1.0560	Congestive heart failure
incode1_nacrs_incode	3AN20WA	20601	166	1.0560	Computerized tomography [CT], brain without enhancement (contrast)
subclnam_odb_hdps	BRONCHODILATOR AND ANTI-INFLAMMATORY COMBINATION	102306	170	1.0555	BRONCHODILATOR AND ANTI-INFLAMMATORY COMBINATION
dxcode_ohip_dx	162	11934	170	1.0555	Bronchus, lung
incode1_nacrs_incode	1YB80LA	1944	170	1.0555	Repair, skin of forehead using apposition technique [e.g. suturing, stapling]
subclnam_odb_hdps	BRONCHODILATOR AND ANTI-INFLAMMATORY COMBINATION	102306	173	1.0550	BRONCHODILATOR AND ANTI-INFLAMMATORY COMBINATION
dxcode_ohip_dx	162	11934	173	1.0550	Bronchus, lung
incode1_nacrs_incode	1YB80LA	1944	173	1.0550	Repair, skin of forehead using apposition technique [e.g. suturing, stapling]
dxcode_ohip_dx	785	240003	175	1.0542	Chest pain, tachycardia, syncope, shock, edema, masses
subclnam_odb_hdps	ANTIBIOTICS	110145	177	1.0542	ANTIBIOTICS
incode1_dad_incode	1CL89VRLN	1613	177	1.0542	Excision total, lens extracapsular phacoemulsification technique with insertion of rigid posterior chamber lens prosthesis (e.g. sulcus fixated)
incode1_nacrs_incode	1KX53HAFT	1364	177	1.0542	Implantation of internal device, vein NEC of intravenous catheter using percutaneous approach
feecode_ohip_fee	J163	49910	179	1.0523	PELVIS, LIMITED STUDY OTHER THAN PREGNANCY
feecode_ohip_fee	L445	159426	180	1.0517	LAB. MED.-HEMATOLOGY-PROTHROMBIN TIME
subclnam_odb_hdps	BRONCHODILATOR AND ANTI-INFLAMMATORY COMBINATION	102306	182	1.0507	BRONCHODILATOR AND ANTI-INFLAMMATORY COMBINATION
dxcode_ohip_dx	162	11934	182	1.0507	Bronchus, lung
incode1_nacrs_incode	1YB80LA	1944	182	1.0507	Repair, skin of forehead using apposition technique [e.g. suturing, stapling]
subclnam_odb_hdps	ANGIOTENSIN II ANTAGONIST	238399	185	1.0501	ANGIOTENSIN II ANTAGONIST
incode1_dad_incode	1CJ52LAAG	453	185	1.0501	Drainage, anterior chamber (of eye) using laser

incode1_nacrs_incode	1GV52HA	221	185 1.0501	Drainage, pleura using percutaneous (needle) approach
subclnam_odb_hdps	INSULINS	61768	188 1.0489	INSULINS
incode1_dad_incode	1NQ87BA	3537	188 1.0489	Excision partial, rectum endoscopic per orifice approach closure by apposition technique [e.g. suturing, stapling] or no closure required (for tissue regeneration)
incode1_nacrs_incode	1ZZ35HAJ2	154	188 1.0489	Pharmacotherapy, total body hormonal agents, excluding sex hormones percutaneous approach [intramuscular, intravenous, subcutaneous, intradermal] corticosteroid agent (systemic)
dx10code1_nacrs_icd1	N390	24359	190 1.0484	Urinary tract infection, site not specified
feecode_ohip_fee	L005	437299	191 1.0467	LAB. MED.-BIOCHEM.-ALBUMIN, QUANTITATIVE
subclnam_odb_hdps	PARATHYROID AGENTS	485	193 1.0466	PARATHYROID AGENTS
dxcod_ohip_dx	289	18436	193 1.0466	Other diseases of blood, marrow, spleen
incode1_nacrs_incode	3ET10VA	305	193 1.0466	Xray, nose without contrast (e.g. plain film) (with or without fluoroscopy)
subclnam_odb_hdps	ANTIMETABOLITES	24040	196 1.0463	ANTIMETABOLITES
feecode_ohip_fee	A131	41830	196 1.0463	COMPLEX MEDICAL SPECIFIC RE-ASSESSMENT
incode1_nacrs_incode	1TA73JA	721	196 1.0463	Reduction, shoulder joint using closed (external) approach
subclnam_odb_hdps	ANTIBIOTICS	110145	199 1.0452	ANTIBIOTICS
incode1_dad_incode	1CL89VRLN	1613	199 1.0452	Excision total, lens extracapsular phacoemulsification technique with insertion of rigid posterior chamber lens prosthesis (e.g. sulcus fixated)
incode1_nacrs_incode	1KX53HAFT	1364	199 1.0452	Implantation of internal device, vein NEC of intravenous catheter using percutaneous approach

