Supplementary Table 2:Themes and supporting quotes (participant number)

|  |  |  |
| --- | --- | --- |
|  Orthopaedic surgeons  | Rheumatologists | General practitioners |
| Theme: Recognition of the importance of non-surgical management of hip and knee OA, focused on exercise-therapy, weight management and analgesia |
| So it’s the first line of treatment to hip and knee osteoarthritis (P10)So I think the role is huge and anything that can delay joint replacement surgery is worthwhile (P6) I'd hope that the strengthening thing is maintained as high as possible, if they’re leading on to surgery (P3)I usually like people to modify their activities, I like them to lose weight, I like them to stop running, jogging, and doing activities that stir things up (P4)Low-impact exercise, weight loss management, physio, injections, psych for depressed patients, that’s about it (P14)Education is critical. Patients need to know that they’re not going to be free of pain. It’s about coping day to day with that pain but education about their diagnosis, about the treatment options available to them (P14)I mean I think the GLA:D [osteoarthritis management program] can cover most of it which is education and strengthening (P3)Physiotherapy to help strengthen muscles around the joint and help unload the joint; weight loss and other important things like hydrotherapy and then we have basically pain relievers, whether it be regular Panadol Osteo, anti-inflammatories, or injectables, but I use corticosteroids, Hyaluronic acid – would be the main two (P10) Steroid injections treat inflammation, so if you got a lot of synovitis or a big effusion, it can be useful. It’s only temporary and the data sort of – my understanding is that the data suggests you probably only get two to four weeks of benefit, tops (P6)Injections play a limited role. My view in injections is that steroids are usually a bit of a waste of time. Synvisc is usually a bit of a waste of time but may have a role to play for people who have, for example, a yearly ski trip that they’re like to go on and they just want some short-term relief, that might be an appropriate patient. But for the day-to-day long-term management of OA pain, I think injections are a bit of a waste of time (P14)You booked a holiday to Europe and you’re going to Europe for ten days and you saved for the last 15 years to go on this massive holiday and it’s gonna be holiday of your lifetime, have an injection, that’s fine. But having an injection every three months because you’ve got arthritis isn’t appropriate (P6) | Critical, critical. And by that, I don’t mean just medications and injection. I think strength training in particular is something that’s very underutilized (P2)So, obviously, apart from the – well, the importance of looking at muscle strengthening, pain management – there are obviously things like over the counter therapy, whether it’s proven or not (P13)So there’s pain control management, weight control management, physical program management in terms of exercise program, and depending on the age group of the patient, provision by the resources around the patient which may help them cope with their joint problems, particularly in weight-bearing areas (P5)A lot of it is education – using diagrams, models, any online resources and things, information from the Rheumatology Association about osteoarthritis as opposed to immune-mediated inflammatory arthritis, emphasizing that there's not a cure as such – at this stage anyway – that's effective for everybody (P2)It can be difficult if the patient don’t really accept the self-treatment type of – you know, the self-motivation, self-treatment (P15)Education doesn’t work if the patient doesn’t speak English and doesn’t understand , it never works (P15) It [exercise-therapy] has a role in, as part of the overall global management of the patient, in terms of providing one part of the repertoire, maybe required either at that very time or somewhere down the line in terms of being able to help the patient with the pain control and locomotion (P5)The importance of maximizing the strength of the muscles, soft tissue, and connective tissue around the various joints, and the role of analgesia, such that they stay as mobile and active as possible to prolong surgery for as long as possible, and emphasizing that surgery may be the end point (P2)I discuss the role of steroid injections, a temporary measure for acute flares (P15)Steroid injection of knees, I occasionally do. It’s just analgesia of various kinds. Sometimes if they request platelet-rich plasma or Synvisc or – what's the other one? Stem cells, etcetera, I generally discourage them and left it up to the patient. I just said I can't wholly or highly recommend them, but it's up to them what they wanna do (P15) | Well, I think it [Exercise] is very important for a number of reasons. One, it keeps the synovial fluid moving, it keeps the muscles strong around the joints, and it improves mobility, and often the pain is eased once they move (P7)Well, I think non-surgical management is the number one treatment choice initiating care and in the context of general practice, I normally start them off with oral medication such as Panadol Osteo, plus Glucosamine, Chondroitin Sulfate, get them on to physiotherapy in order to improve the strength of the local musculature and perhaps flexibility in that area, and if all of that fails, then we’d be exploring possibilities of different injections into those joints which may provide some short to intermediate-term relief. (P11)Remember that most of our consults tend to be short in surgery and it’s very hard to embrace all that in one visit or two visits, but it’s an ongoing issue. I’ll probably do education as part of an ongoing thing from visit to visit without actually focusing on it (P12)Keeping the joint moving, so keeping it mobile is exceptionally important. Educate people as far as what they should do as far as movements. As an example, they shouldn’t be doing any jumping. Yeah. So, rest the joint, but keep it mobile (P1)Well, firstly, I think we have to look at lifestyle issues, whether they're moving, whether got this weight on their joints, weight loss, and their diets, generally, whether they’re actually mobile at home, whether they can have some mild analgesia like Panadol to help them along but education, very important.