Details of public consultation submission received and responses from working group

Submission ID number	Topic/Section in guideline addressed by submission	Comments received	Working group response
1	Algorithm	1. The algorithm would be of use to MOs, with some qualifications (see 2 & 3 & 4 below). The guideline document is far too long and dense to be of any real use by busy GPs.	We appreciate the critique and have amended the summary version of the guidelines including what we have currently portrayed as the algorithms. Any summary needs to be adequately supported by a more substantive version to fully expand on the methods used.
	Consistency with other guidelines	2. There needs to be consistency with other recent work in this area. One of the standout examples is the OA knee CCS recently released by the ACSQHC: weight loss target was “up to 5%; in this document it is 7.5%. What is the evidence base for this variation?	More recent literature highlights to obtain a clinically meaningful effect for symptoms following weight loss a minimum of 7.5% weight loss is preferred to achieve a clinically-meaningful effect. Ultimately, the more weight loss the better. Amended to reflect consistency with a minimum weight loss target of 5 to 7.5% body weight.
	Pharmacologic interventions; herbal interventions	3. A general sense of despair that Pharmacological interventions at best get a “neutral recommendation”, including paracetamol and NSAIDS and that there is no discrimination between the recommendation for use of these two agents vs “herbal therapies”. This may lead to unintended consequences. The inclusion of aspirin as an NSAID agent of choice is also problematic.	Paracetamol is a neutral recommendation for the reasons explained in the guideline. NSAIDs are a conditional for recommendation. The best recommendation for herbal therapies was neutral. Hopefully this provides some more clear distinction between herbal therapies/teacher circles and NSAIDs. We will remove aspirin as an NSAID agent of choice-this was an error on our part.
	3.1.4 Manual therapy, weight management and heat/cold therapy	4. “Manual therapies” should be better defined	We will endeavour to explain this more clearly providing some examples in the explanatory document.
2	Multidisciplinary care	Further review on the role of the health care team would be beneficial. The value of the multidisciplinary team appears to be not strong enough with the focus being on what the general practitioner (GP) can provide. Our experience is that the role of the practice nurse can be invaluable in partnership with the GP in care planning and goal setting. Support of allied health professionals will greatly enhance capacity to include all the concepts of chronic care and will add value to the patient experience and outcomes with their professional expertise in the care of people with osteoarthritis and the comorbidities that are common in the patient cohort.	We will attempt to highlight and expand this further in the management and assessment Section 1.8.
	Promoting patient centred care	While primary care practitioners are the masters of patient centred care this is only referenced once in the document. This guideline could represent a key opportunity to promote this important concept to the health community in general and provide a platform for consistent messaging across health teams working in primary and secondary care settings, whether that be in private or public care services. GPs are crucial in making these links across these divides and the guide would be greatly enhanced if this was transparent in the document, revealing the collaborative nature of the care required.	We will attempt to highlight this further in the holistic assessment Section 1.6.1 and management and assessment Section 1.8.
	Referral Pathways	GPs are time poor and largely guideline implementation is limited by system barriers rather than any knowledge and awareness issues. There appears to be a missed opportunity to place more emphasis on utilising existing services and referral pathways to achieving the recommendations. This could include allied health referrals (chronic disease MBS items),	We will attempt to highlight this further in the holistic assessment Section 1.6.1 and management and assessment Section 1.8.

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		access to multidisciplinary state government initiatives (NSW - OACCP, the Get Healthy service, Vic - OAHKS, OLD - screening clinics), chronic pain clinics in NSW, etc. We suggest these opportunities be included within the guideline and also the holistic assessment algorithm.	
	Implementation support	In consideration of implementing the guideline it maybe opportunistic to produce a separate document that could be updated more regularly than the guideline would require. The implementation document could contain more specific information concerning current opportunities for supportive care services and system resources such as: ● information about MBS items that can be used ● skills development training available e.g. musculoskeletal assessments, physical testing, behaviour change methodology to be applied ● local referral pathway considerations that maybe through Health Pathways linking to services such as the osteoarthritis specific services as noted above, chronic pain clinics, private allied health ● information sources for both patients and health professionals, medicine wise modules, and others.	We have added Section 1.8.3 Implementation and referral pathways in the guideline. A separate implementation and dissemination plan has been developed.
	Page 6 - A Healthy lifestyle	Concerning exercise suggest listing options in order of the 'strength of evidence' as noted on page 9 - i.e. walking, muscle strengthening, tai chi before hydrotherapy and yoga.	This is a good suggestion - we have amended accordingly.
	Page 19 - Target audience	Section 1.4 Target Audience: add exercise physiologists to the list.	This is a good suggestion - we have amended accordingly.
3	Comments about the evidence: Arthroscopy	Our members are concerned that the available evidence would not support a recommendation for arthroscopy where the person also has mechanical symptoms of a clinically locked knee; as it indicated (on p.15); and might support the prescription of exercise, which if not successful could lead to arthroscopy referral. **Suggestion:** We suggest that this recommendation be reviewed.	We have modified the verbiage in the rationale underpinning this recommendation highlighting that if exercise fails to release the locked knee that arthroscopy could be indicated in that infrequent instance.
	Comments about the way that the evidence is curated	Our members thought that general practitioners (GPs) can be time poor, would find it beneficial if the layout of the recommendations helped focus their attention and reinforced the content of the recommendations. They thought that a GP should be able to pick up these guidelines and clearly understand that they should refer their patients to physiotherapy and to encourage the clear importance of progressive strengthening exercise for these clients so that they are on-board from 'day one'.	We appreciate that GPs are time poor and one of the clear intents of developing an algorithm is to summarise this into a useful format. Land-based exercise is clearly part of the core long-term management and referral to an allied health practitioner for this is recommended both in the algorithm and the text.
	Plain language summary	Our members felt that the beginning of the document (e.g. the plain language summary) could be written and laid out in a way that strengthened the likelihood that a GP would have this message reinforced. Some of the early text (on p.6) says: Non–drug treatments ● Applying heat packs or hot water bottles can relieve muscle tension and soreness and improve blood flow. However, applying cold packs, or ice should not be offered.	The plain language summary will be edited such that it conveys more clearly what treatments would be recommended versus those that should not be.

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		● Footwear marketed for OA should not be offered however patients should avoid certain footwear such as high-heeled shoes ● There are different types of knee taping. Speak to your health professional about whether knee taping, such as patellar taping, would be helpful to for you. Our members felt that this indicated that there are NO strong recommendations for non-drug treatments.	
	Consistency and distinguishing between recommendations	The consultation draft indicates that the recommendations are formulated using standardised wording, such as using the term 'recommend offering' for strong recommendations and 'suggest offering' for conditional or weak recommendations or other terminology such as "should" and "may". For example, although the text says: We strongly recommend muscle strengthening exercise, walking and Tai Chi. We think that the consistency is useful. In this case (at p.9), the following sentence says: We suggest offering stationary cycling and/or hatha yoga. Our members were concerned about the high level of discipline and focus it would take for the reader to distinguish the strong recommendation from the conditional recommendation which follows. They acknowledge that the text is congruent with the model for recommendations as outlined; and that there is a signal in the text colour in the adjacent column. Nonetheless, our members felt that it would be easy to mistakenly get the impression that the recommendations carry the same weight.	Thank you for this helpful suggestion. While we were guided by what is recommended with the guideline development methodology, we have now changed the wording in the relevant recommendations to assist the reader distinguish between the recommendations.
	Order and the way document is worded	Our members were also concerned that the way in which the document was ordered and worded was not clear enough to drive more appropriate practice. In this context, the benefit of short-term use of a modality (e.g. heat packs) in contrast to long term benefit was less clear than it might be. **We suggest that:** ● the summary be re-structured: - key treatments - education, exercise therapy (resistance training, aerobic training, functional exercise), consideration to Aquatic therapy for those who struggle with land based exercise, and weight management; and - optional treatments (analgesia, taping, heat packs, etc.) ● recommendations of different strengths be clearly delineated/separated ● all strong recommendations for interventions be provided at the beginning of the summary of recommendations and all be in the colour green ● all strong recommendations against interventions (i.e. what NOT to do) be provided after this, and all be in the colour red.	Thank you for this helpful suggestion and we have attempted to reformat the summary and recommendations to be consistent with this.

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		• conditional recommendations follow strong recommendations against interventions; and be ordered 'for' then 'neutral', then 'against' • the text be augmented to provide some description of the exercise prescription so the GP can better prepare their patients for what exercise management lies ahead • the text be augmented to ensure that distinctions between short-term benefit and long-term benefit of interventions are made, as appropriate.	
	Reference to factors like 'dose'	Our members think that it would be useful for the Guidelines to overtly reference the importance of a full consideration of the frequency, duration and intensity of exercise therapy sessions; the number of sessions; the period over which sessions should occur; and the degree to which sessions need to be 'supervised'. We are undertaking a sustained project on digitally-supported physiotherapy, and think that it would be useful to overtly refer to the opportunity for sessions to be conducted by physiotherapists, but not require the patient to be colocated with their physiotherapist. **Suggestion:** We suggest that consideration be given to inclusion of reference to 'dose response'.	We have further highlighted this in the section on exercise the dosage aspect and that exercise can be delivered remotely.
	Addressing the risk of falls	Our members thought that there was minimal reference to addressing the risk of falls in the population with hip and knee osteoarthritis. They thought that assessing secondary co-morbidities that increase falls risk (intrinsic factors) should be completed with this population and this should be a holistic and comprehensive falls screen. In addition, they thought that an assessment of environmental factors, education, and environmental modifications should be included; and that these appear to be lacking with only references to walking aids. Our members felt that consistent attention to this risk could reduce harm to patients, and secondary costs to the health system (including presentations to acute services). Our members believe that there is moderate to high levels of evidence for systematic assessment (and intervention where needed). **Suggestion:** We suggest that consideration be given to inclusion of a recommendation for the systematic assessment of falls risk.	We are not aware of level one evidence for assessing falls risk in osteoarthritis but understand its importance. Falls risk is already included as one of the key factors to be considered as part of the holistic assessment in Section 1.6.1.
	Articulating the importance of management continuity	Our members felt that the draft Guideline might be too narrowly focused on interventions at the person-level – focused only on those of an individual GP and individual patient. Our members thought that the guidelines missed an important opportunity to reinforce the role of 'management continuity' – the consistent and coherent approach to the management of a health condition that is responsive to a patient's changing needs. Our members who collaborate in patient care with GPs believe that management continuity is especially important in chronic or complex	Thank you for this helpful suggestion. We have included this in the holistic assessment description in Section 1.6.1.

