

S1 Appendix: Flow diagram on the number of excluded patients

Total sample
(N = 21, 575)

Exclusion criteria:

- Records with unknown smoking status (N = 474)
- Patients with multiple cancers (N = 2,392)
- Patients under 18 years of age (N = 25)
- Records with invalid death data (records where death date is on or before diagnosis date) (N <=5)
- Patients with a shared LHIN value (sub-region is split between two LHINs) (N <=5)
- Patients with a stage of zero from OCR or ALR (N = 35)
- Patients with any missing value of LHIN, income quintile, or rurality (N = 86)
- Patients who lose continuous OHIP eligibility (N = 40)

Final sample
(N = 18, 517)

S2 Appendix: Data elements and their definition of Cancer Care Ontario’s Smoking Cessation Dataset

Data Element	Definition
Patient Chart Number	Patient identifier code that is unique within the healthcare facility.
Submitting Hospital Number	The MOHLTC healthcare facility that submits activity to CCO.
Registration Date	Date this patient was first registered at this RCC and/or hospital for this disease.
Disease Sequence Number	The numeric sequence assigned to a primary cancer for a patient at a specific healthcare facility.
Visit Hospital Number	MOHLTC Master Number and name for the reporting healthcare facility where the cancer activity occurred (known by CIHI as Institution Numbers).
Visit Program Code	Primary cancer programs for clinic, planning and treatment activity. Includes; Radiation (RAD), Systemic (SYS), Surgical (SUR), Research (RE), Palliative (PA), Preventative Oncology (PO), or Psychosocial Oncology (PSO).
SMK_Q1	Patient self-reported as being a current smoker or indicated they had smoked within the past 6 months.
SMK_Q1 Date	The date the patient was asked SMK_Q1 (smoking status question).
SMK_Q2	Patient was advised of the benefits of smoking cessation.
SMK_Q3	Patient was recommended a referral to a smoking cessation program.
SMK_Q3 Date	The date when the patient was asked SMK_Q3 (assessed for quitting question).
SMK_Q4	Type of referral selected by patient. Referral is the act of directing or sending a patient to cessation service(s) for further action or support in making a quit attempt and becoming smoke free. The service should be arranged through the RCC (e.g., to a quit coach or to Canadian Cancer Society’s Smokers Helpline fax referral program) to help the patient quit smoking. A referral is not simply the act of providing written information. Internal cessation referrals include services provided by the RCC (e.g. quit coaches), and external referrals are referred to outside the RCC.

Legend: MOHLTC = Ministry of Health and Long-Term Care; CCO = Cancer Care Ontario; RCC = Regional Cancer Centre; CIHI = Canadian Institute for Health Information

S3 Appendix: Completed STROBE statement, a checklist of items that should be included in reports of cohort studies

	Item No	Recommendation	Page number
Title and abstract	1	(a) Indicate the study's design with a commonly used term in the title or the abstract	1
		(b) Provide in the abstract an informative and balanced summary of what was done and what was found	2
Introduction			
Background/rationale	2	Explain the scientific background and rationale for the investigation being reported	4
Objectives	3	State specific objectives, including any prespecified hypotheses	4
Methods			
Study design	4	Present key elements of study design early in the paper	4
Setting	5	Describe the setting, locations, and relevant dates, including periods of recruitment, exposure, follow-up, and data collection	4, 5, 6
Participants	6	(a) Give the eligibility criteria, and the sources and methods of selection of participants. Describe methods of follow-up	4, 5
		(b) For matched studies, give matching criteria and number of exposed and unexposed	N/A
Variables	7	Clearly define all outcomes, exposures, predictors, potential confounders, and effect modifiers. Give diagnostic criteria, if applicable	5, 6
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	5, 6

		group	
Bias	9	Describe any efforts to address potential sources of bias	6, 7, 9, 10
Study size	10	Explain how the study size was arrived at	4, 5
Quantitative variables	11	Explain how quantitative variables were handled in the analyses. If applicable, describe which groupings were chosen and why	5, 6, 7
Statistical methods	12	(a) Describe all statistical methods, including those used to control for confounding	7
		(b) Describe any methods used to examine subgroups and interactions	N/A
		(c) Explain how missing data were addressed	4
		(d) If applicable, explain how loss to follow-up was addressed	4
		(e) Describe any sensitivity analyses	N/A
Results			
Participants	13*	(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	5 (S1 Appendix), 7, 8, 9
		(b) Give reasons for non-participation at each stage	N/A
		(c) Consider use of a flow diagram	5 (S1 Appendix)
Descriptive data	14*	(a) Give characteristics of study participants (e.g. demographic, clinical, social) and information on exposures and potential confounders	7, 8, 9
		(b) Indicate number of participants with missing data for each variable of interest	5 (S1 Appendix)

