

Early Hip and Knee Osteoarthritis James Lind Alliance Priority Setting Partnership

Question ID	Uncertainty	Original uncertainties submitted to survey	Existing evidence	Source of Uncertainty (where sources did not identify themselves they have not been included here. Where a person may have contributed more than one question within one indicative question, the person has been counted only once)
SURGICAL QUESTIONS				
S1	In people with early osteoarthritis, does keyhole surgery to clean out the joint (arthroscopy) work?	<p>Does joint wash out cause long term deterioration?</p> <p>Is there any value of washouts of any joint (shoulders, hips, knees) in the long term?</p> <p>Is there any merit in preventative surgery in conditions such as hip impingement.</p> <p>Does keyhole surgery of the hip work?</p> <p>How do recovery periods differ? can teh surgeon do a proper job through keyhole surgery?</p> <p>how effective is arthroscopy for relief of symptoms of OA</p> <p>Are there more keyhole based therapies that could be harnessed?</p> <p>Is there any indication for arthroscopy in patients with knee/hip OA?</p> <p>Is there any role for washout of the hip in hip OA?</p> <p>If I have a job will I still need an operation? What sort of operation will I need, will I have to have the knee replaced or is there something that can be done under a keyhole operation? Is it a serious operation or not?</p> <p>Is there any role for arthroscopic treatment at any stage of the disease?</p> <p>Most research as I'm aware shows that arthroscopy for DID is not beneficial yet we continue to operate. More info on the outcomes especially who goes on to have a TKR</p> <p>What are the success rates of the different surgical options?</p> <p>how many patients undergoing knee arthroscopies undergo further surgery</p> <p>is keyhole surgery helpful</p> <p>When is keyhole surgery not appropriate</p> <p>Is there a place still for keyhole surgery/ wash out surgery for OA knees?</p> <p>I am unclear about the efficacy of keyhole surgery. There seems to be a lack of evidence that it would make any difference and that I would be better off exercising at this stage</p> <p>can I have just a clear out of my knee</p> <p>Can the joint be "cleaned up"?</p> <p>Many surgeons won't scope an arthritic knee or debride a meniscus in an arthritic knee, some will, why?</p> <p>is arthroscopy just a placebo?</p> <p>Use of other surgical treatments, such as keyhole operations before resorting to a standard replacement operation</p> <p>I've heard a lot about arthroscopy but also heard its very painful post operatively - is this a "treatment" for OA.</p>		Uncertainty identified by 7 patient/carers, 13 clinicians
S2	Is the progression of osteoarthritis to the point of requiring surgery inevitable?	<p>Do I have to use a stick?</p> <p>will I need a new knee</p> <p>What is the likelihood of it deteriorating over time ?</p> <p>how bad will it get</p> <p>What are my chances of having an active life and keeping mobile ?</p> <p>If I was diagnosed with OA 60 will I have to have a joint replacement</p> <p>Do I have to take medication long term?</p> <p>What is the best way to manage oa to reduce need for surgery?</p> <p>will I have to do exercise and take medicine for rest of my life?</p> <p>What should/can I be doing to minimise depreciation of joint to delay surgery forever if possible?</p> <p>Am I likely to see any vast improvements or will it always be a down hill spiral?</p> <p>Is it inevitable that decline and surgery will happen - are there ways to postpone or avoid this?</p> <p>Is decline inevitable - how can the likelihood of surgery be postponed or avoided?</p> <p>will it deteriorate and affect walking?</p> <p>If I have osteoarthritis how quickly will I need a hip/knee replacement</p> <p>Is there an inevitable progression of the disease which will require surgery in the long term</p> <p>Will it inevitably worsen with time?</p> <p>How likely is it one will lose mobility and therefore independence</p> <p>What is going to happen in the long term- how disabled will I be?</p> <p>What can I expect long term?</p> <p>Prognosis/time line of disease (realise how difficult this is)</p> <p>Do all joints with arthritis end up with joint replacements</p> <p>Will my arthritis et worse</p> <p>How long will it last?</p> <p>Does OA knee inevitably end up with needing a new knee</p> <p>will I be able to walk</p> <p>does it get worse</p> <p>Is it inevitable I will end up confined to a wheelchair or very immobile</p> <p>Will it go away? If so, how long will it last? If not, will it stay the same, or get worse and over how long?</p> <p>My osteoarthritis has not deteriorated in 18 months. How likely is that to continue?</p> <p>It is very difficult to predict how cases will progress, whether treated or not, but some idea of the "average" progression would be useful.</p> <p>Is there a way of predicting degree of functional limitation/disability associated with a current estimate of osteoarthritis and its later development?</p> <p>How likely is it that if I self-manage for another 10 years or so, there will be a development, that would preclude the need for heroic surgical interventions?</p> <p>What happens over time, and how will it affect my quality of life and activity ?</p> <p>Is it likely to get worse over time?</p> <p>There is a perception amongst clinicians and patients that OA will always progress and therefore need surgery. This does not appear evidence based.</p>		Uncertainty identified by 16 patient/carers, 11 clinicians and 2 carer&clinicians
S3	Can surgical treatment prevent osteoarthritis or affect its progression?	<p>Are there any surgical procedures that can stabilise OA</p> <p>Can meniscectomy produce a rapid deterioration in knee OA?</p> <p>Does an osteotomy slow the progression of radiographic change in knee OA?</p> <p>Does a meniscal transplant help prevent the progression of knee OA?</p> <p>Does meniscectomy/chondroplasty of the knee effect the need for TKR surgery?</p> <p>Does hip arthroscopy delay/speed up the need for THR surgery?</p> <p>Does microfracture of the knee delay or speed up the need for TKR surgery?</p> <p>Is arthritis more likely after investigatory keyhole?</p> <p>what associated problems arise from arthroscopies</p> <p>Are there surgical (or other) treatments which could address factors which make OA worse rather than specifically target OA itself?</p> <p>The link between ACLR and knee OA, whether knee surgery (pre TKR) accelerates OA</p> <p>If I have had trauma to my knee or meniscectomy what is my prognosis and how long?</p> <p>Is keyhole surgery, of any joint, detrimental in the long term?</p> <p>Are keyhole operations of any joint detrimental in the long term?</p>		Uncertainty identified by 3 patient/carers, 7 clinicians