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		clinical diseases that require a common approach to management from several providers who could potentially work at cross purposes. Continuity is achieved when services are delivered in a complementary and timely manner. Our members noted that the RACGP's 2017 work on prescribing drugs of dependence had a 'light-touch', but consistent message about management continuity. **Suggestion:** We suggest that consideration be given to including brief, but direct reference to the benefits and mechanisms of working as part of a multi-disciplinary team.	
	Strengthening references to education	The principal reference to education in the draft Guidance is to self-management education programs. It may implicit, rather than explicit in the discussion, however, our members thought it would be useful to highlight the benefits of health education and advice (e.g. on pain management and activity) by members of the health team; and the role of health care teams and consistent messaging in addressing motivation and adherence. Our members recognised that a part of the challenge in this area is the way in which Australia's third-party funding schemes tackle payment, with their focus on being collocated with the patient and their focus on paying for occasions of service. **Suggestion:** We suggest that consideration be given to strengthening the text to confirm the value of education about the condition and evidence-based treatments by physiotherapists.	In following the GRADE process, evidence tables need to be produced on which to judge interventions. The only education interventions evaluated in RCTs are self-management education programs – hence they are reviewed. However, we agree that education is an ongoing process that can take a variety of forms and include a range of topics. We have now included a subsection (1.8.1) which reinforces education per se rather than self-management education programs.
	The role of multi-disciplinary pain clinics	Our members understand the utility of multi-disciplinary pain clinics for patients with persistent and recurrent pain and psychological distress. **Suggestion:** We suggest that consideration be given to including specific decision-making tools and guidelines for referral, with the aim of ensuring appropriate patients are directed to this source of care.	We will endeavour to include as part of an implementation plan further resources and information related to educational advice for patients as well is resources in the community they could use to enhance their care including multidisciplinary clinics.
	Referring for aquatic exercise therapy	Although the benefits in pain reduction and function from aquatic exercise therapy in the treatment of hip and knee OA are smaller than the effects from land-based exercise therapy, people who experience too much pain to exercise in a full weight-bearing environment will benefit from aquatic exercise therapy. **Suggestion:** We suggest that the text be augmented to indicate the utility of aquatic exercise therapy for people who experience too much pain to exercise in full weight-bearing environment.	We agree – we have added to the description under aquatic exercise.
	Other comments	Our members are conscious that both New South Wales and Victoria will be releasing Models of Care, and are very keen to ensure that the RACGP materials and these state-based materials are completely consistent.	We will endeavour to enhance our description of such in the holistic assessment section 1.6.1.

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		Our members think that there could be further strengthening of the message on holistic care assessment and greater consideration of benefits on overall health (particularly considering the known comorbidity profile in this population).	
4	General comments:	The stakeholder is pleased that the non-pharmacological, pharmacological and surgical recommendations made in the guideline strongly align with the OAK CCS. Specifically, recommendations graded strong (for or against) align with the key components of care that comprise the quality statements. Consider referencing the OAK CCS as a national resource to support implementation and adherence with the guideline. The indicators in the OAK CCS can be used by general practitioners as a tool to support local clinical quality improvement activities and monitoring the achievement of guideline recommendations. Suggested text could be ';'.\ clinical care standard for the management of osteoarthritis of the knee has recently been developed by the Australian Commission on Safety and Quality in Health Care, which is consistent with these guidelines. The clinical care standard focuses on aspects of care more frequently associated with areas of unwarranted clinical practice variation, which may potentially have the greatest impact on patient outcomes. A set of indicators have been developed to support healthcare providers to monitor how well they implement the care described in the clinical care standard, and support local quality improvement activities. The clinical care standard and its supporting documents are available at: www.safetyandquality.gov.aulccs. We suggest including a glossary and a list of abbreviations with the guideline. We note that the audience includes clinicians with a range of expertise and training, including nurses and allied health professions. An explanation of technical terms (for example, biopsychosocial, psychosocial) and expansion of acronyms would be beneficial. In addition, having a glossary removes the need for the user to scan over preceding indications to find the complete title of a procedure or diagnosis. The stakeholder notes that while the "conditional for" recommendation regarding the use of duloxetine in managing symptoms of OA is consistent with recommendations in the recently updated Therapeutic Guidelines: Rheumatology (2017), duloxetine is not PBS listed for this indication (restricted benefit - major depressive disorders). Further explanation is provided in the table of Specific Comments below:	We will endeavour to include as part of an implementation plan further resources and information including the OAK CCS. Thank you for the text. Thank you for the helpful suggestion. Abbreviations and acronyms have been added to the guideline.
	Page 6 - Plain language summary – language	Suggest revising the word "weight" in the sentence "Common risk factors include injury, weight and increasing age". Consider revising to "Common risk factors include injury, being overweight and increasing age"to describe the context in which weight is a risk factor for developing osteoarthritis.	Thank you for the helpful suggestion. The text has been amended accordingly.

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	Page 6 - Plain language summary – additional text	Consider revising dot point 2 to read "Pain relieving creams (topical NSAIDs) may be useful to manage pain as an adjunct to other treatment strategies" (similar to page 55) to be consistent with the recommendations made in the recently updated Therapeutic Guidelines: Rheumatology (2017) and page 55, Section 3.2.2 Topical analgesics.	Thank you for the helpful suggestion. The text has been amended accordingly.
	Page 18 1.1 Background - additional or revise text	Regarding the sentence "For those over the age of 55, the prevalence of OA increased to over 60% ". The stakeholder acknowledges this is an accurate statement based on data from the Australian Institute of Health and Welfare (AIHW). Consider if it would be useful to reference patients aged 45 years and over, as this is the age that is referenced in the algorithms, and further in the guideline on page 22, Section 1. 7.1 Clinical diagnosis. This would align with the age referenced in the OAK CCS.	Thank you for the helpful suggestion. The text has been amended accordingly.
	Page 18 reference	Consider reviewing reference cited for the last sentence of the last paragraph in section 1.1 "In 2015-2016, OA was managed in 29 per 1000 general practice encounters at all ages". The citation listed is Arthritis Australia. Time to Move: Osteoarthritis. Arthritis Australia. 2014. It seems unusual for a document published in 2014 to be quoting data after its publication date (i.e. in 2015-2016...).	Thank you for alerting us to this. We have checked this and amended accordingly.
	Page 19 1.2 Objectives Potentially add content	Section 1.2 Objectives ... ". A formal communication and implementation plan has been developed to promote the guidelines to general practice and key stakeholders. This plan aims to ... " Consider adding the additional dot point to highlight how the guideline aligns with existing national initiatives that could potentially be used as opportunities for implementation: **• Increase awareness and alignment with other national initiatives, for example, the Osteoarthritis of the Knee Clinical Care Standard**	Thank you for the helpful suggestion. The text has been amended accordingly.
	1.6 Holistic assessment Page 21	Last sentence at the end of paragraph one "Furthermore, people with OA are predominantly older adults and often have different personal priorities and aspirations, which may impacting their treatment choices". Revise to either . .. "which may impacting their treatment choice" or "~~which may~~ impacting their treatment choice".	Thank-you for the helpful suggestion. The text has been amended accordingly.
	1.6.2 Evaluation of treatment response Page 22 Consistent terminology	First paragraph, second and third sentences: The patient's care plan is referred to using multiple descriptors (for example, care plan, action plan, management plan). The second sentence refers to the patient having an action plan, whereas the third sentence refers to it as a management plan. (Page 21 refers to it as a care plan; page 28 refers to it as a management plan). Even though these terms are used interchangeably, we suggest using consistent terminology when describing the patient's care plan, or insert a glossary term highlighting the multiple terms that can be used to describe the plan for clarity. Consistent terminology will help minimise the risk of potential misinterpretation that multiple kinds of plans are required for the patient.	Thank-you for the helpful suggestion. The text has been amended accordingly.

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	3.2.1 Oral analgesics Page 58 Potentially add content	The stakeholder notes that while the "conditional for" recommendation regarding the use of duloxetine in managing symptoms of OA is consistent with recommendations in the recently updated Therapeutic Guidelines: Rheumatology (2017), duloxetine is not listed on the Pharmaceutical Benefits Scheme (PBS) for this indication (restricted benefit major depressive disorders). Hence prescriptions written for indications other than the restricted PBS benefit will not be covered by the PBS and the cost will be incurred by the patient. This may have potential access implications for some patients. - http://www.pbs.gov.au/medicine/item/9155W - http://www.pbs.gov.au/medicine/item/9156X Consider adding text, or links to the PBS website for up-to-date PBS listings of duloxetine.	We will ensure to include the description in the rationale underpinning recommendation for duloxetine.
	3.1.1 Self- management and education programs Page 31 Measurement	Consider linking to the following OAK CCS indicator as a way of monitoring implementation and adherence with the guideline: • Indicator 3: Proportion of patients newly diagnosed with knee osteoarthritis who have an individualised self-management plan	Thank you for the helpful suggestion. This has been noted.
	3.1.3 Land based exercise – knee Page 33 Measurement	Consider linking to the following OAK CCS indicator as a way of monitoring implementation and adherence with the guideline: • Indicator 4a: Proportion of patients newly diagnosed with knee osteoarthritis with a documented recommendation regarding regular exercise	Thank you for the helpful suggestion. This has been noted.
	3.1.4 Weight management -knee and/or hip Page 39 Measurement	Consider linking to the following OAK CCS indicator as a way of monitoring implementation and adherence with the guideline: • Indicator 4b: Proportion of patients with knee osteoarthritis who are overweight or obese who lost weight	Thank you for the helpful suggestion. This has been noted.
	3.2.1 Paracetamol' - Knee and or hip Page 52 Measurement	Consider linking to the following OAK CCS indicator as a way of monitoring implementation and adherence with the guideline: • Indicator 5a: Local arrangements to ensure that patients with knee osteoarthritis are prescribed or recommended medicines to manage their symptoms in accordance with the current version of the *Therapeutic Guidelines: Rheumatology*	The recommendations in the RACGP guidelines are not consistent with the therapeutic guidelines rheumatology particularly as it relates to the recommendations made in the therapeutic guidelines related to paracetamol, intra-articular corticosteroids and viscosupplements.
	3.2.1 Oral Non- Steroidal Anti-Inflammatory Drugs (NSAIDs) Page 53 Measurement	Consider linking to the following OAK CCS indicator as a way of monitoring implementation and adherence with the guideline: • Indicator 5a: Local arrangements to ensure that patients with knee osteoarthritis are prescribed or recommended medicines to manage their symptoms in accordance with the current version of the Therapeutic Guidelines: Rheumatology. • Indicator 5b: Proportion of patients with knee osteoarthritis prescribed oral nonsteroidal anti- inflammatory drugs (NSAIDs) with documented assessment of risks	As above.
	3.2.1 Oral opioids- knee and/or hip	Consider linking to the following OAK CCS indicator as a way of monitoring implementation and adherence with the guideline:	As above.