		(c) Summarize follow-up time (e.g., average and total amount)	N/A
Outcome data	15*	Report numbers of outcome events or summary measures over time	7, 8, 9
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	9
		(b) Report category boundaries when continuous variables were categorized	N/A
		(c) If relevant, consider translating estimates of relative risk into absolute risk for a meaningful time period	N/A
Other analyses	17	Report other analyses done—e.g. analyses of subgroups and interactions, and sensitivity analyses	N/A
Discussion			
Key results	18	Summarize key results with reference to study objectives	9
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	10, 11
Interpretation	20	Give a cautious overall interpretation of results considering objectives, limitations, multiplicity of analyses, results from similar studies, and other relevant evidence	9, 10, 11
Generalizability	21	Discuss the generalizability (external validity) of the study results	11
Other information			
Funding	22	Give the source of funding and the role of the funders for the present study and, if applicable,	12, 13

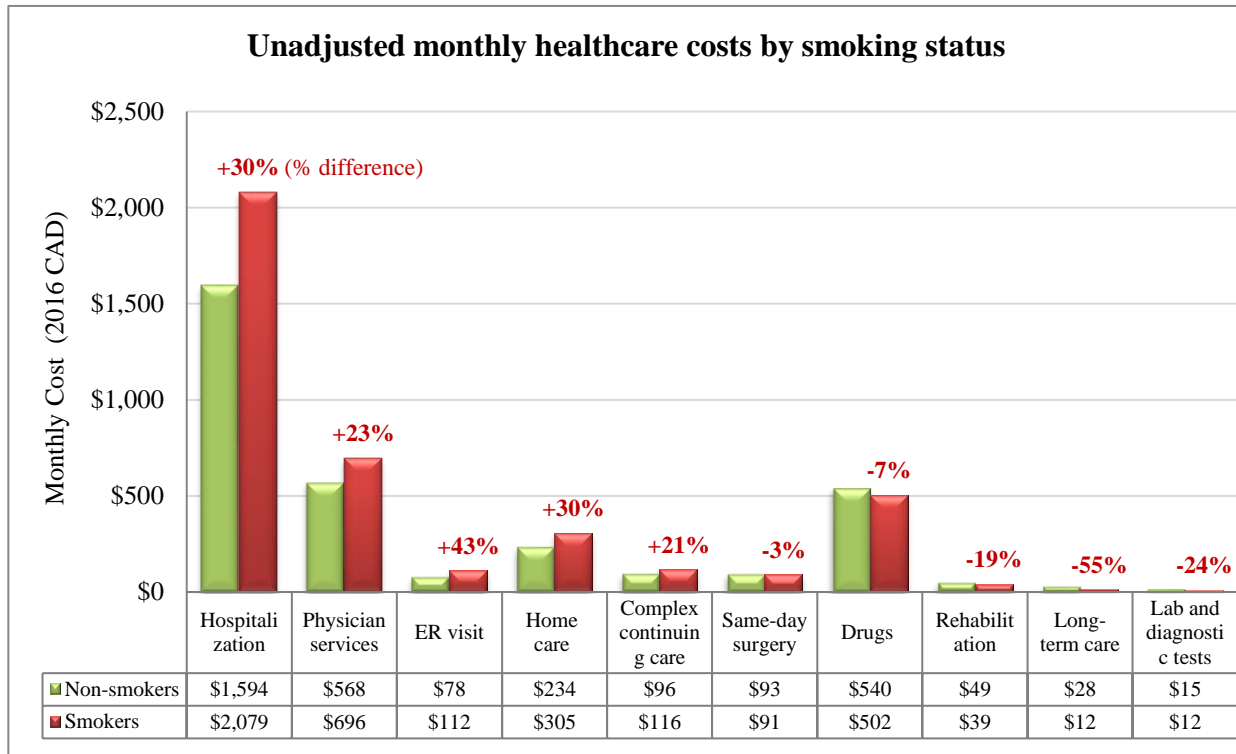
		for the original study on which the present article is based	
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*Give information separately for exposed and unexposed groups.

N/A = Not applicable

Note: An Explanation and Elaboration article discusses each checklist item and gives methodological background and published examples of transparent reporting. The STROBE checklist is best used in conjunction with this article (freely available on the Web sites of PLoS Medicine at <http://www.plosmedicine.org/>, Annals of Internal Medicine at <http://www.annals.org/>, and Epidemiology at <http://www.epidem.com/>). Information on the STROBE Initiative is available at <http://www.strobe-statement.org>.

S4 Appendix: Unadjusted monthly healthcare costs between cancer patients who were smokers and non-smokers (2016 CAD)



Legend: CAD = Canadian dollars.