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Title	The consequences of patient charges for prescription drugs in Canada: a cross-sectional survey
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Reviewer 1	Braden Manns
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General comments (author response in bold)	<p>Point 1: ...Table 3 (this has been estimated using other surveys, but these questions were a bit more direct about the impact of cost related nonadherence – though I worry a bit that these questions might be particularly prone to recall bias).</p> <p>We agree with the reviewer in that the particularly novel parts of this study include the analyses regarding trade-offs patients made and health system consequences. While we acknowledge in the limitations section of our paper the potential role that recall bias could have played in our study, we took a number of steps to limit the degree to which it is a potential factor.</p> <p>First, the questions asked for a simple Yes/No response, asking, (for example) “In the past 12 months, have [you] or anyone else in the household ever spend less on any of the following in order to pay for [your] prescription medicines?” (emphasis is ours). Phrasing the question this way and asking, “have you ever”, rather than “how many times” or “how often”, a patient has engaged in this behaviour, we hoped to reduce the potential for recall bias.¹ While a patient may not be able to recall every instance of a particular behaviour, they are much more likely to recall whether they have ever engaged in that behaviour.¹</p> <p>Second, if recall bias is influencing our results, it is likely that they are resulting in findings that are more conservative. In a review article of various studies regarding recall bias, the authors found under-reporting to be a more significant issue than over-reporting.¹ Further, in one Canadian study, the authors validated patient self-report regarding hospital visits against administrative records, and found that recall bias led to a 20% under-reporting of medical visits.² Regarding prescription drug recall, surveys that do not ask about route, dose, or duration of drug use tend to suffer less from recall bias than studies that ask more specific questions about medicine use.³</p> <p>We have added the following line sentence to the Limitations section to provide more clarity regarding how recall bias might have influenced our results: “However, recall bias (if present) would be likely to have made our estimates conservative.” (Page 15, Para 2) Also, please see our responses to Reviewer 2, Point 1 regarding the validation and testing of the survey questions.</p> <p>Point 2: I am not sure what the question you asked was, but I think the more appropriate term is “indigenous” (if the question referred to First Nations, Inuit and Metis) or First Nations otherwise.</p> <p>We recognise the problems associated with using the term Aboriginal to describe the Indigenous Peoples of Canada, such as its failure to acknowledge the diversity of Indigenous Peoples and their status as distinct, separate Nations. However, we felt reporting the findings within the context of the terms used by Statistics Canada in the CCHS would be the most accurate approach, and thus we mirrored the language used by Statistics Canada in the CCHS (specifically “Aboriginal”). The specific questions asked in the core content of the CCHS regarding Aboriginal identity were:</p> <p>SDC_Q015: Are you an Aboriginal person, that is, First Nations, Métis or Inuk (Inuit)? First Nations includes Status and Non-Status Indians.</p> <p>SDC_Q025: Are you First Nations, Metis or Inuk (Inuit)?</p> <p>To address this concern, we have inserted the following text into the methods section to explain our approach: “When reporting results, we used the term “Aboriginal persons”, to maintain consistency with the question used in the CCHS regarding Indigenous peoples (“Are you an Aboriginal person?”).” (Page 9, Para 1)</p> <p>Point 3: Also, I was in some ways surprised that cost-related nonadherence was higher for First Nations people – as I thought there was no copayments? (Perhaps you have a substantial proportion of Metis people, who have no treaty rights?) Or is this related to meds not on the FNIHB formulary?</p> <p>There are a number of potential issues associated with accessing benefits through the NIHB Program that may put users of the program at greater odds of experiencing CRNA, including the following:</p> <ol style="list-style-type: none"> 1. To be eligible to receive benefits from NIHB, a patient must be: a Registered (i.e. ‘Status’) Indian according to the <i>Indian Act</i>, an Inuk recognized by an Inuit Land Claim organization, or an infant under the age of one who has at least one parent who is an eligible patient.⁴ These benefits are not available to non-Registered Indians or Métis people.⁴ According to Statistics Canada, one quarter of First Nations people, and almost 55% of the total Aboriginal population, are not Registered Indians.⁵ 2. A patient making claims to the NIHB Program may access direct billing services if they fill their prescriptions at a pharmacy registered with the Program.⁶ However, if a patient fills a prescription at a non-registered pharmacy, they will be expected to pay the full cost upfront, and submit a claim to the Program separately.⁶ To the best of our knowledge, NIHB does not maintain records of registered pharmacies, so we are unable to assess the proportion of pharmacies that are registered compared to the number that are not. Patients are asked to contact Health Canada for assistance in finding registered pharmacies. 3. Finally, there is a large and growing body of literature regarding the structural racism and violence Indigenous patients face when accessing primary healthcare in Canada. Indigenous peoples in Canada are marginalized and are more likely to experience social exclusion, poverty, unemployment, and discrimination than other Canadians; these experiences have a significant impact on health.⁷⁻¹⁰ Aboriginal people routinely experience implicit and overt discrimination in their interactions with healthcare providers including having their health needs disregarded, not being treated with respect, having assumptions made about them because of their Indigenous identity.⁷⁻¹⁰ These routine experiences of discomfort and shame when interacting with the healthcare system can contribute to higher rates of CRNA in this population for a number of reasons.¹¹ For example, Aboriginal patients may avoid consultations with physicians and pharmacists, or may cut visits short without obtaining the necessary information.¹¹ Or there may be a misalignment between traditional beliefs and modern beliefs regarding medication.¹¹ <p>We have added a paragraph to the Interpretation section of our paper that includes these three major points. (Page 14, Para 2)</p> <p>References Cited</p>

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Reviewer 2	Regis Blais
Institution	Groupe de recherche interdisciplinaire en santé, secteur santé publique, Faculté de médecine, Université de Montréal, Montréal, Que.
General comments (author response in bold)	<p>Point 1: Page 6 (authors numbering), Introduction, 2nd par., 2nd sentence that says: "These costs are not evenly distributed: 4.8% of Canadians with a chronic condition reported spending 5% or more of their income on prescription drugs." is not clear. We have clarified this sentence to make our point that the burden of high cost drugs is not evenly distributed in Canada, and patients with chronic conditions bear a greater portion of this burden. "Importantly, these costs are not evenly distributed, as a higher proportion of Canadians with a chronic condition reported spending 5% or more of their income on prescription drugs."^{25,26} (Page 6, Para 2)</p> <p>Point 2: Same page, same par., line 8: the year 2017 is mentioned twice (unnecessary). We have fixed this error.</p> <p>Point 3: Statistical analysis, page 8, bottom line: please provide the proportion of missing data across the range of variables (e.g., X% to Y%). In response to Reviewer 2’s comments (Point 5), we have clarified the section on missing variables in our Methods section and provided the requested percentages.</p> <p>Point 4: Conclusion, page 15, line 4: please provide some examples of the possible "avenues through which governments might act to reduce CRNA". In the USA, "value-based insurance plans" are discussed (where patient contribution would be lower for</p>

drugs with demonstrated value and higher for low value drugs). Could this be an avenue in Canada?
We feel that this is an extensive discussion, which is why we have cited a relevant commentary on the issue at the end of that line. Beyond this, we feel that any policy discussion would be editorial in nature and better addressed in subsequent editorial and commentary pieces.

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