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	Page 54 Measurement	• Indicator 5a: Local arrangements to ensure that patients with knee osteoarthritis are prescribed or recommended medicines to manage their symptoms in accordance with the current version of the Therapeutic Guidelines: Rheumatology. • Indicator 5c: Proportion of patients being prescribed opioids for the management of pain associated with knee osteoarthritis for longer than three months.	
	3.2.1 Transdermal opioids - knee and/or hip Page 56 Measurement	Consider linking to the following OAK CCS indicator as a way of monitoring implementation and adherence with the guideline: • Indicator 5a: Local arrangements to ensure that patients with knee osteoarthritis are prescribed or recommended medicines to manage their symptoms in accordance with the current version of the Therapeutic Guidelines: Rheumatology. • Indicator 5c: Proportion of patients being prescribed opioids for the management of pain associated with knee osteoarthritis for longer than three months.	As above.
	How the draft guideline aligns with the OAK CCS Recommendations (pages 9-15, 31-89)	The stakeholder is pleased to see the consistencies between the guideline and the OAK CCS specifically in relation to: o The role of imaging, and that it should only be used for atypical presentations of osteoarthritis o The limited evidence to support formal self-management education programs, yet highlighting the importance of providing information and education to patients so they can self-manage their condition o The importance of losing weight for those who are overweight or obese, and the role of exercise o Encouraging a trial-based approach to analgesic medicines (NSAIDs and paracetamol) with clearly defined management goals, and regular assessment of the patient to determine if the medicine is beneficial o The use of corticosteroid injections, noting their limitations and harms associated with repeated use o The use of opioids, both oral and transdermal, and that they should not be offered to patients with knee or hip osteoarthritis o Viscosupplementation, and that it should not be offered to patients with knee or hip osteoarthritis o The limited evidence of effectiveness of herbal therapies, supplements, and nutraceuticals, and that they should not be offered to patients with knee or hip osteoarthritis o The role of arthroscopy in osteoarthritis of the knee, and that it is not an effective treatment for patients with this condition.	Thank you for the feedback. This has been noted.
	Algorithms (page 16-17)	The algorithms are clear and easy to follow. The guideline and associated algorithms emphasise the importance of conservative (non-surgical) management, using a combination of evidence-based non-pharmacological and pharmacological treatments. The emphasis on core non-pharmacological treatments as outlined in the	Thank you for the feedback. This has been noted.

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		algorithms, including patient education and self-management, exercise, and weight loss for those who are overweight, is consistent with quality statement 3 and 4 of the OAK CCS	
	Background (pages 18-27)	The stakeholder is pleased to see the background section aligns with the following parts of the OAK CCS.	Thank you for the feedback. This has been noted.
	Page 21 1.6.1 Holistic assessment	**Part of the OAK CCS** Quality statement 1: Comprehensive Assessment **Specific aspects of alignment** The aspects highlighted in the guideline which should be included as part of a holistic patient assessment are consistent with the aspects listed in quality statement 1 of the OAK CCS, specifically the need for a physical examination, and an assessment of the psychosocial factors that may affect the patient's quality of life and participation in their usual activities. The Commission notes the OAK CCS uses the term "psychosocial" whereas the draft guideline acknowledges the contribution of both biopsychosocial and psychosocial factors.	Thank you for the feedback. This has been noted.
	Page 22 1.6.2 Evaluation and treatment response	**Part of the OAK CCS** Quality statement 6: Patient review **Specific aspects of alignment** The guideline specifies the timing of a patient review is at intervals agreed to by the patient and their clinician. This is consistent with the wording in quality statement 6 of the OAK CCS.	Thank you for the feedback. This has been noted.
	Page 22 1. 7 Diagnosis of hip and knee OA	**Part of the OAK CCS** Quality statement 2: Diagnosis **Specific aspects of alignment** The guideline supports quality statement 2 of the OAK CCS, in that imaging should only be used for atypical presentations of OA, and that the diagnosis of typical knee OA can be made on clinical assessment alone.	Thank you for the feedback. This has been noted.
	Page 24 1.8 Formulating a management plan	**Part of the OAK CCS** Quality statement 3: Education and self-management **Specific aspects of alignment** The guideline supports shared-decision making, highlighting that a care plan is to be developed with the patient, which takes into consideration their physical and psychosocial needs, and that a chronic disease management approach is taken when providing care to patients with OA. The OAK CCS refers to this plan as an individualised self-management plan.	Thank you for the feedback. This has been noted.
	Page 25 1.9 Timing of and need for referral to an orthopaedic surgeon	**Part of the OAK CCS** Quality statement 7	Thank you for the feedback. This has been noted.
5	To fulfill the aims for the guidelines, several issues need to be addressed	• Errors, e.g. transdermal opioids are listed amongst the topical analgesics, suggesting that opioid patches' increased bioavailability enabled use of lower doses, thus reducing incidence of adverse events	We appreciate the thoughtful feedback and critique provided. In response to the comments that you have provided: • We will remove transdermal opioids from the topical analgesics.

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		• Inconsistencies, e.g. compare "what is it?" section of oral opioids with that of duloxetine • Off label use included without comment. Drugs where there is no TGA approved indication and insufficient data for an OA indication should be considered 'investigational' (e.g. duloxetine, colchicine, methotrexate, doxycycline, bisphosphonates). Consider also that there is a lack of information to guide appropriate prescribing (dosage, monitoring) • Impractical and inappropriate drugs/therapies/substances: is it useful to GPs to include any of the 'investigational drugs' in the final guideline? • Availability of drugs/therapy, needs to be confirmed and drugs deleted if not available in primary care, eg strontium ranelate, growth factors	• We have revised the "what is it" section for oral opioids and duloxetine. • Where we provide recommendations for medications that currently do not have an indication and should be considered investigational (e.g. duloxetine, colchicine, methotrexate, doxycycline, bisphosphonates) we will make that clear. Each of these medications has trials to support or refute the use of the agent and whilst not indicated for OA, are available in Australia, hence the importance of their inclusion in this guideline. • With regards investigational drugs, many of these may be available through regulatory approval relatively soon. Given this guideline will likely not be updated for another long period of time it is important to provide up-to-date information about drugs that may soon garner regulatory approval. As above we will clearly indicate that these have not as yet been approved and are investigational. • While the primary target audience is general practitioners this guideline has also been developed with other healthcare professionals in mind, including specialists. As such, the availability of some of these drugs, whilst maybe not approved for that indication are germane to other health professionals. Again we have reinforced the point that if they have no indication or are investigational they should be considered as such.
	Some specific comments 3.2 pharmacologic interventions <u>Duloxetine</u> <u>Issue</u> Not indicated for osteoarthritis. Information such as dose and precautions for OA not available	**This drug appears to be a recommended treatment in both algorithms?** (Holistic assessment and diagnosis of knee and hip OA, (see diagrams below)) IF INCLUDED, need to inform readers of experimental/off label use.	We will include some description to indicate that at present the TGA has not approved duloxetine for this indication.
	<u>Doxycycline</u> <u>Issue</u> Not indicated for osteoarthritis. Information such as dose and precautions for OA not available	Also consider antibacterial resistance. Although strong recommendation against use, why include in guideline at all?	Duloxetine has previously been used as a potential disease modifier in osteoarthritis and whilst it does not have an indication via the TGA for this purpose it is important that we educate physicians and other health professionals about what does not work as much as we educate them about what does.
	<u>Colchicine</u> <u>Issue</u> Not indicated for osteoarthritis.	Poorly tolerated, highly toxic, narrow therapeutic range. It is not used outside clinical trial setting for OA or atherosclerosis. Dose needs to be adjusted for renal impairment. It has significant drug interactions. Adverse effects can be fatal.	As indicated above it is important that we educate health professionals about what not to use. It is not appropriate to have a strong recommendation against as there is some support of literature for its use.

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	Information such as dose and precautions for OA not available	Suggest 'conditional against recommendation' is inappropriate … you could increase to strong recommendation against use, but why include in guideline at all?	
	Methotrexate Issue Not indicated for osteoarthritis. Information such as dose and precautions for OA not available	Poorly tolerated, highly toxic, low therapeutic range. Significant Quality Use of Medicines (QUM) issues. Suggest 'conditional against recommendation' is inappropriate … you could increase to strong recommendation against use, but why include at all?	As indicated above it is important that we educate health professionals about what not to use. It is not appropriate to have a strong recommendation against as there is some support of literature for its use.
	Strontium Issue Not indicated for osteoarthritis. Information such as dose and precautions for OA not available	Drug withdrawn worldwide. Although strong recommendation against use, why include at all?	As indicated above it is important that we educate health professionals about what not to use. It is not appropriate to have a strong recommendation against as there is some support of literature for its use.
6		**Comment** In October 2017, NPS MedicineWise launched a large education program on osteoarthritis that focused on the limited role of imaging in the diagnosis and management, and the importance of individualised conservative management as a core treatment. Treatment outlined in this program focuses on education, exercise and weight management, and offers practical tools and strategies to improve quality of life for patients with osteoarthritis. Link to the current NPS MedicineWise knee and hip osteoarthritis program - https://www.nps.org.au/medical-info/clinical-topics/knee-and-hip-osteoarthritis The stakeholder supports the guidelines' focus on the role of non-pharmacological interventions as part of the core management strategy for people with symptomatic osteoarthritis of the knee or hip. This aligns with the NPS MedicineWise program. The information on the current evidence for other adjunctive non-pharmacological strategies some patients might need in addition to core strategies is useful. Recommendations for herbal and complementary medicines, which are commonly used by patients, as well as evidence on treatment strategies that are promoted in the popular media, are welcome. Including this information will support clinicians to provide evidence-based solutions to their patients.	We appreciate the thoughtful feedback and critique provided. In response to the comments provided: • Thank you for providing the hyperlink to the NPS Medicinewise educational program resources that have recently been launched. We will include this link in our additional resources. • Thank you for providing greater clarity over the option for patients with atypical symptoms to receive an MRI for further investigation and the importance of them being referred to a specialist for that investigation and referral. • We will restructure the algorithm to provide better clarity over the strength of recommendations. • Thank you for your suggestions with regards to strengthening the guidelines. In response to that we will include a statement highlighting that the diagnosis of osteoarthritis is a clinical one and the role of imaging is limited, we will try to provide greater clarity around the role of patient consultation in the development of the guidelines. We will also try to provide greater clarity around the use of duloxetine and when this could be considered. We have revised some of the wording with regards the recommendations so that these become clearer. • We will include some information on the comparative efficacy and safety for NSAIDs. • We will include some patient resources or links to patient resources on exercise management. • We will include some information on the costs of interventions, including non-pharmacological management options like yoga and CBT.