(P7)It’s very difficult, because you’re dealing with a chronic problem, you want to try and not give narcotics, and so you wanna give them non-narcotics, so that basically is paracetamol and anti-inflammatories or the combination of paracetamol and anti-inflammatories. People need painkillers, but you want them to think outside painkillers (P9)Injection of steroid can be helpful but it is not a cure - it is pure pain relief (P7)Two things – obviously steroid injections and Synvisc injections – two things that work. Beyond that, obviously, you got painkillers, anti-inflammatories, and all sort of natural products, none of which probably do a lot really, but we give them anyway (P9)  |
| Theme: Joint replacement being considered the ‘last resort’ for end stage disease not responding to non-surgical management |
| So it should be considered a last resort once all reasonable non-operative measures have been trialed and failed basically (P14)Well, it’s the definitive cure if you’re bad enough. So, basically, knee arthroplasty is essentially the only meaningful operation for arthritis – I suppose osteotomy is – I don’t do them, but people can do osteotomy for early OA but other than that, arthroscopy doesn’t play any role (P8)The ultimate surgery for knee and hip arthritis is joint replacement surgery, which is reserved for people obviously who’ve got end stage disease that they are disabled with and that has failed management of all other modalities – it’s a last resort operation (P6)I say to patients, “If you get a complication, you don’t wanna look back and think, “Gee, I wish I had tried some physio or some Panadol, or a walking stick (P6)I don't like operating on a patellofemoral joint at all because it's not a happy place to play. It might not result in a successful (P4) | I will consider surgical treatment as pretty much the last resort where all conservative treatment has failed (P15)The importance of maximizing the strength of the muscles, soft tissue, and connective tissue around the various joints, and the role of analgesia, such that they stay as mobile and active as possible to prolong surgery for as long as possible, and emphasizing that surgery may be the end point (P2)Q. What role do you consider surgical treatments have in the management of knee and hip osteoarthritis? Response - As an adjunct for management (P13)It [surgery] has a role in, as part of the overall global management of the patient, in terms of providing one part of the repertoire, maybe required either at that very time or somewhere down the line in terms of being able to help the patient with the pain control and locomotion (P5) | And if that [non-surgical management] was inappropriate or if that failed, then we’d be looking down the surgical route. I see it as usually a last resort, unless it’s fairly clear cut from the get go that their arthritis is particularly severe and nothing else would really cut the mustard (P11)If the patient is incapacitated and not responding to conservative management and, of course, fit enough to have the operation (P7)They have a role when people are – so, in so much pain and disabled that – and generally the x-rays show severe osteoarthritis that they decide they’re going to have the knee and hip surgery (P1)End stage disease So, when the patient can no longer manage his lifestyle (P9) |
| Theme: Determination of management ‘success’ through patient perceptions rather than the use of validated instruments |
| Happy patients, pretty simple (P4) The most important thing is the patient experience (P14) Look, we keep scores. So we got the Modified Harris Hip Score and the Oxford Knee Score. We take one at every consultation. We look at the progress scores. And then we ask the patients how they feel that their pain is adequately controlled and able to perform their activities with some limitation, but they can actually perform them (P10) | Well, one simple way, ask the patient. It depends on which way the problem is impacting the person, like if you are looking at major weight-bearing joints - obviously it depends on the age or other issues. A younger person, obviously, we’ve got to consider other things in terms of employment and raising families, personal things that they enjoy in their life. To the older person, trying to maintain independence and such things to be able to look after themselves, clean and wash themselves, cook, etc etc (P5) From the clinical point of view, it’s very difficult to do a WOMAC score or a research score in – but if a patient feels better, they can do what they need to do at home, go and travel and be a carer, then that’s success (P13) | Oh, they’ll tell me if they’re better or not. But the thing is distinguishing between what has helped, but usually because you do it in stages, step-wise, you usually know. I’ve been through all the basics with them and I send them to a physio, and I said, “Gee, you’re much better now. Then you know that physio has worked.” If I give them Panadol and they say, “Terrific,” I know the Panadol has worked (P7) The patient will tell you – if the patient can continue to walk, if they walk further than they did before, then they’ll tell you (P9)I don’t have any objective ways of knowing except subjective. It will be basically just if a patient report back on pain. The patients very quickly tell you whether it’s succeeding or not (P12) |