

Appendix 3

Peer Review of PEER Simplified Guideline: Management of Chronic Pain (Low Back Pain, Osteoarthritis and Neuropathic Pain) in Primary Care

Response Statistics

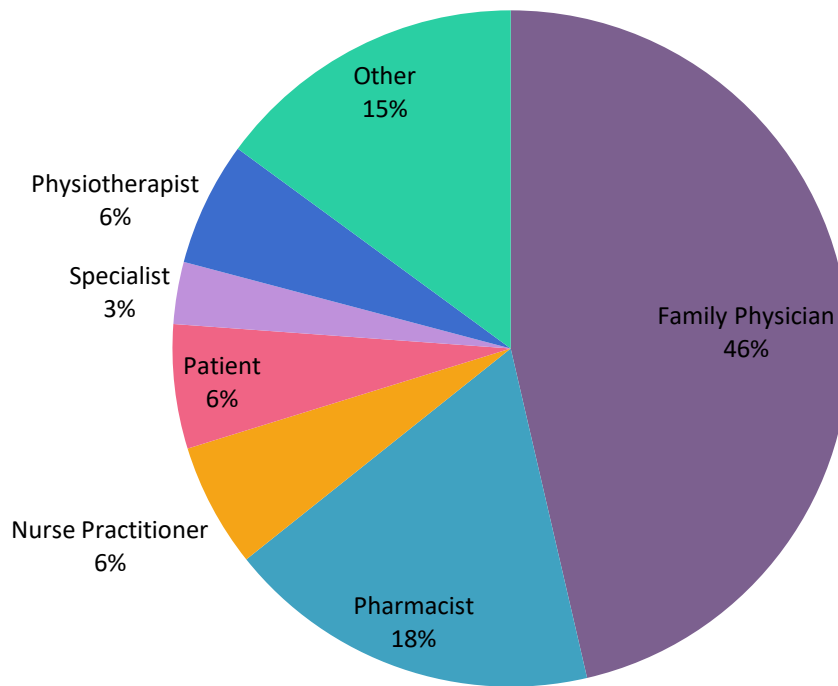
Completed reviews: 33

Permission to publish name and feedback: 20

Permission to publish feedback anonymously:10

Did not give permission to publish name or feedback:3

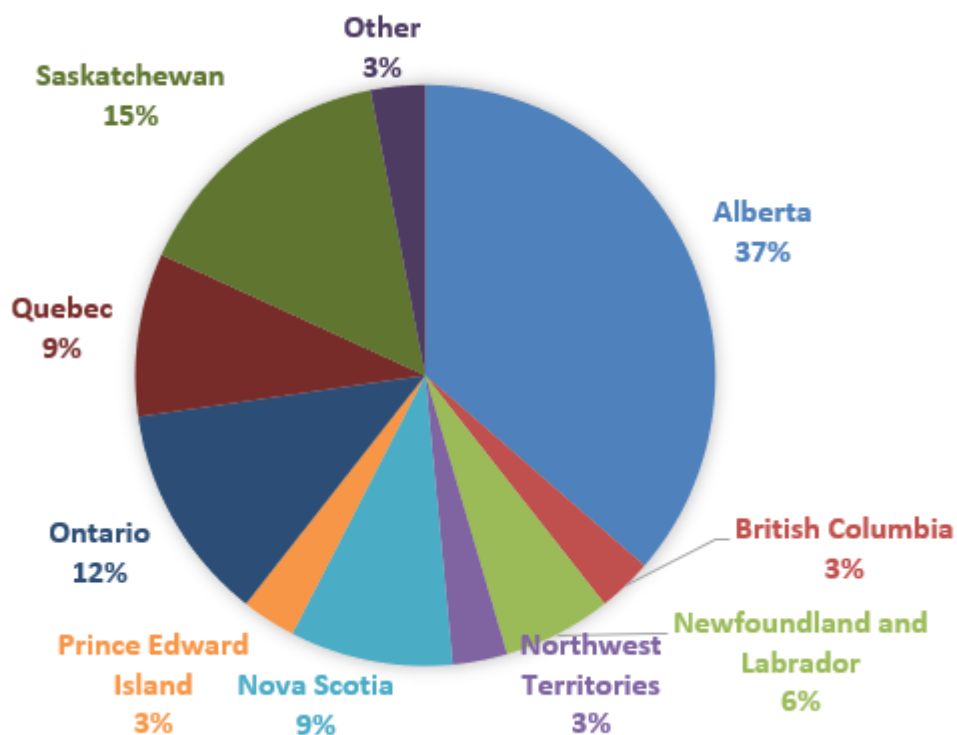
1.Occupation



Occupation	Count	Percent
Family Physician	15	45.5%
Pharmacist	6	18.1%
Nurse Practitioner	2	6.0%
Patient	2	6.0%
Specialist	1	3.0%
Physiotherapist	2	6.0%
Other	5	15.1%
	32	Totals

Other	Count
Communication skills trainer for residents and psychotherapist CBT	1
Epidemiologist	1
FP with primary focus on chronic pain	1
Family Physician CAC Addiction Medicine	1
Rural generalist	1
Totals	5

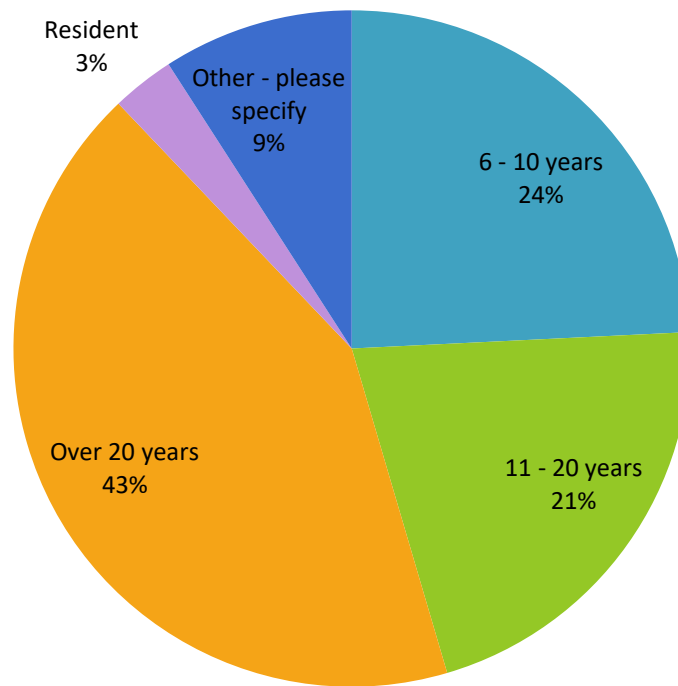
2. Province



Province	Count	Percent
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Alberta	12	37%
British Columbia	1	3%
Newfoundland and Labrador	2	6%
Northwest Territories	1	3%
Nova Scotia	3	9%
Prince Edward Island	1	3%
Ontario	4	12%
Quebec	3	9%
Saskatchewan	5	15%
Other	1	3%
	33	Totals

3.How many years have you been practicing?

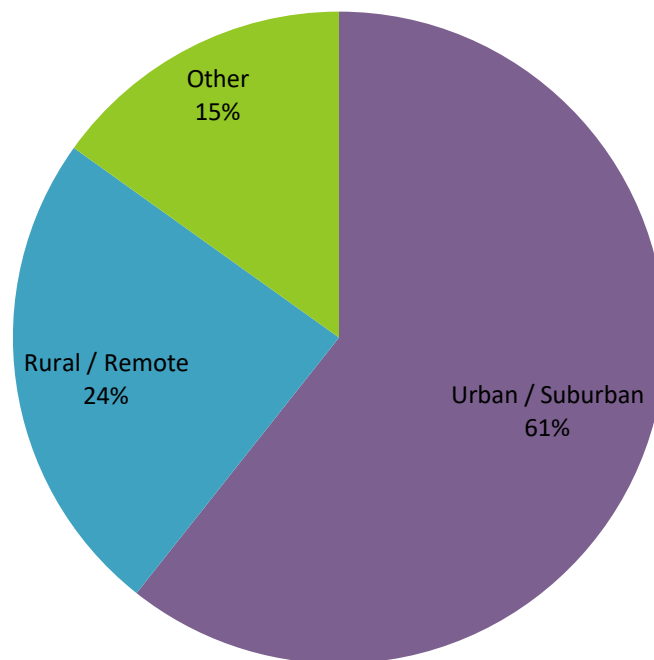


Value	Count	Percent
6 - 10 years	8	24.2%
11 - 20 years	7	21.2%
Over 20 years	14	42.4%
Resident	1	3.0%
Other - please specify	3	9.1%
	33	Totals

Other - please specify	Count
+30	1

I am not a medical practitioner.	1
Patient	1
Totals	3

4.How would you describe your area of practice?