Submission ID number	Topic/Section in guideline addressed by submission	Comments received	Working group response
	Specific feedback on algorithms	● The knee osteoarthritis algorithm recommends that patients with atypical symptoms receive an MRI for further investigation. However, current MBS criteria only allows GPs to order MRIs for patients with acute knee trauma. The algorithm might need to recommend patients with atypical symptoms be referred to a specialist for MRI investigation or remind GPs of the costs to the patient when ordering an MRI that is not MBS reimbursed. ● Strength of recommendations should be incorporated into the algorithm to assist busy clinicians who might not have time to read the full guideline recommendations. ● We suggest the removing the word 'routine' when recommending the GPs do not offer imaging	Thank you for the helpful suggestion. Further efforts will be made to highlight recommendations that are strong for and to distinguish them from those that are strong against. We have incorporated the strength of recommendations into the algorithm.
	Strengthen guideline by the inclusion of	● A statement in the plain language summary highlighting that a diagnosis of osteoarthritis is mostly based on clinical examination with the role of imaging in most patients very limited. ● Information about the nature and extent of patient consultation in the development of the guidelines. ● Clear criteria for determining whether a patient is suitable for trialling duloxetine. Many patients will have already tried standard pharmacological therapy however not all of these patients will be suitable for a trial of duloxetine. ● A change of terminology used in the Summary of recommendation table to replace the term 'suggest/do not suggest offering' with 'we recommend/we do not recommend'. The word 'offer' suggests supplying or performing, which is most cases a GP would not be doing. ● Information on the comparative efficacy and safety for NSAIDs. ● Patient resources or links to patient resources on exercise management. ● Information on the costs of interventions, including non-pharmacological management options like yoga and CBT.	Thank you for the helpful suggestions and we will try to revise the guideline accordingly.
	Other comments	● 2017 RCT looking at intra-articular steroids and knee OA symptoms as well as harmful effects of triamcinolone over 2 years (attached). Demonstrating that repeat intra-articular triamcinolone injections reduce cartilage volume over time. Further **highlighting the importance of considering the appropriateness of repeat injections.** ● 2017 prospective cohort study showing that patients who used opioids preoperatively prior to total knee replacement (TKA) obtained less pain relief from the operation comparatively to patients who were not using opioids before the surgery. Further highlighting the limited role of opioids in OA. Savannah R. Smith,	Thank you for the feedback. It is reasonable to note some caution about repeat injections.

Submission ID number	Topic/Section in guideline addressed by submission	Comments received	Working group response
		Jennifer Bido, Jamie E. Collins, Heidi Yang, Jeffrey N. Katz, Elena Losina. Impact of Preoperative Opioid Use on Total Knee Arthroplasty Outcomes. The Journal of Bone and Joint Surgery, 2017; 99 (10): 803 DOI: 10.2106/JBJS.16.01200	
7		Recommendations 1. The stakeholder is supportive that non-pharmacological management, including lifestyle interventions, are core components of long-term OA management. 2. The stakeholder recommends that the document clearly define overweight and obesity to identify those who require weight management interventions. 3. The stakeholder supports the inclusion of a dietitian, preferably an APD, within the multidisciplinary team involved in the management of those living with OA. An APD can educate on maintaining a healthy weight and can provide interventions for weight loss to those who are overweight and/or obese. 4. The stakeholder has identified a need to strengthen recommendations throughout the guidelines to reinforce the importance of a multidisciplinary approach to OA management. A multidisciplinary team can work together to manage lifestyle factors, provide education and support and assist in decision making in order to enhance patient outcomes. 5. The stakeholder recommends that in older adult's (over 65 years), weight loss should be considered on an individual basis and care needs to be taken to maintain lean body mass. 6. The stakeholder supports the recommendations for weight loss interventions for those with OA who are overweight and obese. Weight loss will ideally be achieved through lifestyle interventions. Bariatric surgery may be appropriate for some clients, should they meet the relevant requirements as per clinical guidelines. 7. The stakeholder agrees that there is a lack of strong evidence for the Herbal Medicines, Supplements and Nutraceuticals, as outlined in the guidelines. Those living with OA should be encouraged to consume a healthy balanced diet, in line with the Australian Dietary Guidelines, to ensure nutrition requirements are met. **Discussion** Non-pharmacologic Interventions- weight management This document clearly highlights that excess body weight is a risk factor for OA development and progression in both the hip and knee. The guidelines contain a strong recommendation for weight management and the algorithm includes weight management as part of the core long-term care for consumers living with OA. There is evidence highlighted in the document to support that weight loss is beneficial for the management of OA. Weight loss has been found to help improve symptoms of knee OA and slow progression of the disease[1]. The guidelines highlight that whilst small amounts of weight loss can provide benefits in management of OA,	Thank you for the helpful feedback. We will attempt to revise the guidelines in accordance with your helpful suggestions.

Submission ID number	Topic/Section in guideline addressed by submission	Comments received	Working group response
		greater benefits are seen as weight loss equates to, or is greater than, 7.5%. The stakeholder supports that weight loss should be encouraged and supported for those with hip and/or knee OA who are overweight or obese. Definition of Overweight and Obesity The NHMRC Clinical Practice Guidelines for the Management of Overweight and Obesity in Adults, Adolescents and Children in Australia[2], referred to in these guidelines, define overweight as a BMI ≥25kg/m^2 and obese as a BMI ≥30kg/m^2. These guidelines strongly recommend that for adults who are overweight or obese lifestyle changes including reduced energy intake, increased physical activity and measures to support behavioural changes should be implemented (Grade A evidence). The stakeholders are supportive of including the definitions and weight management interventions in these guidelines. Inclusion of the Multidisciplinary Team OA patients may benefit from a referral by their GP to members of a multidisciplinary team (such as an APD and Exercise Physiologist) to provide education on lifestyle factors for OA 2-4. This can be done through a Medicare Chronic Disease Management Plan, which can assist in lowering costs for the patients. Patients who are overweight, obese and those having bariatric surgery should always be referred to an APD to address individualised nutrition requirements. Weight loss assessment in older adults There are currently no clearly defined BMI thresholds for older adults (over 65 years). There is evidence to suggest that the cut-offs should be higher for older adults5. The need for weight loss in older adults should be considered on an individual basis5. If weight loss is appropriate, care should be taken to ensure maintenance of lean body mass. An APD has the expertise to develop a nutrition plan for older adults that meet their specific health needs. Use of bariatric surgery as a weight loss option The stakeholder supports weight management for those with OA in the hip and/or knee in line with the NHMRC Clinical Practice Guidelines for the Management of Overweight and Obesity in Adults, Adolescents and Children in Australia[2]. As above, lifestyle changes should be encouraged to achieve weight loss in those who are overweight or obese. In some instances, as per the NHMRC guidelines, more intensive interventions such as bariatric surgery may be appropriate. Herbal Therapies, Supplements and Nutraceuticals The stakeholder supports that evidence regarding herbal therapies, supplements and nutraceuticals in the management of OA is low to poor.	

Submission ID number	Topic/Section in guideline addressed by submission	Comments received	Working group response
		The importance of safety around their use should be considered in all instances. The stakeholder recognises that in some instances, despite limited evidence for their use, a placebo effect may be experienced by OA sufferers, and they may decide to continue using them. Individuals with OA should, in the first instance, be encouraged to meet their nutritional requirements through adequate dietary intake, in line with Australian Dietary Guidelines. APDs can provide individual assessment and advice to those living with OA regarding the adequacy of their nutrition intake. Furthermore, APDs have the skills to educate clients on the evidence available on certain supplements/nutraceuticals and give them the tools to make the best decision for their health. <u>References</u> 1. Gudbergsen H, Boesen M, Lohmander LS, et al. Weight loss is effective for symptomatic relief in obese subjects with knee osteoarthritis independently of joint damage severity assessed by high-field MRI and radiography. Osteoarthritis Cartilage. 2012; 20: 495-502. 2. National Health and Medical research Council of Australia. Clinical practice guidelines for the management of overweight and obesity in adults, adolescents and children in Australia. Melbourne: NHMRC; 2013. 3. Philip, KB. Allied health: untapped potential in the Australian health system. Aust Health Rev. 2015; 39:244-247. 4. Lizarondo L, Turnbull C, Kroon T, Grimmer K, Bell A, Kumar S, et al. Allied health: integral to transforming health. Aust Health Rev. 2016; 40:194-204. 5. Queensland Government Queensland Health, Nutrition Education Materials Online- Using Body Mass Index, 2014, available from https://www.health.qld.gov.au/nutrition/resources/hphe_usingbmi.pdf	
8	Pain	**<u>Recommendation 1: That the guidelines reference the National Pain Strategy</u>** ● Highlight role of the 2010 National Pain Strategy (NPS) in the treatment and management of pain conditions, including osteoarthritis. ● NPS provides a blueprint for prevention and best practice multidisciplinary treatment and management of acute, chronic and cancer pain and is an important resource for specialists, general practitioners (GPs) and other health professionals as well as policy makers ● NPS requires action and commitment at all levels of the health system in order to improve quality of life for people with pain and their families, and to minimise the burden of pain on individuals and the community. ● NPS acknowledges that many GPs play a vital role in meeting its objectives both in their day-to-day practice or as key	Thank you for the helpful suggestions. We will try to embed these suggestions within the implementation and dissemination plan to ensure that resources such as those that Pain Australia have made readily publicly available are more prominently displayed.

