The RECORD statement – checklist of items, extended from the STROBE statement, that should be reported in observational studies using routinely collected health data.

	Item No.	STROBE items	Location in manuscript where items are reported	RECORD items	Location in manuscript where items are 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	(a)"Population-wide NS cohort" in first paragraph of Abstract (b) Paragraphs 2 (Methods) and 3 (Results) of Abstract	RECORD 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. RECORD 1.2: If applicable, the geographic region and timeframe within which the study took place should be reported in the title or abstract. RECORD 1.3: If linkage between databases was conducted for the study, this should be clearly stated in the title or abstract.	1.1) Please see Abstract: Methods. 1.2) Please see last sentence Abstract: Background; first sentence Abstract: Methods 1.3) Please see first sentence Abstract; Methods
Introduction					
Background rationale	2	Explain the scientific background and rationale for the investigation being reported	Background is provided in first 2 paragraphs of Introduction (i.e., implications of primary care provider attachment on access to care and outcome measures as surrogates for deficits in access). Study rationale provided in third paragraph of		

			introduction, with a summary of study objectives provided in finale sentence.		
Objectives	3	State specific objectives, including any prespecified hypotheses	Study objectives summarized in finale sentence of Interpretation.		
Methods					
Study Design	4	Present key elements of study design early in the paper	Study design recapitulated in first sentence of Methods (pg 3).		
Setting	5	Describe the setting, locations, and relevant dates, including periods of recruitment, exposure, follow-up, and data collection	(Target) Study population, setting (i.e., Nova Scotia population-wide) described in first paragraph of Methods. Study period indicates end of follow-up (i.e., Dec 2020). Description of data collection (i.e., Data Sources) described in second paragraph of Methods (pg 4). "Exposure" status articulated in final "Analysis" section paragraph of Methods (i.e., "on-" vs "off-waitlist)		
Participants	6	*(a) Cohort study* - Give the eligibility criteria, and the	(a) Inclusion criteria provided in first	RECORD 6.1: The methods of study population selection (such as codes or	6.1) We did not use data

		sources and methods of selection of participants. Describe methods of follow-up *Case-control study* - Give the eligibility criteria, and the sources and methods of case ascertainment and control selection. Give the rationale for the choice of cases and controls *Cross-sectional study* - Give the eligibility criteria, and the sources and methods of selection of participants *(b) Cohort study* - For matched studies, give matching criteria and number of exposed and unexposed *Case-control study* - For matched studies, give matching criteria and the number of controls per case	paragraph of Methods (pg 4) (b) Matching not applicable. Number/proportion of NS-wide cohort "ever on-waitlist" summarized in Table 1	algorithms used to identify subjects) should be listed in detail. If this is not possible, an explanation should be provided. RECORD 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. RECORD 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.	algorithms/codes to select the study population. See second sentence of Methods for inclusion criteria (page 4) 6.2) N/A (please see 6.1) 6.3) Novel linkage comprised Health Data Nova Scotia's (HDNS) Insured Patient Registry (IPR) and Nova Scotia Health's Need a Family Practice primary care provider waitlist database. As linkage only involved two databases, was by individual identifier (i.e., health card number) which is enumerated and provided by a common intermediary (Medavie), and the NAFPR database is entirely complete subset of the

					HDNS IPR, we deemed it uninformative to provide further detailed description or flow diagram figure of this linkage.
Variables	7	Clearly define all outcomes, exposures, predictors, potential confounders, and effect modifiers. Give diagnostic criteria, if applicable.	Key "outcome" measures (i.e., ED utilization, ACSC hospitalizations) described in 3rd paragraph of methods (pg 4). "Exposure" status articulated in final "Analysis" section paragraph of Methods (i.e., "on-" vs "off-waitlist) Potential confounders and covariables of interest used to describe study population in Table 1 described in Methods (under "Key Measures"	RECORD 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.	We have provided references for all algorithms under "Key Measures" subheading in Methods (page 5). Additionally, all algorithm derived indicators/measured are listed in supplemental table.
Data sources/ measurement	8	For each variable of interest, give sources of data and details of methods of assessment (measurement).	Data Sources) described in second paragraph of Methods (pg 4). Description of measurement		

		Describe comparability of assessment methods if there is more than one group	methods summarized under "Key Measures" in Methods		
Bias	9	Describe any efforts to address potential sources of bias	Please see Methods, pg 4. Multivariable analysis was used to adjust estimated change in incidence (incidence rate ratios) of key outcomes for potential confounders. Further, the study population extended to include the as wide a representation of the target population (Nova Scotians) to maximize external validity of findings.		
Study size	10	Explain how the study size was arrived at	Population (i.e., Nova Scotia) wide cohort.		
Quantitative variables	11	Explain how quantitative variables were handled in the analyses. If applicable, describe which groupings were chosen, and why	Please see Key Measures in Methods Age was categorized to highlight variation primary care provider waitlist (i.e., "exposure") utilization among population segments		

			most at risk of barriers to access to care (i.e., categorized into 5-year groups for ≥50 population; broader categories for younger). Charlson comorbidity index was categorized as this measure is highly skewed toward ≤1 in general population. Canadian Index of Multiple Deprivation was combined into a single summary score to avoid redundancy and multicollinearity in multivariable analyses. Finally, data intervals were collapsed into calendar quarters to facilitate comparability in the face of sparse data which arose for ACSC hospitalizations, particularly in stratified analyses.		
Statistical methods	12	(a) Describe all statistical methods, including those used to control for confounding	(a) Please see "Analysis" in Methods (pg 4)		