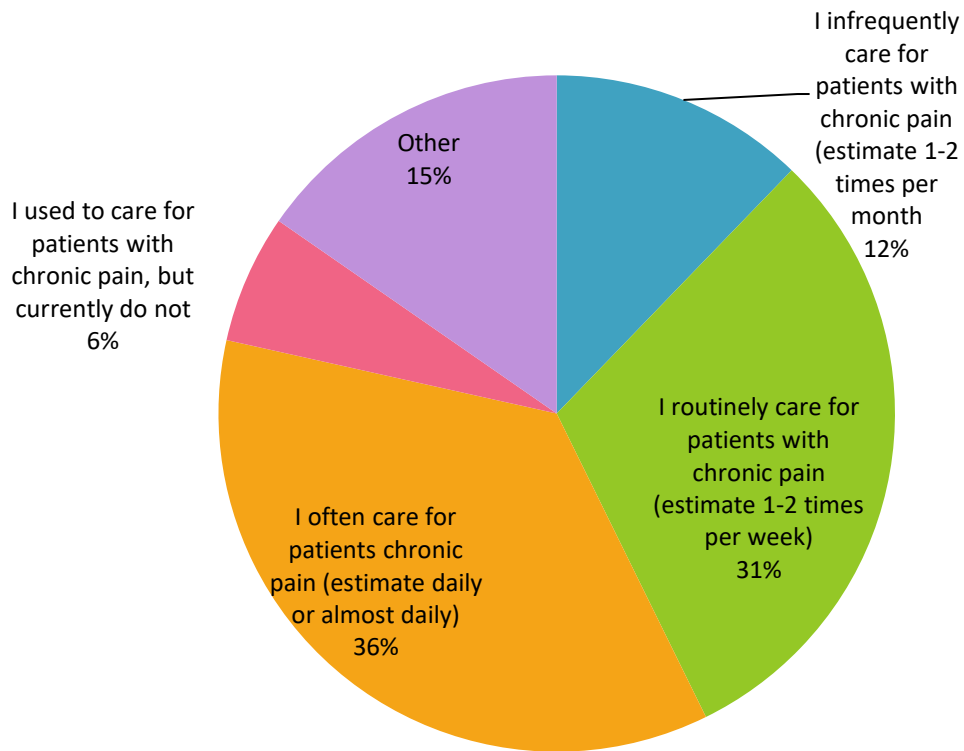


Value	Count	Percent
Urban / Suburban	20	61%
Rural / Remote	8	24.2%
Other	5	15.1%
	33	Totals

Other	Count
I am not a medical practitioner.	1
Urban base but patients travel from all over my province to see me	1
inner city	1

Totals	3
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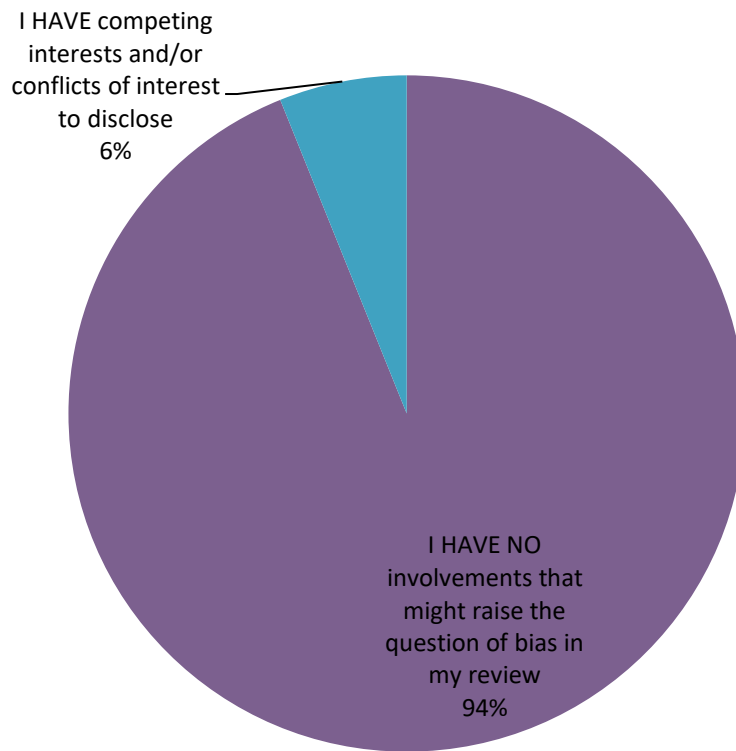
5. My level of familiarity with treating chronic pain can be best described as:



Value	Count	Percent
I infrequently care for patients with chronic pain (estimate 1-2 times per month)	4	12.1%
I routinely care for patients with chronic pain (estimate 1-2 times per week)	10	30.3%
I often care for patients chronic pain (estimate daily or almost daily)	12	36.4%
I used to care for patients with chronic pain, but currently do not	2	6.1%
Other	5	15.2%
	33	Totals

Other	Count
I am not a medical practitioner	1
I see chronic pain patients every day	1
retired from clinical practice 9 months ago, treated patients with chronic pain daily prior	1
routine weekly care for 25 years, up until 3 years ago; not currently in direct patient care practice	1
Totals	4

6.Competing Interests or Conflict of Interest Declaration:



Value	Count	Percent
I HAVE NO involvements that might raise the question of bias in my review	31	93.9%
I HAVE competing interests and/or conflicts of interest to disclose	2*	6.1%
	33	Totals

*disclosures not reported in this document as reviewers could be potentially identified

The following questions relate to the **PEER Simplified Guideline: Management of Chronic Pain in Primary Care**. Please refer to the line number indicated in the document if needed.

8.Strengths of the Guideline

Reviewer ID	Response
7	Guideline development overseen by an inter professional team including (MDs, NP, Pharmacist, Physiotherapy, Psychologist and a patient). This lends a comprehensive approach and facilitates a broad lens in developing the tool. Excellent supplemental questions that really help guide treatment management in primary care. Good information in the guideline to use when discussing evidence with patients in the management of chronic pain, particularly when discussing opioid and cannabinoid use. The KT tools developed for this guideline are a fantastic supplement, easy to read and provide a clear summary of the evidence for clinicians.
8	<ol style="list-style-type: none"> 1. a thorough review of current evidence 2. a clearly explained approach, including deprescribing 3. the importance of shared care (assuming this to mean patient-prescriber discussion and acceptance of treatment plans)
9	Summarization of the recommended treatments for chronic pain is helpful for busy practitioners. The chronic pain knowledge translation tool is a great idea to assist physicians.
11	Simplicity Clear what is supported and what is not
13	Brevity. Clarity. Practicality.
14	- Solid base of systematic evidence review of outcomes important to the patient. - no COIs; broad representation including (especially) primary care; nice mix of expertise in methods and clinical practice
16	This guideline is easy to read with clear wording. It includes a large number of RCTs in the systematic reviews, allowing for evidence-based recommendations to be made. The information regarding physical activity to counter chronic pain was extremely well presented, answering the relevant and important questions regarding type of exercise (line 206) and how to help motivate patients to engage in exercise (line 216).
17	Very thorough review of the issues around chronic pain and family/primary care practice. The 1) chronic pain knowledge translation tool and 2) Table 1 (GRADE) and Boxes 1, 2&3 are excellent summaries of the recommendations and strength of evidence around them.
19	This guideline provides a clear entry point into discussion between clinicians and patients about how to deal with chronic pain. I especially appreciate that it is stressed that the goal of physical activity is pain management, independent of weight loss (lines 177-8). It can be frustrating when clinicians focus on weight loss as the reason for activity when many patients have experienced weight gain as a result of continued pain. Emphasis upon the

	treatment value of physical activity can reduce patient frustration within the discussion process.
20	Reaffirms what is known in a guideline that helps clarify recommendations with clear options Shared decision making helps give practitioners the opportunity to individualize the guidelines
23	The questions were well laid out. Answers were to the point. I thought having a piece that talked specifically about harmful interventions is helpful. The graphic summary page was well laid out
25	The guideline is clear and concise and summarizes the pertinent information regarding chronic pain management. It provides a summary of the current research so that best evidence recommendations are available to put directly into practice in a variety of health care settings.
26	Very comprehensive analysis. Simple language clear indications for recommendations and suggestions. Thorough literature search.
27	KT Knowledge Translation Tool - simple, easy to read . Repeated use of the levels of evidence demonstrates how difficult this area of medicine is. It clearly outlines the specific form of Chronic Pain outlined in the particular studies eg. Neuropathic vs Back pain vs arthritis
28	-evidence based -clear questions being answered -well communicated results For further information please see my uploaded letter in the your #12. comments
29	discouraged the use of opioids unnecessarily
30	Having worked on previous peer simplified guidelines, I am comfortable with the research done in reviewing available information is complete and accurate. I believe the information is trustworthy and without bias. The guideline gives a very good overview of current evidence regarding a variety of treatments for chronic pain without specifically guiding or providing a stepwise approach. The layout of the recommendation summary is easy to use and understand. Findings are presented in several different ways that help focus on the most useful treatments available.
31	Box 2-Practice Point # 4 Related to assessment, I believe Pain scales are controversial as they may be more reflective of emotional and psychological factors than pain. The focus should remain on pain tolerability and impact on daily function and activities.
32	Excellent summary of the evidence - clear and concise.

33	Evidence based, clear and concise recommendations for the commonly used treatments in community practice.
34	- Focus on patient centred care - the guideline assists with, doesn't dictate decision making with patients. - Focus on non-drug measures as it has the strongest evidence - exercise but not too prescriptive. - The summary document is fantastic - I like how the effect of placebo is indicated as well for perspective
35	Well written guideline. Practical and relevant to chronic non-cancer pain management in primary care. Good summary of evidence needed to have a meaningful shared decision making discussion.
36/37	-11 supplemental questions very applicable -allowed development of tools for patients & practitioners to make informed decisions -We know that physical activity & psychological therapy is important in treating chronic pain but really appreciate that this guideline gives us the evidence to support our claims!
38	- pertinent question for primary physicians - emphasis for shared decisions making - emphasis on exercise, CBT, mindfulness - very powerful methods that sometimes we are reluctant to prescribe because we are not prescribing a pill, and sometimes patients have trouble accepting exactly due to these reasons.
40	The guidelines clearly indicates what they suggest versus what they recommend with ll the available data. Guideline team seems to have done their research in term of the available evidence for their recommendations. I like that they separated the different types of pain, however i feel like their might be additional subcategories that could have been highlighted, but they do seem to be addresses in supplemental appendix. They include the confidence intervals and their RR for each of the interventions as well as the NNH and RR for side effects that really help apply a shared decision process with our patients.
42	Overall, the guideline is very clear and concise. The authors should be commended for taking on such a complicated and complex synthesis and review of evidence. The rigor behind the guideline is apparent and the authors did an excellent job of synthesizing the results into a cohesive and easy to understand manuscript. The guideline introduction was relevant and conveyed the need for a review of the evidence. The results of the systematic reviews provide additional strength for the theory that management of pain is complex and each person that copes with pain may have complex factors clinicians may want to take into consideration. The inclusion of the GRADE table allows for a clear overview of the evidence.
43	This is a very clearly written document in the style of other PEER documents.
45	Clear and concise. Good methodology. Comprehensive evidence review. Very applicable to practice. Very happy to see the mention of ACEs and trauma in chronic pain, as I believe this is a very important aspect of chronic health issues. I like the NNH statistics. The discussion around risks of deprescribing was useful. I inherited many patients in my practice on chronic opioids, so this information was helpful and aligned with my experience in practice.