Submission ID number	Topic/Section in guideline addressed by submission	Comments received	Working group response
		practitioners in a multidisciplinary pain setting, which include creating a pain management and support network that enables: ● Knowledgeable and empowered consumers and communities; ● Access to multidisciplinary care at all levels; ● Skilled professionals and best-practice evidence-based care; and ● Quality improvement and evaluation across the pain treatment and support network ● Given the critical role of the NPS in setting the benchmark for pain management and across all parts of the health system, we urge you to reference the Strategy in the guidelines. A copy of the Strategy can be found at www.painaustralia.org.au/improving-policy/national-pain-strategy. ● Further, a range of practical resources are outlined below to support GPs to deliver best practice treatment and management of chronic pain conditions including osteoarthritis. **Recommendation 2: That the guidelines reference health professional and consumer resources on the Painaustralia website** ● Knowledgeable, empowered and supported consumers and communities ● A key objective of the NPS is to improve community understanding of chronic pain and best practice management to de-stigmatise and ensure people with pain, their carers and other supporters will have the knowledge and confidence to seek appropriate advice, education and treatment to better understand and manage their pain. ● GPs play a critical role in achieving this objective through direct advice and referrals for patients during consultations and the provision of information in their practices. ● The stakeholder notes the draft guidelines provide conditional recommendations for face-to-face self-management education programs and other non-pharmalogical self-management strategies for people with knee and/or hip OA and that clinicians should provide information to enhance understanding about OA, its prognosis and its optimal management. ● Painaustralia's website contains several key resources that can be provided to assist GPs in their work, which can be found at www.painaustralia.org.au/getting-help/getting-the-right-care including key resources on self-management. A range of fact sheets for consumers can also be found at the website	

Submission ID number	Topic/Section in guideline addressed by submission	Comments received	Working group response
		(www.painaustralia.org.au/getting-help/get-help-resources/factsheet). **Recommendation 3: That the guidelines reference the list of pain services on the Painaustralia website** Access to multidisciplinary care at all levels ● As noted in the NPS, timely access to effectively coordinated care and support, as close as possible to where people live is the optimal standard of service for those with chronic pain. ● This includes ensuring access to a multidisciplinary team of appropriately skilled practitioners (virtual or actual) both in community and in hospital settings, and that GPs are able to make the most appropriate referrals. ● While many people with chronic pain are best managed at the primary or community level with multidisciplinary support including self-care, specialist services in public hospitals typically focus on treating more complex patients. ● The stakeholder advocates for an increase in the availability of pain services, including expanding the use of telehealth, noting patients face long waiting times to access multidisciplinary pain services in public hospitals. ● To assist GPs in understanding what pain services are available, a full list of Australia's pain services is listed on the Painaustralia website (www.painaustralia.org.au/getting-help/pain-services-programs/pain-services). **Recommendation 4: That the guidelines reference the list of relevant training and education courses on the Australian Pain Society and Painaustralia websites** Skilled professionals and best practice evidence care ● The NPS highlights the need for education and training in biopsychosocial processes underpinning acute and chronic pain to give health professionals an accurate conceptualisation of pain and best practice treatment and support. ● The stakeholder notes RACGP offers a specific learning module in this area. Several other programs have been developed by the Faculty of Pain Management and Pain Management Research Institute (University of Sydney). ● The stakeholder advocates for the expansion of access to relevant courses for GPs and other health practitioners noting there is some support at the Primary Health Network level for some financial support for health professionals to participate in	

Submission ID number	Topic/Section in guideline addressed by submission	Comments received	Working group response
		training courses but there is a significant waiting list for access to a limited number of scholarships. ● To assist GPs, details of relevant pain management courses are available on the Australian Pain Society website (www.apsoc.org.au/courses) and the Painaustralia website (www.painaustralia.org.au/health-professionals/education-training). **Recommendation 5: That the guidelines note the ePPOC program and the importance of primary care involvement given significant reported improvements in pain where it has been implemented.** Quality improvement and evaluation ● The NPS seeks to improve outcomes in pain management through a quality improvement process using measurement of outcomes, evaluation and feedback across the health care system. This will facilitate the judicious, appropriate, safe and effective use of pain medicines, treatments and technologies. ● There is an opportunity to better understand the role of primary care in pain management through the electronic Persistent Pain Outcomes Collaboration (ePPOC), an initiative of the Faculty of Pain Medicine. ● ePPOC aims to help improve services and outcomes for patients experiencing chronic pain through benchmarking of care and treatment and involves the collection of a standard set of data items and assessment tools by specialist pain services throughout Australia and New Zealand. This data is being used to develop an Australasian benchmarking system for the pain sector. ● The second ePPOC (electronic Persistent Pain Outcomes Collaboration) benchmarking report for the period 1 July 2016 to 20 June 2017 has shown at least 30% of patients experienced improvement in moderate to severe pain, while some services are now reporting figures of up to 80 percent. Key statistics include: – More than 25% experienced significant reduction in their pain on average – a total of 58% reported significantly less interference in daily activities – around 50% experienced a reduction in depression, anxiety and stress. ● It is noteworthy that 24% of patients in clinics report OA and degenerative arthritis as a co-morbidity with chronic pain.	

Submission ID number	Topic/Section in guideline addressed by submission	Comments received	Working group response
		● A small number of primary health services are now participating in the ePPOC, which is demonstrating the value of multidisciplinary support for patients with pain. ● More information on the initiative can be found at www.ahsri.uow.edu.au/eppoc/index.html	
9		Provided restricted feedback to clinical areas related to non-pharmaceutical interventions for adults with symptomatic osteoarthritis (OA) of the hip and/or knee. Feedback provided on the selected evidence base and the recommendation for online cognitive behaviour therapy (CBT) programs. **1. The psychological evidence base** Noted that the selected evidence base considered in the technical document has been limited to the effectiveness of CBT among patients with knee and/or hip osteoarthritis. It is well-established that physical and psychological health are inextricably linked and that physical health conditions can have a broad psychological health impacts. These impacts can emerge from pain but also from living with a disability, changes to identity, sleep disturbance, anxiety, social withdrawal and the patient's ability to cope with OA. However, the majority of the papers that met the criteria for selection in the document had a primary focus on pain management. While pain management is a high priority in the clinical care of patients, there are broader psychological impacts likely overlooked by restricting the evidence base to include hip or knee OA as a search term. In considering the broader psychological impact of OA and the effectiveness of CBT, it would be helpful to broaden the search criteria to ensure that other psychological impacts arising from a physical health condition are considered in the analysis of how psychology may improve a patient's ability to live with and manage OA. **2. Online CBT recommendations** The evidence for the effectiveness of online interventions for psychological health is still in development. As such, recommendations for online CBT for patients with hip or knee OA may be premature. We suggest that in the section titled 3.1.2 Cognitive behavioural therapy, the following sentence – "The Working Group recommends online programs where available and suited to the patient as they have the potential to improve availability and access and be less costly, is replaced with "**Evidence-based online CBT programs are an alternative option for patients with limited accessibility to face-to-face treatment**".	In the rationale describing and underpinning the recommendation for CBT for osteoarthritis we will try to capture additional information related to the impacts that this may have on outcomes other than pain. We will look into modifying the verbiage related to the online CBT recommendation and add the suggestion sentence.
10	Inconsistencies between the Guidelines and other recent guidelines relevant to osteoarthritis,	Note a few minor inconsistencies between the Guidelines and other recent guidelines relevant to osteoarthritis, namely the Australian Commission on Safety and Quality in Health Care's Osteoarthritis of the Knee Clinical Care Standard and the most recent Therapeutic Guidelines: Rheumatology V3.	We recognise that there are some minor inconsistencies with the Australian commission on safety and quality in health care is knee clinical care standard. We have attempted to address those above.

Submission ID number	Topic/Section in guideline addressed by submission	Comments received	Working group response
		Addressing these inconsistencies would help to reduce confusion among both health care professionals and people with hip or knee osteoarthritis. <u>The inconsistencies noted are:</u> ● The Clinical Care Standard and the Therapeutic Guidelines both suggest a weight loss goal of 5% or more while the RACGP Guidelines recommend a weight loss target of 7.5% of body weight. While the intent is similar, consistent messaging is likely to be helpful for people with osteoarthritis who may see a number of clinicians for assistance in managing their condition. ● The RACGP Guidelines suggest transcutaneous electrical nerve stimulation (TENS) may be beneficial in some people: however the Therapeutic Guidelines say evidence suggests TENS is not effective. ● The RACGP Guidelines suggest not offering topical capsaicin cream whereas the Therapeutic Guidelines say topical capsaicin has been shown to have a small benefit in pain relief compared to topical placebo formulations. With respect to patient education and support for self-management, we would like to suggest that **some reference be included in the Guidelines to the consumer information resources and services provided by patient support organisations like Arthritis Australia**. As noted in the Therapeutic Guidelines, organisations such as Arthritis Australia provide printed and online information resources on arthritis which help to reinforce education and self-management advice provided to patients by clinicians. These resources are all consumer-focused and evidence-based and align with the recommendations of the Guidelines. Arthritis Australia also offer activities such as support groups, exercise sessions and other services that are valuable for social support. Access to these resources and services is at <u>www.arthritisaustralia.com.au</u> The stakeholder would also like to suggest that a consumer information sheet be prepared to assist people with osteoarthritis to better understand the RACGP Guidelines. This may also assist with improved patient adherence to treatment.	Further we will develop a resource document to facilitate implementation and dissemination such that particularly for the valuable consumer information resources provided by Arthritis Australia that they are more readily accessible through our implementation plan. We are planning to develop a consumer information sheet and would be happy to partner in that endeavour with you.
11		As per our Scientific Statement Endorsement Process, these draft guidelines have been reviewed by our Research Committee and the following feedback has been provided: ● The 2017 BJSM article (Pugh et al) highlights the need for expert advice for exercise prescription in difficult medical cases, meaning Sport and Exercise Physicians should be consulted by patients with multiple comorbities including OA for exercise prescription ahead of physiotherapists and exercise physiologists. Consideration should be made to include Sport	• We will endeavour to list the health professionals that could be engaged in facilitating prescription of exercise including sport and exercise physicians along with physiotherapist and exercise physiologists. • We considered extensively the evidence for corticosteroid and hyaluronic acid injections in developing our recommendation.