eTable 6. Baseline Characteristics of Sodium Polystyrene Sulfonate (SPS) and Non-SPS Users Post-Matching in the Subcohort With Known Baseline eGFR and Serum Potassium Values

Characteristic	Matched		
	SPS (%)	Control (%)	Std. Diff. (%) [†]
Total, N	7,557	18,492	
Demographics, (%):			
Age (years, mean, SD)	78.3 (7.4)	78.3 (4.7)	0.7
Men	55.4	55.4	0
Long term care	12.6	15.4	8
Reside rurally	14.4	11.6	8
Comorbidities, (%):			
Hypertension	54.4	52.4	4
Diabetes mellitus	54.4	54.4	0
Stroke/transient ischemic attack	6.0	5.3	3
Atrial fibrillation	7.8	8.1	1
Peripheral vascular disease	1.6	1.4	1
Congestive heart failure	9.4	9.4	0
Coronary artery disease	19.8	19.4	1
Angina	2.9	3.1	1
Prior Acute kidney injury	7.8	7.8	0
Current dialysis	0.6	0.6	0
Gastrointestinal surgery	0.8	0.8	1
Laboratory values (%):			
Potassium (mEq/L) ^{††} :			
< 4.0	1.2	2.4	8.9
4.0 to 4.9	16.8	15.6	3.2
5.0 to 6.0	60.4	80.9	46.2
> 6.0	21.5	1.0	68.5
eGFR (ml/min/1.73m ²):			
<15	2.7	2.7	0
15 to 29	22.4	22.4	0
30 to 44	32.3	32.3	0

45 to 59	20.2	20.2	0
60 to 89	20.5	20.5	0
> 90	1.9	1.9	0
Access to care (% utilizing the following health service \geq 1 episode):			
Emergency department visits	70.8	66.2	8
Hospitalizations	27.5	24.1	6
Gastroenterologist visits	12.8	11.7	3
Nephrologist visits	30.9	31.1	0
Cardiology visits	53.9	50.6	5
Medications, N (%):			
Angiotensin-converting enzyme (ACE) inhibitors	49.0	45.7	6
Non-potassium sparing-diuretic	47.1	48.1	2
Potassium-sparing diuretic	6.9	6.9	0
Beta blocker	46.8	43.9	6
Angiotensin II receptor blocker (ARB)	33.2	34.9	4
Aldosterone receptor antagonist	6.0	5.4	2
Non-steroidal anti-inflammatory agent	18.0	16.2	5
Low molecular weight heparin	0.2	0.2	0

[†]Std. Diff. Standardized differences $>10\%$ are statistically significant and bolded. ^{††}Serum potassium levels were hard matched on categories of < or ≥ 5 meq/L

SPS sodium polystyrene sulfonate, % percentage

eTable 7. Association Between Sodium Polystyrene Sulfonate (SPS) Use and a Negative Control (Composite of Hospitalization or Emergency Room Visit for Cholecystitis, Diverticulitis or Appendicitis With 30-Day Follow-up)

Matched cohort ^a	Number of events (% total)	Time to event (median, IQR, days)	Incidence rate (95%CI, per 1000 person-years)	HR (95%CI)
SPS	86 (0.43)	13 (6,21)	53.46 (42.16-64.76)	1.22
No SPS	67 (0.33)	17 (6,26)	41.02 (31.20-50.84)	(0.89-1.69)

^a matched (greedy, without replacement) 1:1 to individuals without SPS on the logit of the HDPS (± 0.2 of the standard deviation) and the following: age, sex, chronic dialysis, history of diabetes, heart failure, acute kidney injury, previous hyperkalemia, medication use (beta-blocker, renin angiotensin aldosterone blockade), previous nephrologist visit and index date (within 1 year); additionally adjusted for place of residence