46	- broad representation on guideline group patient perspective
47	Appropriate, formal language, yet it is still easy enough to read. - Separate sections for each type of chronic pain is helpful when looking for recommendations for a specific type of pain - recommendation to provide people dealing with chronic pain to be given educational materials - approach seems patient-focused while maintaining best practice principles based on the best information available at this time

9. Weaknesses of the Guideline

Reviewer ID	Response	Comments
7	No weaknesses to note just editing of Appendix 1	
8	While this guideline may work well for 90% of patients with chronic pain, particularly those with good coping skills, there is little to help the 10% where the greatest issue is the suffering, not the pain.	We added a paragraph in the discussion acknowledging the inability of best evidence to address many of the complexities of chronic pain. In addition, we highlighted that the committee did attempt to supply practical practice points based on experience (not evidence), however noted significant variation between practices with no clear consensus in many areas.
14	Limited help with navigating those patients currently on complex medication regimens, or high doses of opioids - yet not doing well. Hard to address, especially with EBM - but some acknowledgment and guidance needed given the degree to which some clinicians struggle to cope with patients who are not coping.	As above - highlighted in discussion.
11	Complexity of factors in chronic pain are underestimated by the committee, many competing interests affect patient decision-making and this needs more support in the guideline.	As above - highlighted in discussion. PEER guidelines are intended to highlight best evidence. Unfortunately there is not high quality evidence to address these issues well.
34	Limited information on how to "work backwards" ie. patients with chronic pain of many years who have polypharmacy but limited success with treatments - any evidence for deprescribing (mention of reducing opioids briefly with limited evidence).	As above - this area is lacking high quality evidence. Conflicting expert opinion.
9	This guideline, like many others, takes away many of the treatment options such as cannabinoids and opioids because there is lack of good evidence. I feel the use of statements such as "treatments with harms that exceed benefit" is not necessarily appropriate as this will dissuade most family physicians from even considering these options and just lead them to request referral to other specialists for management of the pain which is usually not readily available. In my opinion the use of	The guideline highlights the best currently available evidence. There are currently no RCTs demonstrating long term benefit of opioids or cannabinoids in chronic pain. While we would also like to see options that work, our goal is to highlight current evidence of

	<p>low THC and high CBD edible products is showing initial anecdotal benefit, excellent tolerability and low discontinuation rates. This therapy has not been studied in great detail to this point (previous research only evaluates pharmaceutical cannabinoids (Cesamet,Sativex) or other cannabinoids (usually inhaled and no mention of the THC/CBD contents) but I believe it will eventually have strong evidence for benefit in OA and back pain and so I do not support the inclusion of a blanket statement that cannabinoids have more harms that exceed benefit. The lack of evidence of benefit does not necessarily mean that it is not beneficial. Similarly saying that opioid therapy is not a good idea is really based on the current political environment related to overdose rather than evidence of benefit especially in severe chronic neuropathic pain. Line 472 makes this very clear that there may be a possible link to risks of overdose, mental health crisis and suicide. From what I gather in this guideline, this reasoning is why we are not including opioid therapy as a possible option for some patients with severe pain. I have a very significant bias towards severe neuropathic pain as this makes up the majority of my patients and clinically I see that many of these patients benefit from very carefully prescribed opioid therapy.</p>	<p>benefits and risks, then allow the clinician and patient to decide.</p>
<p>11</p>	<p>Recommendations largely depend on limited resources (PT), (CBT) and guided meditation.</p> <p>The table looks like a paper chart we received in 1992. Where are the modern EMR quality resources to come from? That needs creation and the table needs to be much more than a poster.</p> <p>Likewise the last PDF 4 (<i>Box 1 – recommendations</i>) seems to fill no need I can determine. The issues there concern me working with many cp patients in s team fashion is the difficulty knitting the influence of other professions on the discussion and pain care planning. Where is that advice? This management is much more complex than you acknowledge and boiling it down to three recommendations is about as beneficial as printing it on a pen. With all the work on the literature review I'd expect a more sophisticated document. I don't think you have moved the peg significantly.</p>	<p>This is certainly true. It is our hope that this guideline may help push policies that look at covering interventions with evidence of benefit for patients with chronic pain.</p> <p>Not entirely clear what this means. We are somewhat limited financially in our ability to develop “modern EMR quality resources”.</p> <p>Box 1 - is a summary of all recommendations which is generally consistent with guideline presentation.</p> <p>As discussed above, this guideline is based on current best available evidence - which does not address many of the issues of complexity in chronic pain management, and expert opinion varies significantly on best approach.</p>

13	I involuntarily gnash my teeth when hearing or reading the term "chronic pain". Pain is a symptom...potentially reflecting many diseases. Our first obligation is to try to identify a reversible, or treatable cause of pain. Patients routinely come to me saying "I'm here for pain management". Which always (yes, always) means "opioid refills". No suggestion...except that hopefully in 30 years there will be no more smiley faced pain scales and the term "chronic pain" will be eliminated from our human lexicon	Noted.
35	Reference to some pharmacological classes are very vague - I assume due to heterogeneity of studies/evidence. However, not all NSAIDS/COX2 inhibitors, SNRI, TCA are equal in chronic pain.	We have added an appendix table highlighting specific drugs that have been studied and range of dosing utilized in the trials as a reference. For some classes (e.g. TCAs) the data was very limited and the benefit between individual drugs was not discernable.
14	Lacks some specifics around how applying the findings might best be done; e.g. which drugs, what doses, how to individualize, etc.; therefore would be nice to have a complimentary document with such info. Overgeneralizes at times to a category (e.g. SNRIs, cannabinoids) when there may be important differences between agents/approaches.	As above.
34	would like additional information about the lack of clear evidence for viscosupplementation which is often presented to patients as a, "can't hurt to try it" option, especially for knee OA	<p>The full review for viscosupplementation is presented in an earlier published document:</p> <p><i>Ton J, Perry D, Thomas B, Allan GM, Lindblad AJ, McCormack J, Kolber MR, Garrison S, Moe S, Craig R, Dugré N, Chan K, Finley CR, Ting R, Korownyk CS. PEER umbrella systematic review of systematic reviews: Management of osteoarthritis in primary care. Can Fam Physician. 2020 Mar;66(3):e89-e98. PMID: 32165479; PMCID: PMC8302337.</i></p> <p>This document is referenced in the guideline. We present the information in a summarized manner in the guideline in an effort to keep the final document a manageable size for primary care.</p>

38	<p>- it tries to cover a lot of material so some section remain rather vague, for example the section on opioids: which exactly, long acting, short acting; this topic is so very important that deserves further exploring;</p> <p>the same for SNRIs, corticosteroid injections; neuropathic pain in which contexts, combination pharmacotherapy - which combinations</p>	<p>We have added an appendix table highlighting specific drugs that have been studied and range of dosing utilized in the trials as a reference. (Including opioids, SNRIs, corticosteroid injections) For many classes the data was very limited and the benefit between individual drugs was not discernable.</p> <p>Combination therapy was explored as a supplemental question and reported in the appendix.</p>
45	<p>I think there should be more clarity around what cannabinoid data was referring to - does this include CBD oils or products containing THC that are commonly used, or limited to just pharmaceutical products. Separating these out could be useful as all are commonly asked about in practice.</p>	<p>Use of cannabinoids was addressed as a supplemental question - further specifics of the cannabinoid data is discussed in the appendix.</p>
14	<p>Guideline sticks to what can be recommended based on high quality evidence, which then results in overlooking some potential practice pearls.</p>	<p>Addressed. See above.</p>
17	<p>The information provided is long and very technical especially the 1) chronic pain guideline and the 2) appendix.</p>	<p>There are conflicting comments on this - others suggest the guideline is succinct and easy to follow.</p>
36/37	<p>Unfortunately there isn't evidence available to recommend . Unfortunate but not unexpected, there isn't as much good evidence available on chronic pain as we would like.</p>	<p>Agreed!</p>
38	<p>- overall, from the reading the guidelines/methods section, I feel that I still would have to go back to primary evidence to answer clinical questions. This is mostly due because from reading the guideline strength and weakness of recommendations is not discussed. best evidence seems to be moderate and it should be discussed why.</p>	<p>The guideline is intended to summarize the information from 3 large systematic reviews in a way that assists busy clinicians. A limited number of clinicians may want to review the evidence - which is referenced within the guideline.</p> <p>Table 1 does highlight the grade quality of evidence for all interventions.</p>

40	<p>Not clear what inspired the supplemental questions (researchers, available evidence, patients). There are a lot of different types of neuropathic pain and having such a global recommendation for such a wide variety of causes for pain seems maybe a little too simplistic when recommending agents or methods but especially when advising against an agent.</p>	<p>Identification of supplemental questions is addressed under methods. Agreed that there are many other questions that could have been chosen (particularly in primary care). Any additional questions were out of scope at this point.</p> <p>Note: cannabis was a supplemental question that did look at evidence in any pain setting. Results noted in appendix.</p>
42	<p>While the guideline is trustworthy there are some weaknesses that should be addressed. I have made notes to these weaknesses under each heading.</p> <p>Does not include an operational definition of chronic pain: The manuscript should include the current ICD-11 definition of chronic pain, it notes, "chronic pain is pain that persists or recurs for longer than 3 months.</p> <p>Chronic pain is multifactorial: biological, psychological and social factors contribute to the pain syndrome" (ICD-11, May 2021). While it may seem unnecessary, clinicians should be reminded that pain should be considered as chronic only if it has persisted or recurred for more than three months. Related to this, the new ICD-11 manual has classified chronic pain syndromes, such as nonspecific low-back pain as a disease in itself, while chronic pain that is secondary to underlying disease, such as osteoarthritis should be considered chronic secondary pain (Treede et al (2019) Pain, Vol. 160 (1), pp.19-27).</p> <p>The title should be more precise: This is not a guideline for all chronic pain, it's for the management of chronic pain in three common conditions and the title should reflect the specific topic more accurately, for example, Management of chronic (secondary) pain in OA, back pain and neuropathic pain.</p> <p>Uses some jargon: There are parts of the guideline manuscript that use in-group jargon and terminology that fails to articulate and clarify the points being made.</p> <p>The guideline would be improved by defining the following terms: Shared decision making iterative process, used in Line 132 and Line 144- "the guideline process was integrative in identifying key questions"</p>	<p>Thank you. We have included our operational definition which we employed during the systematic reviews - which is consistent with the current ICD-11 code which we have also referenced.</p> <p>We agree - and have modified the title to reflect this.</p> <p>Unsure what specifically this refers to.</p> <p>We expanded the description of the process for line 144 - although</p>