Submission ID number	Topic/Section in guideline addressed by submission	Comments received	Working group response
		and Exercise Physicians in the referral network for exercise professionals in the section 3.1.3 Exercise for both hip and knee interventions. ● clarification of inconsistencies in the recommendations based on the same or similar levels of evidence ● reconsideration of the evidence for corticosteroid and hyaluronic acid injections for the knee ● clarification of the use of duloxetine as a single agent A recently updated Position Statement on the Use of Autologous Stem Cells in Sport and Exercise Medicine, 1. There is insufficient evidence to support the use of MSC therapy in the routine management of musculoskeletal injuries or degenerative conditions typically managed by Sport and Exercise Physicians. 2. The inclusion of innovative MSC therapies into routine clinical practice should only occur after clinical trials establish reproducible evidence of MSC efficacy and safety in musculoskeletal sports medicine. These recommendations extend to the use of MSC therapy for knee and hip osteoarthritis so are relevant to these guidelines.	• We will try to provide greater clarity around when and if duloxetine would be used as an adjunct. It is important that we stressed this is not a first-line pharmacologic agent and that it present it is not TGA approved for this indication. • Consistent with the position statement on the use of autologous stem cells we do not recommend stem cells for knee or hip osteoarthritis. We will refer to your position paper in helping to reinforce that point.
12		Note that there is no specific reference to the contribution of occupational therapy intervention in the management of hip and knee osteoarthritis within the guidelines. ● Hochberg et al (2012) recommend referral to occupational therapy as part of patient/client/consumer education programmes and a multidisciplinary approach alongside physiotherapy, dietetics and podiatry. ● In addition, occupational therapy specific approaches to self-management, such as occupational adaptation, have been shown to enhance strategies for coping with pain, and the ability to complete everyday life tasks including work, by Klinger et al (1999), and Felson (2006). **Perhaps the committee would like to consider this as the draft is finalised.**	As part of the description of the holistic assessment we plan on including further description about health professionals that may be engaged in different therapeutic interventions. We will try to highlight where occupational therapists may be involved.
13		Provides input on the draft guidelines addressing: 1. The use of sham as the sole control for inclusion of acupuncture level 1 and 2 evidence 2. Exclusion of other control comparator types for evaluation of acupuncture benefit and harms in knee and hip OA 3. The pooling methods of acupuncture studies in GRADE results 4. Very limited data for acupuncture evaluation of the benefits and harms of its use in OA of hip 5. Conclusions and recommendations for acupuncture as a therapy in knee and hip OA 6. Conclusions on the safety of acupuncture for knee and hip OA.	

Submission ID number	Topic/Section in guideline addressed by submission	Comments received	Working group response
		7. Conclusions on the cost effectiveness of acupuncture for knee and hip OA In addressing the above aspects of the draft guidelines, the stakeholder found the methodology used in developing the recommendations for acupuncture to be misleading and inappropriate as a comprehensive review of acupuncture's benefits and harms in hip and/or knee OA as; ● For the majority of interventions being reviewed according to their PICO, various control types were included, however for acupuncture interventions only studies using 'sham' as the comparator were included. ● Various types of acupuncture study have been pooled together in GRADE results (i.e. acupuncture and electro acupuncture). <u>Other information</u> As allowed for in the technical document, could you please forward to the the stakeholder complete voting details on specific recommendations for acupuncture related therapies (acupuncture, laser acupuncture, electro acupuncture, acupressure etc.) as well as manual therapies and TENS? Acupuncture safety requires adequate practitioner safety training and regulation, thus the stakeholder recommends any GP referrals for acupuncture provided by the guidelines is directed only to endorsed or registered by a relevant Australian Health Practitioner Regulation Agency (AHPRA) Board, such as the Chinese Medicine Board of Australia (CMBA). **<u>Summary</u>** The stakeholder urges the RACGP Working Group to consider **amending the review methodology and subsequently the recommendations for acupuncture in the draft guidelines** as; - It is evidenced the use of an active control for evaluation of acupuncture benefit could lead to inaccurate recommendations that could reduce the quality of outcomes for persons with knee and/or hip OA. - For a comprehensive evaluation of acupuncture benefits and risks for knee and hip OA other control types should also be included and evaluated - All outcomes in the draft review show acupuncture was more effective than sham for knee OA. The clinical significance of these benefits thought cannot be assessed without investigating the clinical improvement from baseline and considering the costs of any benefits. - Recommendations on costs should be excluded from the guidelines, as costs were not a question the guidelines aimed to address. Or further costs-benefits evaluation of acupuncture should be conducted to justify any conclusions for the costs of acupuncture.	We have now considered the evidence on each type of acupuncture separately and performed a re-vote on these. We are happy to provide the details upon which the voting was made as well as the voting results. In developing the recommendation related to acupuncture we carefully took into account whether the benefits obtained from acupuncture were of a clinically relevant magnitude over and above appropriate comparators from robust and well-designed clinical trials. In developing the recommendations we tried to be consistent about this being a population-based approach. We cannot exclude individual or subgroup benefits in the analyses that we have done.

Submission ID number	Topic/Section in guideline addressed by submission	Comments received	Working group response
		Currently the draft recommendations for acupuncture are mostly unfounded, biased and based on limited potentially heterogeneous data. If the current draft guidelines are not reconsidered and the current recommendations remain against acupuncture for OA, future patient OA outcomes could be sub-optimal. This could lead to increased costs for consumers and the health care system, as well as impact negatively on patient outcomes.	
14	Section 3.4 Surgical interventions	We note that, within the current draft RACGP guidelines [Section 3.4], surgical interventions of knee OA (arthroscopic, lavage and debridement, meniscectomy and cartilage repair) are not recommended unless the person also has mechanical symptoms of a clinically locked knee as per Australian Knee Society Arthroscopy Position Statement. Patients who elect not to undergo invasive surgery or who are not suitable surgical candidates may therefore be left with sub-optimal treatment options, often requiring ongoing use of opioid-based therapies (Reddy et al 2016). There is accumulating data supporting the role of radiofrequency neurotomy of the genicular nerves in such situations. **Considering this we present here data to support consideration of its inclusion in the update of the RACGP guidelines**. <u>Conclusions</u> Cooled radiofrequency used for genicular nerve ablation is indicated for the management of moderate to severe knee pain that has persisted for more than 6 months despite conservative therapy, including medication, in patients with radiologically confirmed osteoarthritis (grade 2-4) and a positive response (≥50% reduction in pain) to a diagnostic genicular nerve block. This minimally invasive, non-narcotic procedure is the first, and only, radiofrequency treatment cleared by the FDA for osteoarthritis knee pain. The clinical data demonstrate that it provides and efficacious treatment, that is superior to corticosteroid injection in osteoarthritic subjects for managing knee pain and that it does not present safety issues related to the proposed indication for use. **Based on the data available, we ask that this treatment modality be considered by the RACGP for inclusion in the guidelines for the management of knee OA. It would, ideally, be included within Section 3.4 of the guideline as an alternative option in patients prior to consideration for more invasive surgical interventions.**	We recognise that at this point in time radiofrequency neurotomy for knee osteoarthritis is an emerging therapy. We will take into consideration the submission that has been made with the evidence base provided particularly the recent systematic review by Gupta.
15	Opioids	In short: ● The studies quoted are graded as POOR or VERY POOR: how can a “strong” recommendation be made on such a basis? ● The oral morphine equivalent doses used in the studies of oral opioids - noting that doses of transdermal opioids used were not	We appreciate the thoughtful feedback and the concern raised with the inconsistency with the recent RACGP prescribing drugs of dependence in general practice document. It is important to note the great difference in methodology in the development of these guidelines compared with the RACGP document on

<table>
<tr><th>Submission ID number</th><th>Topic/Section in guideline addressed by submission</th><th>Comments received</th><th>Working group response</th></tr>
<tr><td></td><td></td><td>stated (which is a culpable omission) - are such that adverse effects would be inevitable.
● It is true that the effects of opioids on pain and function are not impressive. But function may have been adversely affected by side-effects. All that one can conclude is that an adverse effect is more likely than a beneficial one. The only way to know is to do an individual patient trial (which is the pragmatic wisdom in any case).
<u>I would contend that the “evidence” quoted is insufficient to justify any recommendation other than CAUTION</u>. The baby need not be thrown out with the bathwater. However the pendulum has swung against judicious prescribing.</td><td>prescribing drugs of dependence in general practice. Osteoarthritis is a chronic disease and while we recognise that opioids may have some role in acute pain the evidence base advocating for their role in the management of osteoarthritis does not support that. As you recognise the magnitude of evidence suggests that patients treated with opioids are more likely to sustain an adverse event than they are to benefit. We recognise that the quality the evidence that we have made this decision is based upon very low quality trials. It is however important for us to acknowledge not only the real risk of harm but also the societal concerns raised about ongoing inappropriate prescription of opioids for chronic musculoskeletal conditions such as osteoarthritis.</td></tr>
<tr><td>16</td><td></td><td>Observations:
1. A more detailed explanation of how individual comorbidities will change the recommendations would reduce the chance of patients/doctors/litigation lawyers using the guidelines as a management protocol. This could be done in the form of a table. Conditions to consider included DM, Osteoporosis, Frailty, CCF, Chronic Kidney Disease, Back pain, Multi-joint osteoarthritis, Depression, Anticoagulation.
Example:
<table>
<tr><td>Diabetes mellitus</td><td>Weight control and exercise</td><td>Additional advantages</td></tr>
<tr><td>Anticoagulation therapy</td><td>Oral NSAIDS</td><td>More severe consequences of GI bleed changes recommendation to strongly against.</td></tr>
<tr><td>Depression</td><td>Duloxetine, focused psychological strategies</td><td>Additional advantages</td></tr>
<tr><td>Multiple joint OA</td><td>Topical NSAIDS</td><td>Cost, time and risks of use changes to conditional recommendation against.</td></tr>
</table>
2. I did not read any recommendation relating to pentosan polysulphate – ref Ghosh et al 2005 (doi: 10.1016/j.curtheres.2005.12.012)
3. Title of this guideline has changed from the earlier iteration by dropping the words “non-surgical”. I think this is appropriate because surgical management by arthroscopy has been reviewed. Perhaps the most</td><td>1. We will try to include more description related to individual comorbidities in the holistic assessment section.
2. Thank you for your suggestion related to pentosan. We’ll consider this in the next iteration of the guidelines.
3. Similarly thank you for your suggestion related to the title change which will take into consideration.
4. The evidence related to continued participation in high-impact sports in the context of prevalent osteoarthritis is conflicting and difficult to make a firm recommendation based upon.
5. We will try to provide linkages to the HANDI in a resource to facilitate implementation.
6. This varies depending upon the nature of the intervention but in general would be close to 6 weeks to 3 months for review. We will try to include this in the holistic assessment discussion.
7. We would propose this is actually beyond the nature of this guideline.
8. As 7 above.
9. Thank you for the helpful suggestion that we will try to include in the holistic assessment section.</td></tr>
</table>