		(b) Describe any methods used to examine subgroups and interactions (c) Explain how missing data were addressed (d) *Cohort study* - If applicable, explain how loss to follow-up was addressed *Case-control study* - If applicable, explain how matching of cases and controls was addressed *Cross-sectional study* - If applicable, describe analytical methods taking account of sampling strategy (e) Describe any sensitivity analyses	Count (negative binomial) regression was used to compare crude differences in rates (i.e., rate ratios) between Nova Scotians "on-" or "off-" registry, as indicated in figures 2 and 3. Multivariable count regression was used to adjusted estimate incidence rate ratios when comparing changes in ED utilization or ACSC hospitalizations among COVID-19 "waves" with analogous prior year intervals. Chi square tests were used to highlight key differences in proportion when describing the study population. (b) Stratified analyses were used to examine subgroups by sex and age (please see Results, Pgs 6,7) (c) Missing data was addressed by excluding		

			individuals for analyses. Missing data were only encountered for less than 3% of the study population when including postal code linked data. (d) Nova Scotians were included if they were eligible for publicly insured health care and remained in the province. An individual no longer eligible for provincial health insurance was excluded for eligibility as a "denominator" corresponding calendar quarters. (e) Other than stratification by sex and age, no sensitivity analyses were conducted.		
Data access and cleaning methods		..		RECORD 12.1: Authors should describe the extent to which the investigators had access to the database population used to create the study population.	12.1)We had no access to the HDNS Insured Patient Database used to enumerate the study population (please see second

				RECORD 12.2: Authors should provide information on the data cleaning methods used in the study.	sentence under "Data Sources" subheading.) 12.2). We have no notable data cleaning to report as accessed administrative data is curated by HDNS
Linkage		..		RECORD 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.	Please see second sentence under "Data Sources" subheading.
Results					
Participants	13	(a) Report the numbers of individuals at each stage of the study (*e.g.*, numbers potentially eligible, examined for eligibility, confirmed eligible, included in the study, completing follow-up, and analysed) (b) Give reasons for non-participation at each stage. (c) Consider use of a flow diagram	(a/b)We do not have demarcated study "stages". Further the proportion of individuals leaving and entering the Nova Scotia-wide cohort over the study period was minimal and do not materially impact results. Calendar quarters were used to define intervals of analysis. We did not judge it useful to provide precise counts for individual "on-" and "off-	RECORD 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.	We included all publicly insured Nova Scotians 5 year or older as of April 1, 2016. No additional data "filtering" was conducted.

			waitlist for all 16 calendar quarters include and doubt whether this would contribute to transparency of findings to any material extent. (c)We provided a plot of cohort members "on-waitlist" over the 16 calendar quarter study period in Figure 1 and cohort and "exposed" counts at start of the study period in Table 1.		
Descriptive data	14	(a) Give characteristics of study participants (*e.g.*, demographic, clinical, social) and information on exposures and potential confounders (b) Indicate the number of participants with missing data for each variable of interest (c) *Cohort study* - summarise follow-up time (*e.g.*, average and total amount)	(a) Please see Results, paragraph 1 and Table 1. (b) Please see Table 1 (c) N/A		
Outcome data	15	*Cohort study* - Report numbers of outcome events or summary measures over time *Case-control study* - Report numbers in each exposure category, or summary measures of exposure	N/A		

		Cross-sectional study - Report numbers of outcome events or summary measures			
Main results	16	(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 (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	(a) Please see Table 2. Justification for confounders given in Methods under Key Measures. (b) Please see Table 1. (c) We decided to estimate incidence rate ratios as the most compelling effect estimate to highlight adjusted differences in ED utilization and ACSC hospitalizations during the calendar quarters comprising waves 1 and 2 of COVID-19 in Nova Scotia and analogous prior year calendar quarters in Table 2. We have included raw rates of these outcomes in Table 2 to facilitate calculation of crude absolute risk should the reader be interested.		

Other analyses	17	Report other analyses done—e.g., analyses of subgroups and interactions, and sensitivity analyses	Analyses stratified by age and sex are features in Figures 2 and 3 and described in paragraphs 2-4 of Results.		
Discussion					
Key results	18	Summarise key results with reference to study objectives	Please see first paragraph of interpretation (pg 12)		
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	Please see paragraph 4 of Interpretation (Pg 7)	RECORD 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.	
Interpretation	20	Give a cautious overall interpretation of results considering objectives, limitations, multiplicity of analyses, results from similar studies, and other relevant evidence	Please see paragraph 2 of Interpretation (Pg 9)		
Generalisability	21	Discuss the generalisability (external validity) of the study results	Please see paragraph 2 of Interpretation (Pg 8), specifically, where we discuss consistency of our findings with other results from Canada and internationally.		
Other Information					
Funding	22	Give the source of funding and the role of the funders for the	Please see acknowledgements		

		present study and, if applicable, for the original study on which the present article is based	for source of funding on page 2		
Accessibility of protocol, raw data, and programming code		..		RECORD 22.1: Authors should provide information on how to access any supplemental information such as the study protocol, raw data, or programming code.	Raw data available through Health Data Nova Scotia (HDNS) and Nova Scotia Health. All data and programs are contained on secure HDNS server. Please see "Data Sharing" subsection on page 2.

*Reference: Benchimol EI, Smeeth L, Guttmann A, Harron K, Moher D, Petersen I, Sørensen HT, von Elm E, Langan SM, the RECORD Working Committee. The REporting of studies Conducted using Observational Routinely-collected health Data (RECORD) Statement. *PLoS Medicine* 2015; in press.