	<p>Needs clarification on some results: Line 99- was the 30% improvement part of the inclusion criteria, if it was, line 99 should say the responder analysis refers to the proportion of patients that achieved 30% or greater improvement.</p> <p>Line 333/334, is -11.17 the average reduction of points on the VAS? It would be helpful to provide a bit of discussion around these reduction numbers.</p> <p>Does this refer to the mean reduction?</p> <p>The confidence intervals are quite wide, would you say these studies were underpowered? Why is the 10-point change acceptable as a clinically important difference? The inclusion criteria stated a 30% or greater improvement, reasons for inclusion should be clarified.</p> <p>Line 363- Perhaps mention the 'known' harms- these are mentioned above in the guideline</p> <p>Line 429 should it refer to the NNH?</p> <p>Line 184- perhaps say, as the current evidence of benefit is unclear.</p> <p>Line 271, notes low quality evidence RR 1.17, this is not a significant result- why mention the RR here and not for the interventions above (lines 265-268)?</p> <p>Box 2 Practice point: Pain scales are controversial as they may be more reflective of emotional and psychological factors than pain. The focus should remain on pain tolerability and impact on daily function and activities. I disagree with the statement to focus on pain tolerability- chronic pain is biopsychosocial in nature, the emotional and psychological factors should be assessed as they may be significantly affecting the efficacy of the treatment, for example, pain coping, such as catastrophizing, has shown to be significant in the experience of pain.</p>	<p>placing importance on the need for brevity. We feel that iterative best summarizes how the information was approached.</p> <p>Responder analysis could include a number of different responder definitions. This is highlighted in the SRs. 30% is the most common.</p> <p>We added a clarification that this was a supplemental question. The supplemental question expanded inclusion criteria to all RCTs given the limited RCTs with responder analysis.</p> <p>The 11 is a mean reduction. We cite moderate quality evidence for this outcome.</p> <p>Between 10-12 is generally considered a meaningful clinical difference. 30% is the most commonly seen in the responder analysis.</p> <p>They are mentioned above and referenced here. We are trying to keep word count to a minimum.</p> <p>Yes this has been corrected.</p> <p>Corrected.</p> <p>We removed the RR for acetaminophen for simplicity and consistency.</p> <p>This has been changed to “focus remain on coping with pain and impact.....” which is more consistent with the committee’s approach.</p>
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46	<p>There appeared to be some inconsistency in how the evidence behind each of the recommendations was presented. For example, the CBT recommendation did not include RR or confidence intervals where as many of the others did. The guideline would benefit from ensuring standardization in how the evidence / details behind each recommendation is presented</p>	<p>The CBT recommendation was a supplemental question that utilized a different approach to gather evidence, because responder analysis was not available.</p>
45	<p>Wish there was more NNT statistics for different options with evidence vs just RR. Would be easier stat to communicate to patients compared to NNH.</p>	<p>Due to significant differences in placebo rates across interventions, we felt that RR most clearly reflected the true effect.</p>
28	<p>-some recommendations do not have the evidence provided in the results section. This is specifically the recommendations of shared decision making and using decision aids. See section 12. comments. <i>(see below)</i></p>	<p>We have included a reference to the evidence for shared decision making at the beginning of the recommendations section.</p>
28	<p>Thank you for the opportunity to review this Chronic Pain guideline. As per other PEER work it maintains a high standard by engaging in a robust process, defining relevant questions, carrying out appropriate systematic reviews and communicating the knowledge in clear language as well as through concise knowledge translation tools. Excellent work! The following are particular concerns I have with the guideline document.</p> <p>a. In each disease specific recommendation section, the guideline starts by stating a recommendation for shared decision making and the use of decision aids. Given that it is a recommendation this should be supported by the evidence, even though it may be extrapolating from other non-chronic pain research on decision making and the use of decision aids. Some of the evidence for the use of decision aids is reviewed in the Discussion section, but I see this as placed incorrectly. I believe that if these statements are being made as recommendations then the evidence should be provided in the results section to show on what the decision to include this was based on.</p> <p>b. I am concerned about the decision to include the suggestion that "treatments with no or unclear benefit could be discussed" when the other modalities with better evidence have been considered. Though the language is vague as to the intent of the discussion, I would assume from it that it is to consider the implementation of such treatments. In a number of these there is reasonable evidence that they don't work. I believe that in these situations it is better to hurry up and do nothing than to trial patients on medications</p>	<p>Thank you . We highlighted evidence at the beginning of the recommendation section.</p> <p>We have attempted to highlight the importance of exercise, and that this is the foundational piece for much of chronic pain. However, given the complexities of chronic pain, we wanted to give physicians</p>

	<p>that are known not to help, further searching for unsubstantiated approaches. This not only adds further risk to the patient, however small that might be, but also takes the focus away from treatments that have evidence, such as exercise in the case of chronic pain. I worry that it can lead to looking for the next drug rather than doing the hard work of getting active.</p> <p>An aspect of chronic pain management that has not been discussed in the guideline presented is what the evidence is for dealing with chronic pain exacerbations. It is a challenging issue that there is little guidance for. This is something that you may want to consider for future iterations of your guideline.</p> <p>I very much liked your knowledge translation Summary document, appreciating its clarity and succinctness.</p> <p>I am concerned that in Figure 1 you do not list the most common complication of an intra-articular steroid injection, that of the steroid flare. Different sources give anywhere from a 1-10% risk of this occurring per injection. I have seen this a number of times and it is very unpleasant for the patient.</p>	<p>and patients room to explore alternate options when they feel they are stuck.</p> <p>Agreed. This is a challenging area.</p> <p>Thank you.</p> <p>This is a good example of RCTs not capturing adverse effects well. Steroid flare, or acute worsening was not reported in the RCTs included. We are aware of data as you have identified, however have done our best to highlight key adverse effects as identified in included trials. This was listed as a limitation of the guideline overall - the likelihood that important adverse events have not been included.</p>
14	<p>Evidence is the same, but conclusions are different from the national opioid guideline group, based on some different methodology and values. Would be helpful to assess differences and discuss potential pros/cons of each, or how they intersect in clinical practice.</p>	<p>We have added a paragraph on current opioid and cannabis guidelines in Canada in the discussion section.</p>
30	<p>It may have been worthwhile comparing current recommendations from the guideline with current recommendations from the various regulating bodies such as for example the College of Physicians and Surgeons of Alberta with regard to their pain management guidelines. Sometimes it may be difficult</p>	<p>The CPSA does not make specific recommendations with regards to pain management. They do have standards for when opioids are prescribed.</p>

	to shift people's treatment plans when it conflicts with a current standard of care published by their licensing body.	
16	There were a couple of topics that were not even mentioned in this guideline, which I had been interested in hearing about. Firstly, I would have liked to see the evidence regarding interventional nerve blocks for low back pain, as this is a procedure commonly performed at pain clinics and it would be useful to know if a patient might benefit from a referral. Secondly, I would have been interested in reading about dietary changes that may help support pain management. For example, there is some evidence that a plant-based diet may help alleviate the pain of diabetic nephropathy.	Great questions. There are many other questions that we would have liked to answer - but this was beyond the scope of the guideline.
26	It would have been good to see 1. recommendations on <u>trauma informed care</u> . 2. recommendations on <u>Chronic pain management in the elderly</u> . 3. Benefit of <u>CBT vs ACT</u>	Trauma informed care was addressed in the practice points section. Unfortunately these additional questions were beyond the scope of the guideline.
33	No discussion of evaluation of the conditions reviewed. Some treatment modalities "lumped together" eg "corticosteroids for LBP". No review of less commonly used treatments or specialist options.	This guideline was primary care focused - highlighting interventions that would be accessible to most primary care clinicians. Many less commonly used interventions were beyond the scope of the guideline. We have developed a table of all interventions studied and included in the appendix - hopefully clarifying the corticosteroid interventions that were studied. Additional details are in the individual systematic reviews.
19	I cannot see anything that I would consider a weakness.	
20	The lack of ability to provide a baseline exercise program may be seen as a weakness by practitioners. This was reviewed in the guideline as not having good quality evidence. Exercise prescription template?	As all exercise interventions were different, a one size fits all program with best evidence was not available. We have included examples of exercise programs that seem reasonable in Box 3 and in addition, a link to an example exercise prescription.

23	Overall I thought they were great.	
25	When referring to spinal manipulative therapy, it's not clear whether this refers specifically to a thrust manipulation (grade 5 mobilization), or to spinal mobilizations in general. Also, as a potential harm for manipulation, a risk mentioned is stroke from cervical manipulation - but would be an unlikely area to manipulate when treating LBP.	We have included a table highlighting the specific interventions that were assessed in the RCTs (see appendix).
29	where spinal manipulation is found helpful in chronic back pain, the review committee could have benefited by involving at least one physiotherapist or chiropractor to provide more in-depth details of how it is helpful. Also, the CBT or motivational interviewing should be part of the treatment process to assess ongoing goals of therapy.	A physiotherapist was a member of the guideline committee. Descriptions of how an intervention works is not as important as evidence of whether it works or not. CBT is recommended and motivational interviewing is addressed in the supplemental question on how to get people to exercise.
32	Might not be possible to do but would be helpful to know specifics of the CBT or mindfulness-based programs used in the studies cited - in person vs on-line sessions vs app. Same with respect to spinal manipulation - more details wrt patient selection and details of the intervention would be helpful.	We have included a table highlighting details of interventions that were studied (See Appendix)
8	Given my comment above, I wonder whether the psychological intervention component, which showed effectiveness across the three types of pain addressed, was given the emphasis it deserves.	We have moved this up on our KT document to highlight its importance.
27	Nil obvious to me	
31	Box 1 Describes OA pain, Chronic Back pain and neuropathic pain DO NOT benefit with opioids and cannabinoids - I agree with this a 100%. However, this is what's prescribed a lot of times, and harms with high opioid doses is what has brought renewed attention to the neglected Chronic Disease, Chronic Non Cancer Pain. In my view, HOW WE EDUCATE or discuss this with patients should be a part of this guideline as well.	We have created a patient handout that hopefully helps to address some of these issues.