Submission ID number	Topic/Section in guideline addressed by submission	Comments received	Working group response
		accurate title would be the 'primary care management of knee and hip osteoarthritis' 4. I did not read any recommendations about avoiding further injury - should we advise patients to avoid running/ jumping sports? 5. HANDI has detailed descriptions (based on the methodology of RCT interventions) so it would be helpful to link to HANDI knee exercises, taping techniques, use of walking cane, aquatic exercises. 6. There is vagueness about the periodicity of review after a n=1 trial of therapies - perhaps the guideline could recommend a timeframe for assessing the impact. 7. There is no mention about the risk of bias from the placebo and nocebo effects of a n=1 trial of therapy. 8. There is no mention about the risk of attributing benefit to a n=1 trial of therapy because of regression to the mean. 9. In the assessment of patient – typical clinical features of osteoarthritis, I find the presence of Heberden's nodes a helpful clinical sign, given that OA is often a multi-joint process.	
17	Stem cells	I have read the guidelines with particular attention to the parts to do with stem cells, as I have been doing some work with Stem Cells Australia and the Centre for Stem Cells Systems with regard to unproven stem cell therapies. While I agree with the statements I have copied below, I feel that there might be some additional information to support GPs strongly recommending against stem cells as consumers will want to know why. I think there are risks and adverse events in stem cell therapies that aren't reported by consumers, particularly the consumers who go overseas and return with a dose of Hep C. Another problem is that the research is often short term and does not demonstrate what might occur some years later. Stem Cells Australia speaks of the evidence that when the wrong cells are transplanted (because shonky operators often don't know what they are doing) cancer is a possible result. An associated risk is that many of those who have stem therapy pay big bucks and go into debt for something that is largely ineffective. Here is a link to the College of Sports Medicine Position Statement on stem cell therapies which I understand AHPRA supports: http://www.acsep.org.au/content/Document/ACSEP%20Stem%20Cell%20Position%20Statement%20Nov17%20Final(1).pdf I also think that with regard to exercise programs there needs to be some emphasis that the exercise needs to be delivered by appropriate people. I	Thank you for the suggestions that we will try to include in the rationale related to a recommendation.

Submission ID number	Topic/Section in guideline addressed by submission	Comments received	Working group response
		know it is only anecdotal but it is evidence that those who head off to the nearest commercial gym can end up with injuries. I understand that none of this may fit with the purpose of guidelines but it needs to be available to GPs.	
18	prolotherapy	● I will focus my comments specifically on the effect of prolotherapy on knee osteoarthritis, an area I have followed for many years. I have attached an RCT by Dumais et al, that was not included in the analysis and a metaanalysis by Sit et al that combines the results of the Dumais RCT with that of Rabago et al. ● I am not sure why these papers were not included but I am wondering if it was because the Dumais RCT was a pragmatic RCT with an exercise comparator rather than a placebo controlled trial. If so, I would regard this as unfortunate. Pragmatic RCTs are generally undervalued in the guideline production process whereas they are of great interest and importance to doctors and patients faced with choosing between active treatments, not between an active treatment and a placebo treatment. Nonetheless I would appreciate an explanation for the exclusion of this study. Another strength of this study was its crossover design, showing a clinically important response to prolotherapy compared with exercise in the first 16 week period and then a reduction in the differences between groups in the second 16 weeks when the groups swapped treatments. The authors claimed that the improvement attributed to RIT (prolotherapy) alone corresponds to a 11.9-point (or 29.5%) decrease in the overall WOMAC scores. ● This brings me to the question as to what the guideline team used as their criteria for minimum clinically important differences (MCID) for the WOMAC instrument. The MCID is essentially a statistical construct that can vary greatly depending on the method of calculation used and the trial data on which it is calculated. The attached paper by Williams et al calculates it as little as -1.8 using the Youden index and -11.5 using values with a specificity of 0.8. The effect attributable to prolotherapy in both the Rabago and Dumais RCTs seem to meet the more demanding threshold for MCID. ● In the systematic review section of the paper by Sit et al, it is reported that 'dextrose injections, either on their own or mixed with sodium morrhuate, were found to be superior to normal saline in improving WOMAC composite and subscale scores to	Thank you for the feedback related to prolotherapy. The nature of developing these guidelines meant that we needed to search for randomised controlled trials that had placebo comparators- not active comparators. Based upon the evidence that we reviewed, where are only one small RCT of low quality met the criteria for inclusion to a substantial risk of bias and the effects found both at 24 and 52 weeks were not clinically significant.

Submission ID number	Topic/Section in guideline addressed by submission	Comments received	Working group response
		levels above the minimal clinical important difference (MCID) at 12 and 52 weeks. In the meta-analysis section of this paper, it reports that 'prolotherapy is superior to exercise alone by a standardized mean difference (SMD) of 0.81 (95% CI: 0.18 to 1.45, p = 0.012), 0.78 (95% CI: 0.25 to 1.30, p = 0.001) and 0.62 (95% CI: 0.04 to 1.20, p = 0.035) on the WOMAC composite scale; and WOMAC function and pain subscale scores respectively. ● Given this I would ask the guidelines committee to explain why they concluded that prolotherapy not be offered to patients with knee osteoarthritis at a strength of 'conditionally against'. In their rationale they declare that there were no clinically significant effects on function and marginally clinically significant effects on pain. There is no mention of the clinically significant changes in the overall WOMAC index or the moderate effect sizes in the WOMAC composite, function and pain scales. I would ask them to further explain their conclusions and to reconsider them in light of the additional evidence I have provided.	
19		I would like to see included: • topical Comfrey where there is some evidence of equivalence to topical NSAID. • oral Devils Claw, another herbal, with weak recommendation/ evidence on medline plus • Is it too early for Cannabis/THC, topical or oral?	Thank you for the suggestions which we will take into consideration in the next iteration of the guidelines.
20		● Appears to be a well-researched document, with the "Holistic" assessment & diagnosis" algorithms especially helpful to busy GPs. ● Having been involved in the NH&MRC funded trial into glucosamine & chondroitin, I was particularly interested in the "conditional recommendation" against the use of these "Nutraceuticals". ● I include a link to a large, well conducted meta analysis of acupuncture in chronic pain – for your consideration Published in final edited form as: JAMA. 2014 Mar 5; 311(9): 955–956. NIHMSID: NIHMS579448 Acupuncture for chronic pain Andrew J. Vickers, D.Phil and Klaus Linde, MD	Thank you for the link to acupuncture in chronic pain which is not specifically focussed on osteoarthritis.
21	Algorithm	Is it worth drawing more attention to RED FLAGS in imagine on the flow charts	Thank you for the suggestion which we will try to incorporate into the algorithm.
22	Prolotherapy	Interesting that the recommendations for knee OA include corticosteroid injection but not prolotherapy which has 2 RCT's showing better outcomes than placebo injections. Not sure on reasoning there	Thank you for the practical suggestions related to inclusion of a GP management plan to facilitate appropriate and targeted allied health intervention.

Submission ID number	Topic/Section in guideline addressed by submission	Comments received	Working group response
	Non pharmacologic interventions Algorithm Diagnostic ultrasound and MRI	In relation to non-pharmacological interventions, I recommend reference to the use of a GP management plan as part of the practical intervention to appropriate and targeted allied health to assist with the core interventions. For pharmacological interventions the algorithms should indicate the use of IA steroids and Duloxetine for patients where these are specifically indicated and not to read as the next line of management for all patients. Can I also suggest the routine use of diagnostic Ultrasound and MRI be recommended against as part of the holistic assessment	We will try to be more prescriptive with regards indications for certain agents within the algorithm. We will try to further highlight inappropriate imaging in particular the use of diagnostic ultrasound and MRI.
23	Complementary therapies **<u>Overall feedback</u>** Paracetamol Acupuncture	It is important that whenever there is high prevalence of use of complementary therapies, that recommendations are made regarding their use, even if it is a recommendation that no recommendation can be made due to insufficient evidence. It is clear that the Working Group has considered each therapy carefully, and has taken the time to write a very useful guideline. The tone of the sections on complementary therapies appeared to be **overly negative**. In particular, the tone of the section on herbal therapies, supplements and nutraceuticals is excessively negative. The statement about "frequently outlandish claims" and the suggestion to "not undermine these placebo effects" sets these therapies in an unnecessarily derogatory context and implies that "all of these therapies are a placebo", which is disappointing given that there have been a number of placebo-controlled RCTs showing promising findings. I suggest rephrasing this and encouraging GP's to assist their patients in making informed decisions by considering the potential and known risks and benefits of the therapies they seek to use to relieve their pain. It is also curious that despite the positive RCTs evaluating curcumin, boswellia, avocado and pycnogenol, the writeup is so negative, whereas there is much gentler approach taken with Paracetamol, which I note has no clinically relevant effect, quality of evidence is very low, and there is risk of potential harm from abnormal liver function. There is no mention of the placebo effect here nor of any risk of bias from industry-sponsored trials. The neutral recommendation is inconsistent with the current understanding of the lack of clinical effectiveness and the potential risk of harm from paracetamol. (see for example <u>https://ajp.com.au/news/paracetamol-largely-ineffective-not-exactly-safe/</u>) Re acupuncture, the SMD between acupuncture and usual care is large and clinically relevant (see network analysis reference below), and the Working Group has not noted the physiological activity of sham (i.e. that sham is not an inert placebo). There is also the mention of financial cost here which is not mentioned with any of the other treatments. I suggest that a discussion about the possible benefits of acupuncture compared to	We will attempt to be more considered in our use of language as it relates to complementary therapies.

Submission ID number	Topic/Section in guideline addressed by submission	Comments received	Working group response
		usual care be provided in this context and that the potential financial risks be discussed with the patient rather than a blanket statement that implies "acupuncture is expensive and therefore should not be considered". https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3769860/ General Practitioners are in need of carefully prepared guidelines such as these in order to participate in shared decision making with their patients. Systematic evaluation of potential benefits and risks will aid GP's in decision making. A neutral approach would serve us well in evaluating the role of complementary therapies.	
24	Acupuncture and Chondroitin sulphate	There are studies I am aware of eg for acupuncture and Chondroitin sulphate demonstrating positive results for treatment of OA that are included by your collation of data but diluted by other negative studies, or not included in the references of the technical attachment. There are variations in findings of studies eg the type of acupuncture, brands and doses for chondroitin and glucosamine which might explain mixed findings for treatment of OA. In view of their safety profile, I am not sure if it is wise for GPs to advice against their use if patients are clinically benefiting from them. I have patients who feel better with oral glucosamine sulphate and chondroitin sulphate [one patient being a cardiologist and he feels the combined formula is what is helps him to continue playing tennis] and other patients who are better with regular acupuncture for OA knee. It may be placebo responses, but in view of their good safety profile compared with pharmaceuticals which come with a greater risk, I am not sure that I should be advising these patients to stop if they are clinically feeling better. As mentioned there is some evidence ie not no evidence and there may be reasons for mixed heterogeneity research findings.	Inclusion of original trials in our search required for them to have an appropriate, not active comparator. In developing recommendations and advising against, in particular the use of glucosamine and chondroitin, this was for patients naive to these therapies. We tried to highlight in the rationale underpinning the recommendation that we do not want to undermine the real potential for placebo effects.
25		LIKES: Systematic review approach (much much better than what national Knee OA Clinical Care Standard did which was expert opinion only - Therapeutic Guidelines Rheumatology basically which is an expert opinion document). Neutral approach to Specialist referral without recommending that Rheumatologist and Orthopaedic Surgeon are superior specialists. However it would perhaps be better specifying what each medical specialist group tends to be most expert in (eg. Orthopod - surgical opinion esp TKP; SEM - exercise program; Rh - consideration of inflammatory joint component; Addiction - withdrawal from opiate reliance; Pain management - weighing up pain relief options); the same could be done for Physios, Exercise physiologists etc. DISLIKES:	Thank you for the feedback. We will try to highlight where different health professionals may be more appropriately engaged in the management of patients with osteoarthritis. In particular, the important role of a number of different health professionals and exercise prescription. We recognise that PRP has a developing literature base with some suggestion of benefit. The challenge we have at present is that the quality of these trials is not strong enough for us to make a favourable recommendation. We recognise that there is increasing evidence suggesting caution in the context of corticosteroid use which we have tried to capture in our recommendation and rationale.

Submission ID number	Topic/Section in guideline addressed by submission	Comments received	Working group response
		Still don't understand how cortisone injection can be rated more favourably than PRP injections for knee OA. My read of the knee OA literature is: CSI for knee OA: Benefits - moderate (at best) evidence of benefit vs placebo in the first month; no evidence of any benefit thereafter (strongly so after McAlindon JAMA); CSI not as effective as HA in the medium term (1-6 months). CSI for knee OA: Harms - strong evidence of harm, cartilage destruction, from repeated injection (McAlindon JAMA 2017); moderately strong evidence of increased infection if TKR performed after cortisone injection PRP for knee OA: Benefits - moderate (at best) evidence of benefit vs placebo/HA but over 6-12 months; Harms - no evidence of harms So in conclusion - PRP has greater evidence of benefit in knee OA than CSI (ie duration of benefits much longer, even though both are based on studies with significant bias) whereas CSI has significant evidence of harms (but PRP doesn't). I've currently got CSI in "Do not Do" category, and PRP in "perhaps consider" (even though no injection preferable for most patients). No idea how CSI can get a recommend rating and how PRP can't get a cautious recommend if CSI gets one. On hip there is less injection evidence, but this abstract (just presented in USA/published in abstract form) is pretty devastating and should swing hip CSI into "Do not Do" once this is in print: https://press.rsna.org/timssnet/rsna/media/pr2017/chang/abstract/chang.pdf http://www.empr.com/news/hip-steroid-anesthetic-injection-shoulder-osteonecrosis-osteoarthritis/article/710210/?webSyncID=84e812c1-04bd-c342-321b-786ddd3ee149&sessionGUID=76a4de08-524a-62bd-33d8-a5071e2a8d0c That is, fourfold increase of osteonecrosis and bone collapse within a year if you have a single hip CSI injection! As soon as this is published in paper form, hip CSI instantly has to go on the "do not do" list as well.	
26	Cold therapy	One of the recommendations for cold therapy to be "conditional against recommendation" I believe could be altered. I think that for hip arthritis, it is not effective due to the depth of the tissue surrounding the joint. However for the knee, there is often an effusion, or with fat pad involvement which respond favourably to ice. The only patients I don't recommend cold therapy for are the ones who report increased knee pain with cold weather.	We made this recommendation based upon the existing evidence. If there is Level 1/ RCT evidence to suggest otherwise we would be happy to review this.
27	Plain language summary	A healthy lifestyle “Regular exercise is important for relieving pain in people with knee and hip OA. These include land-based activities such as yoga and walking and water-based activity such as hydrotherapy”	Thank you for the suggestion. We will revise in accordance. We will try to capture recommendations with a strong for versus those with a strong against in a more transparent manner.

Submission ID number	Topic/Section in guideline addressed by submission	Comments received	Working group response
	3.1 Non-pharmacologic interventions	Suggest not listing Yoga first. This will likely lead to consumers viewing this as the first / best recommended option. While there is evidence, this does not align with the evidence listed in the Summary of Recommendations section. Suggest a different table format to clearly identify “strong evidence for” and strong evidence against”	
28		Evidence provided to suggest inclusion of **Photobiomodulation (PBM) Therapy or Low Level Laser Therapy (LLLT)**,	We appreciate the submission and particularly the evidence brought forward with regards these intervention modalities. In providing the recommendation about laser we took into account the randomised controlled trial evidence but also the practicality of its delivery, multiple clinician visits and costs.
29	Page 6 Plain language summary p12 Summary of recommendation	Paracetamol, and nonsteroidal anti-inflammatory drugs (NSAIDs), such as ibuprofen and aspirin are recommended for at low doses and short periods – I would suggest the reference to aspirin is confusing. It is so rarely used as an analgesic today, so why single it out for a mention? Furthermore, using the phrase low dose in the same sentence complicates this even more, as the term low dose aspirin is used when we are wanting an antiplatelet effect not an analgesic effect. – There is also a grammatical error 'for at low doses' which needs correcting. The recommendation of paracetamol here seems at odds with the language used on p12, where it is said that paracetamol cannot be recommended for or against • Pain relieving creams (topical NSAIDs) may be useful to manage pain - I would suggest this is reworded to state gels (or gels and creams) as some of the most popular products are gels • Opioids, a class of prescription-only medication are not recommended - Why state 'a class of prescription-only medicines' ? This is irrelevant, corticosteroid injections are prescription only too, but the guideline does not include those words when referring to that class of medicine. • Medications used in the treatment of osteoporosis, such as bisphosphonates and calcitonin are not recommended - I would suggest this is removed from the plain language summary as the reality is that most clinicians would not think of using these drugs in OA, so it feels rather out of place It might be reasonable to trial oral NSAIDs at the lowest effective dose for a short period and then discontinue use if it is not effective. This sentence (and next) contain inconsistencies regarding use of singular or plural references	We will remove the use of aspirin. Thank you for the suggestion with regards topical NSAIDs which we will go ahead and revise. We will remove the use of the words “prescription only medication” when referring to opioids. We appreciate your advice with regards the use of osteoporosis medications and will remove this from the plain language summary. We will review the use of language in the trial oral NSAIDs sentence to ensure consistency. The rationale for including these medications (doxycycline through to methotrexate) is that there is some interest in using them, they are available-albeit off label-and so it’s important that GPs be aware about whether they have evidence to support the use or not. Thanks for the suggestions regarding collating oral and transdermal opioids. As we have a great deal of interest and feedback related to opioids we will plan to keep them separate.

Submission ID number	Topic/Section in guideline addressed by submission	Comments received	Working group response
	Algorithms p16 and p17	Statements regarding doxycycline through to methotrexate (inclusive) Consider removing these statements as the reality is that most clinicians would not ever think of using these drugs in OA, so it feels rather out of place, particularly in regard to strontium as it is no longer even on the Australian market Oral / transdermal opioids Why have these as separate sections? The recommendations are the same - keep it simple. Reference to 'NSAIDs (topical before oral)' seems at odds with what is stated on p12, where it is stated that unable to recommend for or against topical NSAIDs; whereas the statement for oral NSAIDs is more positive ('we suggest offering')	
30	Yoga	● There is a large body of research which shows that resistance exercise is advisable for osteoarthritis management. The evidence for resistance exercise is more substantial than the evidence for yoga, Tai Chi, stationary cycling, and walking. ● Yoga is the first listed recommendation for land-based activity. This may not be suitable for many as they may have trouble getting on the ground. ● It should be emphasised more greatly that an Accredited Exercise Physiologist can help prescribe suitable exercise for osteoarthritis sufferers. Our profession specialises in exactly this area.	We will revisit the order of the exercise listed recommendations. In addition, we will try to provide some recommendations with regards the healthcare professionals suitable for exercise prescription.
31	Consumer engagement	There is no engagement or consultation with the consumer/patient group	We have invited consumer groups to provide feedback and had consumer advocates involved in development of the guidelines.
32		The waiting times to see orthopaedic specialists are often much longer than elective surgery waiting times and perhaps waiting till the patient has severe functional impairment, could be considered as doing harm to a patient and their families. Perhaps the timing of the referral could be reconsidered by the working group? Downloads/Specialist_Clinics_Activity_Q4_2015-16.pdf More than 744 days (two years) at Ballarat Hospital, 735 days at the Austin (two years) and 451 days at Bendigo Hospital (1.2 years) to see an orthopedic surgeon. This would leave the patient suffering for a period of more than two years in regional centres of Victoria and I suspect many other regional areas. Is this really giving equitable access and treatment to this patient group?	Orthopaedic surgeons are not the only specialists involved in managing musculoskeletal disease. We recognise that there is variation in access to care that in part is driven by rural availability of specialist services. It is beyond the brief of these guidelines to change access to care.