43	No particular concerns.	
47	No significant weaknesses	

10. Other comments, suggestions, or edits?

Reviewer ID	Response	Comments
7	<p>What is Nordic walking? What is spinal manipulation, rubefacients? etc A brief glossary with definitions of terms used in the guideline write up may be beneficial as not all providers may be familiar with terms (you have done this on the KT tool for the meds.</p> <p>Line 326. Spell out TCA as you have spelled out the other terms in that sentence. Line 370 - different font</p> <p>line 479 - different font Methods section in Appendix using present and past tense (para 2 sentence starting with Based needs fixing) Page 6 appendix 1, Title A. Post Herpatic Neuralgia put (PHN) after. Same with Title B Low Back Pain (LBP) Page 11 TKR (write out total knee replacement).</p> <p>The entire appendix 1 needs editing for readability - more paragraph separation, font changes and watching spelling out of common phrases and abbreviations (eg. RCT is spelled out numerous times).</p>	<p>Based on a number of comments, we have included a definition of rubefacients when first mentioned in the document.</p> <p>We have spelled out the terms when they are first introduced in the paper.</p> <p>This has been formatted.</p>
9	<p>The term "rubefacients" needs to be defined in the text or replaced as this is not a term used in Chronic pain management in my experience.</p> <p>I feel that we should be very careful with making recommendations within this report where there is very poor evidence for benefits or potential harms as mentioned in line 452. In particular, if the evidence is insufficient then why make strong recommendations against certain agents such as opioids and cannabinoids? This is similar to previous guidelines that address opioids and cannabinoids with a negative bias towards use seemingly related to the authors bias against these agents and the political/psycho/social environment.</p>	<p>Manuscript revised.</p> <p>The committee balanced the evidence for harms in their decision, weighing that with limited evidence of benefit.</p>
11	<p>We need resources in regard to the discussion and function as physician and PCN or facility staff in this continuing care scenario.</p>	<p>We have included a few recommended resources in Table 3. The committee felt a more comprehensive list would simply be overwhelming.</p>
13	<p>I would like to see us have an approach where someone with pain was seen medically/surgically. All somatic, reversible causes found/treated. Once that is done, the patients PRIMARY care would be in Mental</p>	<p>Noted thank you.</p>

	<p>Health: with a focus on "coping with chronic disease and loss of health". With consultations to the "medical people" if/when there was a concern about a somatic issue. That is, to reframe chronic pain and "de-medicalize" it.</p> <p>164-169: Nice! Individualize. Be willing to "re-try" things. (Why not?)</p> <p>173-174: Yes! EXERCISE is so key</p> <p>343-345: "Shot" clinics are HUGE business. patients are desperate....doctors aren't always circumspect. What a mess.</p> <p>356-359: Does the ACP line even make sense? How can we INDIVIDUALIZE harms and benefits when there aren't proven benefits in large trials? I'd rather they say: "Go ahead and try it if the patient is eager and willing to try unproven things". Let's just not pretend it is "science".</p> <p>462: Evidence of harms of all our aggressive attempts? Association of Dose Tapering With Overdose or Mental Health Crisis Among Patients Prescribed Long-Term Opioids. Agnoli A, Xing G, et al: JAMA; 2021;326 (August 3): 411-419.</p> <p>490-492: Excellent emphasis. LOVE the 2nd document...the knowledge translation!</p>	<p>Fair enough. However, that is the current recommendation from the ACP.</p> <p>Noted.</p> <p>Thank you.</p>
16	Overall a very well-written and thoughtful guideline.	
17	The highlight of the publication should be the aspects that are short-sweet and to the point. This should be followed by reference to the larger document which is quite thorough in its review of the studies and evidence	The KT document was developed to highlight the key points of the guideline.
25	Line 273-274 - "a trial of acetaminophen may be a reasonable option for patients who have contraindications" ... - could clarify that the	Added

	<p>contraindications are to different medications, rather than the acetaminophen itself.</p> <p>Line 216 - Motivating patients to be "physically" active (rather than physical active) I thought I found "patient" written somewhere as "patent" in my initial read-through, but couldn't find the mistake for the life of me on my specific passes looking for edits.</p>	Corrected
26	<p>179 In patients who request assistance to increase their physical activity, we recommend the use of wearable activity trackers with an exercise prescription <u>Review: Suggest instead of recommend since not all patients can afford wearable activity trackers.</u></p> <p>309 We recommend the use of shared decision making (including the use of 310 decision aids) when considering treatment options beyond physical activity 311 for patients with chronic low back pain. Review ; Decision aids should be specified. 312 • We recommend treatments with evidence of benefit be considered and 313 discussed first as options: Oral NSAIDs, SNRIs, Spinal manipulation, TCAs <u>Review: Spinal manipulation to be clarified.</u></p> <p>340 Similarly, rubefacients demonstrated statistically significant benefit in the overall 341 analysis but no study assessed outcomes beyond 3 weeks duration <u>Review; Definition and examples of rubefacients will be helpful.</u></p>	<p>Based on available evidence the committee felt this was a strong recommendation. Cheaper options are available.</p> <p>We have included an appendix of spinal manipulation interventions that were assessed in included RCTs</p> <p>We have added a definition at first mention of rubefacients.</p>
27	Line 149 - last word is 'share' - should this be 'sharing' ?	Corrected to "shared"
29	If possible, more details should be included what tests x-rays etc (if any) should be included to assess back pain [generally]. It would be helpful if some case scenarios are discussed for example: A case where spinal manipulation was beneficial. A case where opioids were tapered off gradually. etcetera	<p>This guideline focuses on management, no diagnosis of chronic pain conditions.</p> <p>Cases would be helpful, however, this is beyond scope of the guideline.</p>
30	Well the guideline is quite clear about reducing opioid medication in patients who have a vested interest in doing this, it does not provide any direction for those patients who demonstrate substance use disorder or who do not want to participate in opioid reduction. In order to be a complete/more comprehensive guideline regarding chronic pain management it may be useful to have at least some mention of alternative treatment for patients with substance use disorder or those who declined medication reduction.	Good point. We have addressed this further in the discussion - referencing the OUD guideline. Practice point 5 includes a beginning on how to address this concern.

31	Very well written guidelines which hopefully will guide Primary Care Practitioners across the country!	
32	See above	
33	<p>Page 16 (343-45): "Very low quality evidence suggests that corticosteroid injections are no better than control. Ten RCT's with 1152 patients were included, however they did not demonstrate significant benefit over control".</p> <p>Comment: Corticosteroid injections for CLBP include epidural steroid injections and facet joint injections as very distinct types of injections with different objectives. Does this recommendation apply to one or both type? Or is this intended to refer to a general IM corticosteroid injection for sciatica?</p> <p>Page 11 (248-50): "We recommend treatments with evidence of benefit be considered and discussed first as options: Intra-articular corticosteroids, SNRIs, Oral NSAIDs, Topical NSAIDs.</p> <p>Comment: The benefit of topical NSAIDs is limited to knee osteoarthritis and is of no value for hip osteoarthritis.</p> <p>Comment: Clinicians are often asked about regenerative injections (prolotherapy, PRP, stem cells) for hip and knee osteoarthritis. It appears this was not reviewed or if no support was found, it would be helpful to include this notice.</p> <p>Page 17: Neuropathic Pain Comment: It might be a good addition to review recommendations for two specific and relatively common neuropathic chronic pain conditions: Post-herpetic neuralgia for which topical lidocaine is a first line treatment, and trigeminal neuralgia for which carbamazepine remains the mainstay of treatment.</p> <p>Comment: There is relatively robust evidence for interventional treatments for specific types of chronic neuropathic pain, for example spinal cord stimulators for persistent post-operative pain (failed back surgery syndrome), peripheral nerve blocks and stimulators, etc. While outside of the scope of this review it would be good to bring to the family physician's attention that an interventional chronic pain service may have additional options for refractory neuropathic pain problems. The same would apply for the selected osteoarthritis and low back pain patient.</p>	<p>This has been clarified. Trials primarily focused on epidural injections. Note made in the evidence section that there were no responders identified for facet injections.</p> <p>Evidence section has been updated to reflect that trials primarily assessed hand and knee OA.</p> <p>We did not review prolotherapy or stem cells. PRP was included in the SR of OA, however no trials with responders were identified.</p> <p>Unfortunately, post-herpetic neuralgia was beyond the scope of the guideline.</p> <p>Beyond scope of current guideline.</p>

34	<p>- it is possible to add dosage suggestions? I see a lot of gabapentin titrated to incredibly high doses with the thought that there may not be a response until a "target" dose of gabapentin is met.</p> <p>- Another treatment I see a lot of people using is platelet-rich plasma for OA (better than corticosteroid injections!).</p>	<p>We have included a table in the appendix of all included interventions and details (eg dose). Box 2 - practice points -does highlight that lower doses generally provide the majority of the benefit with fewest adverse effects. We have reordered the points so that this appears earlier, along with other medication points.</p>
35	<p>Line 54. What does "inconsistent" mean?</p> <p>Line 188. Can you specify what kind of OA? Hip/knee? What about hand/shoulder OA?</p> <p>Line 261. What SNRIs? Does it include venlafaxine? Line 262. Can you comment on NSAIDs vs COX2 inhibitors? Line 279. Opioids in OA - consider making comment on tramadol and buprenorphine Line 327. Does it matter if NSAID vs COX2? Which TCAs?</p> <p>Clarify topical NSAIDs for what type of OA?</p>	<p>This simply reflects the absence of clear messaging around how to treat pain.</p> <p>Details of inclusion criteria are addressed in the systematic review on OA, however all types were included</p> <p>We have added a table in the appendix that highlights all medications that were studied for each class.</p> <p>Added a sentence in the evidence section that trials focused on knee and hand osteoarthritis</p>
36/37	<p>-Found the information in the appendix on preventing chronic pain in primary care to be very informative.</p> <p>-Interesting to see the benefits of topical nitrates in diabetic neuropathy</p> <p>-Under physical activity, I was wondering if physiotherapy-guided exercise programs could be defined...is this typical PT? and what does access to these programs look like?</p> <p>-Interesting to see that TCA only have clear evidence of benefit for treatment of low back pain. This varies from RxFiles where they list it as neutral for low back</p>	<p>Due to substantial variation in trials, there is not one clear definition of 'best approach to physiotherapy guided exercise. That is why we included a few resources in Box 3 as examples that may be useful.</p> <p>Noted.</p>

	<p>pain & that there is some benefit for treating neuropathic pain (Pain Colour Comparison Chart, Oct 2021).</p> <p>-Appreciate that although the cannabinoid guideline was recently developed that the evidence team checked for evidence on chronic pain since it was published as it is a common topic in primary care</p>	
38	<p>General: - it is not very clear from the guideline which evidence work led up to the creation of guidelines; it is briefly mentioned 3 systematic reviews including 285 RCTs, but we do not know the PICO question, which question each systematic review treated;</p> <p>in the appendix prism diagrams, inclusions and exclusions of publications are shown but it seems several systematic reviews have been conducted (and it seems these are for the supplemental questions)</p> <p>- although mentioned in the table 1, clearly state in the subheadlines of treatment if the recommendations are strong, moderate, or weak and the associated quality of evidence</p> <p>- RR mentioned in the guideline: it would be useful to be more precise on the outcome - I presume it is the number of patients obtaining meaningful pain relief; it would have been interesting to calculate ARR and NNT from the retrieved data, but I am not sure that this is possible due to the outcome nature (increase in RR). Even more pertinent since you mention NNH for adverse effects.</p> <p>- sometimes a term is written in an abbreviated form whereas at other times it is written in a full form (OA vs osteoarthritis), this should be screened</p> <p>- SNRIs: it is not clear from the guideline which SNRI should be used - duloxetine is mentioned at one place, but during the remainder of the guideline this remains</p>	<p>The specifics of the reviews are available in each systematic review itself. In an effort to keep the actual guideline a reasonable length, we focused on the clinically relevant application - leaving the SRs for those who are interested in further reading.</p> <p>The Prisma diagrams in the guideline only reflect the 11 supplemental questions identified by the committee. The bulk of the work is reported in the individual SRs that have each been published separately.</p> <p>We discussed this at length. Due to the fact that multiple medications are involved in each recommendation, listing the GRADE quality of evidence for each recommendation would make the recommendations almost unreadable. For simplicity and full transparency, the GRADE strength of evidence for all intervention are fully available in Table 1.</p> <p>Due to significant differences in placebo rates across interventions, we felt that RR most clearly reflected the true effect.</p> <p>All references now say osteoarthritis.</p>

<p>vague; the same holds for TCA, rubefaciants, cannabinoids (be more precise which ones were used)</p> <p>- in the section of opioid tapering is there any evidence of opioid substitution on pain (methadone, suboxone?)</p> <p>- Generally I would suggest revision of the text; there were a few mistakes only but some phrases could have been phrased more directly or were missing some clarity spinal manipulation - to you mean chiropractors?</p> <p>22-23: the guideline process was iterative....it is not very clear what this phrase means</p> <p>284 - I would include opioid misuse, and use opioid use disorder (according to DSMV) instead of addiction and dependence</p> <p>285 - what is OARSI</p> <p>292 - evidence team TO review 3</p> <p>11 - quality of evidence</p> <p>324 - THESE include</p> <p>343 - what corticosteroid injections do you talk about - facet blocks, spinal blocks, epidurals, foraminal blocks?</p> <p>354 and 433 - same as 284 382 - It is unclear how many RCTs were analyzed: 8 or 27 or in between? Why is this not a precise number?</p> <p>It is hard to follow 390 - you discuss here why this study is not valid. I personally would have appreciated such as discussion with other, more convincing evidence to demonstrate the validity of your recommendations (which are at the most moderate if I understand from table 1). The reason is that studies in pain medicine are often biased as a primary physician I need to know what I base my recommendations on; also be aware that the common physician might not</p>	<p>We have added a table that lists all interventions/medications that were studied and additional specifics (ie dosing).</p> <p>Thank you - we have referenced the PEER opioid use disorder guideline which addresses this very question.</p> <p>Spinal manipulation was performed by other health care providers in addition to chiropractors in the RCTs, (eg physiotherapists). Specifics included in table in appendix</p> <p>Addressed. See above.</p> <p>Manuscript revised.</p> <p>This has been clarified.</p> <p>Not needed.</p> <p>I am not sure which line this refers to.</p> <p>Primarily epidural - this has been updated</p> <p>The listed line #s don't match up, however, the reference to 8-27 RCTs in line 383 refers to the SRs completed for each of the interventions with benefit listed following this. We could list each individually, however for brevity decided to summarize this data, which is fully available in the references systematic reviews.</p> <p>The quality of all included studies is clearly reported in the individual systematic reviews which are referenced in the guideline. For</p>
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	<p>know what these terms mean, especially the I2, so further precision might be necessary</p> <p>401 - you mention "all types of neuropathic pain" - be more precise, because the diagnosis of neuropathic pain based on DN4 criteria remains the same. You mean different disease processes?</p> <p>455 - it might be dangerous to recommend this because there are combinations that should be avoided. This recommendation is very vague</p> <p>464 - define CBT</p> <p>467 - Randomized controlled trials: write RCTs</p> <p>470 - both groups - define (intervention and control?)</p> <p>471 - which outcomes?</p> <p>474 - 5-10% - define of what, I presume you mean dose</p> <p>512 - patents: PATIENTS</p> <p>535 - which one page summary to you refer to? the methodology should be outlined in the methods section</p> <p>546 - the highest quality evidence - which is the level of evidence, from this phrase it seems that interventions have no benefit beyond placebo - but in the results this is not what you proposed for exercise, CBT, SNRIs, NSAIDs, etc. Maybe clarify which you suggest compared to which effectively do not have benefits</p> <p>549 - I would add 2 important factors here: comorbidities, age - they very often limit treatments</p> <p>557 - very interesting point as it is often a comorbid conditions, but adding on this new idea at the very end</p>	<p>brevity, we highlighted only a few points of interest in the guideline. With regards to TCAs, we felt it important to highlight that although the RR is 3.00, the quality of evidence is quite low which affected our recommendations for their use.</p> <p>The DN4 is a questionnaire which helps to identify neuropathic pain. Included trials enrolled pts with any type of neuropathic pain. As a primary care guideline we feel that most clinicians will be familiar with the symptoms of neuropathic pain.</p> <p>We looked at combination treatment as a supplemental question and found that evidence does not clearly support one recommendation over another. As in all of primary care medicine, clinicians will need to prescribe with caution.</p> <p>CBT is defined in line 230</p> <p>Done</p> <p>This is implied from sentence above</p> <p>Outcomes are specifically defined in the full supplemental question in the appendix. We have summarized for brevity here.</p> <p>Yes</p> <p>Corrected.</p> <p>Two page summary - outlined in methods.</p> <p>Many (not all) have limited evidence beyond placebo. This is simply a summary of what has been discussed already.</p>
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	<p>of the review - do you think it is pertinent without previous discussion.</p>	<p>The list is not meant to be exhaustive, we feel that acceptability of side effects would be considered in pts with varying age and comorbidities.</p> <p>Manuscript revised.</p>
40	<p>I want to commend the committee on making a very high-quality guideline on a subject that is vary hard to tackle. It is a very concise and user-friendly guideline that i think will further shared decision with patients and a better treatment of chronic pain. My only small recommendation is in the Chronic pain Knowledge Translation tool, in the section Psychological Therapy to define the control group in parentheses. Thank you</p>	<p>KT tool revised</p>
42	<p>Typos and clarity issues</p> <p>Line 24: consider re-writing for clarity, for example: 285 RCTs were reviewed and the results were synthesized into 3 systematic reviews</p> <p>Line 104- says 11 supplemental questions while Line 27 says 10 complementary questions</p> <p>Line 149- typo Line</p> <p>327- what is the RR for TCAs?</p> <p>Line 184- perhaps say, as the current evidence of benefit is unclear.</p> <p>Line 234- the written text leads me to wonder "what question"? Perhaps re-state the questions prior to the recommendation for the reader's clarity.</p> <p>Line 271, notes low quality evidence RR 1.17, this is not a significant result- why mention the RR here and not for the interventions above (lines 265-268)?</p> <p>Line 360- extra space before regarding</p> <p>Line 383 what does 8-27 RCTS mean? The results of these interventions seem consistent and well powered, why are they not recommended as first line?</p>	<p>Corrected for both to say 11.</p> <p>Corrected</p> <p>The RR for TCAs is a bit further down in the paragraph following an explanation of why this outcome is a bit different from the rest.</p> <p>Modified</p> <p>The question has been clarified.</p> <p>We removed the RR to be consistent.</p> <p>Corrected</p> <p>These are the number of RCTs identified (and meta-analyzed) for each of the following 4 interventions. (simplified for brevity). The results</p>

	<p>Line 387- consider re-writing, for example, evidence from these trials was low quality due to small sample sized and short study duration.</p> <p>Line 430- state the NNH and the RR</p> <p>Line 467- consider rewriting to say, Randomized Controlled Trials have not shown statically significant reductions...</p> <p>Line 512- typo patients not patents.</p> <p>Line 524- would be more informative to say three systematic reviews, OA (XX RCTs), Back pain (XX RCTs), and Neuropathic pain (XX RCTs).</p> <p>Line 482: does observation data refer to Cohort Studies?</p> <p>Line 540- should say a shared discussion with the patient about interventions where harms exceed benefits is important.</p>	<p>are recommended as interventions with evidence of benefit.</p> <p>NNH has been added.</p> <p>Slightly modified - changed “achieve” to “demonstrate”.</p> <p>Corrected</p> <p>Balancing full information with brevity.</p> <p>Yes</p> <p>This has been discussed in the guideline.</p>
43	<p>Line 183: the explanatory statements following seem to prefer physiotherapy-led exercise; should the overall recommendation not mention this as preferred but not required?</p> <p>Line 331 and surrounding: although it's explained why a deviation away from 30% pain reduction ("responders") is necessary for TCAs, would it not make more sense to maintain a rigorous definition and therefore declare that TCAs for LBP and sciatica do not meet the 30% threshold, rather than using the studies' threshold?</p>	<p>While most studies did look at physiotherapy led interventions, we do not have evidence that they were superior to others.</p> <p>As highlighted in the systematic reviews, we used a few variations of “responders” including simply reporting that the patient was “better”.</p>
46	<p>There is frequent use of the NNH statistic when discussing harms. Why is there not a similar use of the NNT when discussing benefits? I would suggest routine use of the NNT along with confidence intervals for this statistic.</p> <p>Line 216: could the CI of the step count and exercise minute changes by reported?</p>	<p>Given the variability in placebo/control response rate - we felt that RR most accurately reflects the true benefit, and allows for more direct comparison between interventions.</p> <p>The CI is reported in the supplemental document.</p>

	<p>Line 188: I think the definition of "meaningful pain relief" needs to be more clearly defined as it is the outcome used on line 190. Just saying "example 30% reduction in pain" makes it unclear. Is it > 30% reduction? If so, don't say "example".</p>	<p>This is clearly outlined in referenced systematic reviews. The most common outcome is ~30% or greater.</p>
<p>47</p>	<p>24- provide the full term for RCTs as this is the first time it appears</p> <p>25- identify who "they" are 25- i.e. 29- had undergone</p> <p>108- full term for GRADE</p> <p>149-shared</p> <p>152- have undergone</p> <p>160- period after (KT tool)</p> <p>161- change comma to period, capitalize Full</p> <p>197- explain withdrawal: does it mean withdrawal from the implemented exercise program, withdrawal from the study, etc</p> <p>328- Kolber</p> <p>558- add Oxford comma after suffering .</p>	<p>Corrected.</p> <p>Not sure what this refers to.</p> <p>Corrected.</p> <p>Corrected.</p> <p>Added.</p> <p>Done.</p> <p>Withdrawal due to adverse effects is a commonly used measure.</p>

The following questions relate to the **Knowledge Translation (KT) tool**.

11. What are the strengths of this document? Would you find it helpful in your practice?

Reviewer ID	Response
7	Clear, simple, concise and great to look at. Definitely would use in practice. A nice tool to show patients when having discussions surrounding management of chronic pain
8	the pictorial representation of data & recommendations is helpful to clinicians and patients
9	Yes I would find this translation tool helpful in my practice. Presenting the treatments with clear evidence of benefit is helpful in discussing these options with patients. Encouraging physical activity as the primary component in the treatment plan for chronic low back pain and osteoarthritis is helpful.
13	oops...spoke too soon earlier. This is OUTSTANDING and "worth the price of admission"
14	simple yes - Will be helpful for discussions and decisions with patients. - attempts to support shared decision making approach
16	Clear, easily accessible information. This would be extremely helpful in my practice. I would post this up for easy reference!
17	The Knowledge Translation Tool is an excellent summary of this chronic pain review. It is concise
19	This is an easily read document, well-organized and clearly laid out. It is a deftly designed overview of the information contained in the guideline that I can see useful in facilitating discussion between patients and clinicians about the options for pain management. This document reflects the recommendations of the guideline by highlighting both physical activity and psychological therapy in a way that draws the focus, making it helpful as a visual aid. The "Treatment Interventions for Discussion with Patients" and "Key Adverse Effects" charts are both effective at conveying the additional information needed to make the best choices for treatment with an eye to efficacy, comfort and risk management.
20	Clear concise and primed for family practice. The actual percentages help communicate the benefit or lack thereof to certain patients that require that level of detail
23	I think that it is condensed. Well laid out with just the right amount of text . Colours create division well
25	Extremely applicable for clinical use - clear and concise. I think it would be useful in guiding treatment in our physiotherapy practice, but also useful to have information regarding medication use in our chronic pain patients (despite working in a drugless profession).

26	Simple language, to the point. Recommendations and suggestions are very clear. Very useful for my practice.
27	Well laid out - pearls listed and evidence in graphic form -useful to download a refer to on clinic EMR. I liked it.
28	-clear -concise -provides important guidance and succinctly
29	unnecessary use of opioids.
30	Easy to read and follow. Definitely helpful in practice. Would be useful to have during conversation with patients.
31	The colored document - Peer Simplified Chronic Pain Guideline is very well summarized and a handy tool for the busy practitioners. The emphasis on "shared decision making" is extremely important in all aspects of medicine, but more so in Chronic Pain as its so individualized as has been mentioned line 547-550
32	Clear and well-laid out
33	Well organized and easy to find the desired information.
34	I think it is clear, succinct and easy to follow. I like the addition of effect of placebo/control
35	Easy to compare the evidence of benefit with bar graphs.
36/37	Love the PEER Simplified Chronic Pain Guideline: Summary! Besides being a quick reference for practitioners, it also has visuals to help guide conversations about treatment options between practitioners and patients to enable shared decision making. Really like that it includes information about physical activity & psychological therapy which are important components of treatment for chronic pain as medications only reduce pain by ~ 30% when effective. I use the analogue 4 flat tire car analogue from RxFiles when explaining why medications alone typically don't work to treat chronic pain...this will be a great supplement to it!
38	summarizes well different options thanks for the great table on side effects I would find it helpful to discuss treatment options
40	It is a very well constructed tool that is concise and uses numbers (percentages) that I think will be easy to explain to patients. The key side effects are mentioned, the cost (which is important for patients). I think it will be useful for my practice.
42	One of the biggest strengths of the Knowledge Translation Tool, Key Adverse Effects table. Providing an easy guide about the type of adverse effects and the costs of such treatment will be very beneficial to support a conversation with patients about treatment options. The graphic design is bright, easy to read and informative.

43	This is important - this is what most people will use. It seems to be clear to understand.
45	Found this tool especially useful. Nice, simple overview. Could be used to show patients even to support shared decision making.
46	Love this document. I anticipate it being very useful in practice.

12. What are the weaknesses of this document? How would you improve it?

Reviewer ID	Response	Comments
7	None	
8	Why is your first section about exercise--which applies only to OA--when CBT/Mindfulness therapy works across all types with equal efficacy, and (in my opinion) gives patients more "control" over their own condition.	The strength and quantity of evidence was considered here. There are many RCTs for OA and chronic back pain for exercise and very little raw data for counselling to get estimates from. Additionally, our guideline committee provided a strong recommendation for exercise and a recommendation to consider counselling. So the KT tool prioritizes exercise first, and counselling afterwards.
38	- I would visually depict treatment benefits with exercise and CBT/mindfulness (as you did with medications) and I would put these interventions on the top of the list maybe mention Canada based costs; this is hard because each province I guess has its prizes depending on provincial coverage	We will rearrange the KT tool to place exercise first, counselling second and drug/other treatments third. Will add formatting to emphasize exercise and counselling. Adding them to the table makes it difficult to capture an appropriate 'control' rate for these interventions so we worked on highlighting those sections. Costs added on the back page.
42	Overall, I really liked the KT tool, however, the visual impact of physical activity is diminished because it is not included in the Treatment Interventions table, along with the percentage of patients with meaningful reductions. Also, the Psychological Therapy statement should also be in the table, as a stand-alone item, it will be missed.	Noted. Format adjusted to address these comments. See above for further clarifications.
9	Stating so strongly that certain treatments have "evidence of no benefit" or treatments have more harm than benefit is not helpful for patients with severe pain that have already tried most of the first line recommended treatments. Stating these issues so strongly, without significant back up published evidence is not helpful in my opinion, as it will dissuade primary practitioners from even considering opioids or cannabinoids which just leads to a request for specialized chronic pain management which is often	<ol style="list-style-type: none"> 1. Evidence of no benefit is based on the best available evidence – see SR for that data. We acknowledge the complexity of chronic pain management (see previous comments). 2. Adverse events are important for shared

	<p>not available. Similarly, focusing half of the entire translation tool on "key adverse effects" is not particularly helpful in assisting practitioners educating patients about possible beneficial therapies. Focusing so much on key adverse effects and cost seems to be more of a deterrent to using these agents than actually providing them as a trial (there is no mention of how expensive CBT is). If a medication is effective and well tolerated, the medication could be continued, but if not well tolerated they should be discontinued and switched to something else. Line 445 in our full report suggests that combinations are reasonable but there is really no mention of using combination therapy in the translation tool. In people with severe pain, combinations of treatment are almost always required.</p>	<p>decision making. We are not saying "no" to a trial but to consider both benefits and harms. Evidence + experience = decision.</p> <ol style="list-style-type: none"> 3. Combination therapy – adding 2nd drug is reasonable – see clinical pearls in KT tool 4. Complex patients – has be acknowledged in the guideline but cannot be addressed in simplified 2 page KT tool
11	<p>No, a three line chart would work as well! If it's a poster for the waiting room. Fine. PDF4 overemphasizes in the format those unsupported interventions by having double bullets that attract many eye uselessly</p>	<p>Not entirely clear what this means.</p>
13	<p>None</p>	
16	<p>None that I can think of. Don't forget to edit the second sentence under "Clinical Prescribing Pearls" on the second page!</p>	<p>Adjustments made to relevant section.</p>
17	<p>I think the Knowledge Translation Tool is well and I don't have any suggestions for improvement</p>	
19	<p>I would suggest that percentages be used in the recommendation for physical activity rather than "...2 out of 3 people who increase their activity..." to keep consistency throughout the document and make it easier to discuss the decisions that need to be made.</p>	<p>Addressed. See above.</p>
36/37	<p>I wonder if more stress & information could be included about exercise in the tool. Perhaps including details about the impact of wearing an activity tracker eg. how much it increases daily step count & minutes exercising. An example of a exercise program as outlined in the appendix may be helpful for practitioners to become comfortable developing a written, stepwise & goal-orientated exercise program for their patients which increases patient success compared to being told to be more active, which can result in failure as they get overwhelmed and don't know where to start.</p>	<p>Space limits full description – refer to full guideline for more details. Example of exercise prescription added.</p>

40	In the exercise section there is no mention of health care professional guided exercise, with either a physiotherapist or a kinesiologist.	This is mentioned in the guideline, but space limitations do not permit further details in the KT tool.
30	Perhaps point out/ highlight the that key elements are exercise (independent of weight loss) and wearable devices have significant impact on pain reduction	KT tool revised. See above.
32	Link to resource/s for formulating exercise prescription might be helpful	Added. See above.
34	Add a reference or link to a physical activity prescription. Many practitioners are familiar with the visual analog pain scale, perhaps also a link to other scales to assess function, ability to complete activities of daily living, perhaps motivational interviewing questions to ask patients when assessing the impact of chronic pain on their daily functioning.	Noted. Added prescription for exercise but space constraints limit our ability to add further tools to the KT handout.
46	Suggest replacing the word "exercise" with "activity".	We have added the word "activity" as much as we can without being excessively repetitive.
47	At the very top of the page it says "Physical activity" and then the rest of the sentence is on the next line. When I first looked at it, I skipped reading "Physical activity" which others may do as well. It might be more clear to have the sentence continue on the same line.	Wording adjusted.
14	Would love a few more clinical practice pearls. Any important insights from the evidence regarding dosing needed, approaches that allow for a good trial	Very difficult to get consensus from the guideline committee re: most valuable clinical pearls. We have included the top 2 as voted on by the guideline committee. We have added a table to the appendix highlighting specific drugs that have been studied and range of dosing utilized in the trials as a reference.
25	In the clinical prescribing pearls at the end of the document, I think it's worth reinforcing/mentioning that a combination of one drug in addition to physical activity may be beneficial, rather than just writing a	We agree with the idea – we have made physical activity more prominent in the KT tool to indicate it is the foundation for treating LBP and OA (in addition to drugs).

	second drug (as the initial agent could have been physical activity).	However, space constraints do not permit us to add it in the clinical pearls section.
20	Under clinical prescribing pearls the second line looks like a filler? either replace or delete?	Fixed.
30	Pearls seem to be incomplete.	Fixed.
23	Not exactly clear why the second page is divided the way it is	Fixed.
47	Clinical Prescribing Pearls is incomplete	Fixed.
26	By adding studies on trauma informed care. By mentioning the apparent lack of chronic pain studies in the elderly.	Beyond scope of guideline however, included as clinical pearl.
29	role of vitamin D or any other supplements? role of diet? More details about spinal manipulation	Beyond scope of guideline. Details about spinal manipulation can be found in the LBP guideline and KT tool.
45	Eventually would be good to have other types of pain syndromes included like fibromyalgia, chronic myofascial pain. Would explain what "cannabinoids" refers to - just pharmaceutical or CBD oils?	Other types of pain syndromes are beyond the scope of this guideline. Further specifics of cannabinoid data is discussed in the appendix.
27	Although difficult to do and not fitting the format -- on page 2 of the KT Tool--the percentage stopping is not available from the studies in the last (teal colored section) for various treatments -Oral NSAIDS, Spinal Manipulation, topical treatments and viscosupplementation. Evidence or ranges of discontinuation from general studies (not necessarily chronic pain studies) may be helpful for practitioners to be given a range so they can fit it into their plan. [in non evidence based language a ball park figure especially for oral NSAIDS}	Agree that other studies may have this data. But the process to get this information falls outside our methods/process and scope.
32	Not a weakness but surprising that there were no recorded stoppages due to adverse events with oral NSAIDS and 2-9% stoppage due to adverse event with acetaminophen.	Agree.

28	-I would add the risk of steroid flare to the risks of intra-articular steroids as it is the most common side effect and a significant one that patients should be aware of.	Noted. See previous comment. Also, space limitations prevent us from including all relevant adverse events.
33	Would recommend advice about the maximum recommended number of repeated corticosteroid injections for OA.	The number of total injections varied considerably across studies. This information was captured in our OA KT tool but we limited the guideline KT tool to adverse events only (i.e. did not include prescribing advice).
25	Key adverse effect of spinal manipulation includes risk of stroke if neck manipulation - but unlikely treatment choice for LBP. More common would be increased LBP or onset of leg pain, etc - if spinal manip is in the lumbar spine.	Discussed. We included this adverse effect because practitioners sometimes recommend neck manipulation even though a patient presents with spinal manipulation.
31	None	
34	I don't know, perhaps adding the references I list below. Otherwise I think it is great!	Space constraints limit the ability to add further references.
35	Percentages may be a little misleading because there is a high placebo response. It would be more accurate to report the incremental benefit of treatment or overlap the 2 bar graphs. To illustrate that of 100 people with OA, 40 would feel better already without treatment; of 100 people with OA who take SNRI - an additional 21 would feel better. I think it would be helpful to see some dosing recommendations or ranges - at least for the treatments with clear evidence of benefit.	<p>We have added a table to the appendix highlighting specific drugs that have been studied and range of dosing utilized in the trials as a reference.</p> <p>Dosing recommendations and iconarrays have been included in the KT tools of the individual conditions and the reader is referred to those. The display of results as suggested by reviewer is captured in earlier KT tools also.</p>
43	I think it would be helpful to explicitly rank interventions (they are listed in order of percentage of patients receiving benefit, but numbering them would be better). No major weaknesses.	We purposely chose to not rank interventions as different patients will prefer different treatments at different times.
38	- the phrase "adding a second drug is reasonable.." is so vague that, although it is helpful, it is not at the same time – which ones can be combined? No combination seems to be better than any other according to the guideline, although this section was only discussed very shortly – mention hypertension and blood sugar	<p>Injections - see previous comment.</p> <p>Combinations - full write up in the appendix of the guideline. None are specifically recommended and thus are not captured in the KT tool.</p>

	increase, diabetes exacerbation with glucocorticoid injections; is there a safe number of injections?	
40	<p>“Insert others and adjust wording to reflect guideline” not sure what you wanted to mean by this? I would define spinal manipulation out of fear that someone might do it themselves at home with a youtube video. What specialist are trained in this and where and who should they consult without being specific. Maybe give examples of different Rubefacients, where you define you abbreviations. Also in the section Psychological therapy i would define or give example of the control in parenthesis. I would only do these things if it fits cleanly in the format you have picked out. I find it very nice and user friendly especially that it fits on page front and back.</p>	<p>Fixed.</p> <p>Details about spinal manipulation cannot be included in the KT tool due to space constraints.</p> <p>Example of rubefacient added.</p> <p>Control arm for psych added.</p>

13. Other comments, suggestions, or edits?

Reviewer ID	Response	Comments
7	None	
8	Could you include a QR code & weblink to specific resources for clinicians? And could you develop a companion KT tool especially for patients, with QR links to specific resources?	Patient handout being developed with QR codes.
9	please replace the term "rubefacients" or define it somewhere.	Fixed.
16	Great tool. I am looking forward to the final product.	
17	If the Knowledge Translation Toolkit was being published by itself as a summary there should be reference somewhere in this document to the larger more comprehensive document.	Noted.
26	Would be helpful to add studies identifying benefit from pain coping strategies, understanding pain and group programs.	Outside of the scope of the guideline and KT tool.
27	KT Knowledge Translation Tool page 2 under 'Clinical Prescribing Tools' -- the 2nd line states instructions "Insert others and adjust wording to reflect guideline". I presume this is incomplete at present as suggested in the red brackets . I include this only for completeness recognizing it is stated there in line 148.	fixed.
28	Well done!	
38	<ul style="list-style-type: none"> - possible mention on how you obtained the percentages - under topical agents you mention ketamine and doxepin. I am not sure if these have been discussed appropriately in the guideline to be mentioned here, the same for acupuncture - document puts a lot of emphasis on corticosteroid injection - however this is often not the first treatment we want to propose to patients; the same for oral NSAIDs in cardiac, renal patients. 	<p>Methods fully explained in the guideline. Due to space limitations, we cannot capture methods in the KT tool.</p> <p>Re: ketamine, doxepin, acupuncture - these are captured in additional pain questions in the appendix (ketamine, doxepin). Acupuncture is more fully explained in the original SRs and KT tools for LBP.</p>

	- there seem to be more benefits with TCAs, but sometimes we prefer prescribing SNRIs due to a different side effect profile, so maybe mention that treatment choice depends on several factors, not just efficacy of treatment	The comment about needing to consider full prescribing issues is noted. This has been captured in the guideline but due to space limits, will not be included in the KT tool.
40	All mentioned in other sections. Thank you	
46	Suggest alternate wording for "Psychological therapy". "Brain training" perhaps or something	"Psychological therapy" is a more commonly used term.

Acknowledgment: PEER would like to thank all the people who contributed to the peer review for the guideline and KT tool. The following are the names of the reviewers who gave permission for their names to be published.

Note: we have also published the feedback of reviewers who preferred to remain anonymous. In addition, there were 3 reviewers who did not want their name or comments published.

Name	Profession	Location
Amiel, Jacques-Alexandre	Pharmacist	Quebec
Dunkin, Jennifer	Pharmacist	British Columbia
Fancy, Nicole	Family Physician	Prince Edward Island
Findlay, Ted	Family Physician	Alberta
Fink, Karin	Family Physician	Quebec
Flaman, Jennifer	Physiotherapist	British Columbia
Ha, Rita	Pharmacist	Ontario
Howe, Jennifer	Pharmacist	Alberta
Isaac, Jenna	Patient	Nova Scotia
Lees, Mark	Family Physician	Saskatchewan
Majeed, Yasmin	Family Physician	Alberta
Marceau, Raelene	Nurse Practitioner	Alberta
Marwah, Radhika	Family Physician	Saskatchewan
McConnell, Mark	Specialist	Wisconsin
Orrantia, Eliseo	Rural Generalist	Ontario
Parsons, Ean	Family Physician	Alberta

Phillips, Leah	Other	Alberta
Rose, Mat	Family Physician	Alberta
Saqib, Nida	Pharmacist	Alberta
Varughese, Jobin	Family Physician	Ontario