S4	In people with early OA do surgical procedures that involve cutting and re shaping bone (inc. realignment and osteotomy) work?	<p>how effective is surgical realignment/osteotomy</p> <p>Does realignment surgery really work at all?</p> <p>Do osteotomies relieve pain for long enough for it to be a good operation prior to a replacement?</p> <p>What is the correct realignment to perform in knee osteotomy?</p> <p>Does high tibial osteotomy provided more relief than non-operative treatment?</p> <p>Does joint alignment surgery or joint distraction surgery work to slow disease and help pain?</p> <p>Which individuals are most likely to benefit from joint alignment or distraction surgery, and which other treatments should they have tried?</p> <p>Is (re-alignment operations) only useful if patellofemoral mis alignment and pain under the patellar causing pain by wear and tear.</p>		Uncertainty identified by 1 patient/carer, 5 clinicians
S5	What is the best way (content and structure) of delivering rehabilitation (physiotherapy) after surgery for early OA?	<p>What is the contribution of rehabilitation after surgery to its success?</p> <p>Lifestyle adaptations following surgery?</p> <p>I have noticed that knee operations have better outcomes than hips, is this because there is the 'core' element of hip rehabilitation which is automatically missed in rehabilitating the hip alone? (Continues)</p> <p>What's the recovery time post surgery?</p>		Uncertainty identified by 2 patient/carers, 1 clinician
S6	What pre operative factors can predict the outcome of surgery in people with early OA?	<p>How effective is non conservative strategies?</p> <p>Are there any co-morbid conditions that would mean that surgical treatment of my joints would have a worse outcome than the general population?</p> <p>Will surgical intervention help?</p> <p>What is my chance of being pain free post op?</p> <p>What treatment is better for patients with partial thickness knee OA - a UKA or HTO?</p> <p>Will it cure me completely or will I have to have another operation?</p> <p>Is there a complete recovery after surgery?</p> <p>Can surgery fully cure your knees?</p> <p>Which surgical treatment would facilitate quickest recovery to early wt bearing and activity?</p> <p>effect of psych/social status on outcomes</p> <p>I had keyhole knee surgery 35 years ago to remove a "bucket-handle" meniscus tear after a skiing accident, and now have knee pain. Is further surgery likely to improve my situation?</p> <p>Will my joint be back to normal after the operation? If not, what can I expect?</p>		Uncertainty identified by 5 patient/carers, 4 clinicians and 2 carer&clinicians
S7	In people with early OA are surgical treatments designed to repair, not replace the joint (such as stem cells, micro fracture and cartilage transplant) effective?	<p>What about the cure reported in the newspaper a few months ago- about injections of cartilage?</p> <p>How effective are stem cell or cartilage transplants?</p> <p>Are there procedures that will re-grow articular cartilage?</p> <p>Does cartilage regeneration have a future?</p> <p>Are new treatments like stem cells effective?</p> <p>Can knee cartilage be regrown?</p> <p>Could stem cell treatment be included with key hole surgery?</p> <p>Does micro fracture provide a good treatment for people with knee/hip OA?</p> <p>Are we any further forward with chondral transplantation?</p> <p>Where is cartilage replacement therapy in the treatment of OA? Is it routinely available? Who qualifies? Will the NHS make this therapy available?</p> <p>Stem cell therapy to grow your cartilage</p>		Uncertainty identified by 5 patient/carers, 5 clinicians and 1 carer&clinician
S8	In people with early OA does timing affect the outcome for non joint replacement surgery e.g. osteotomy, arthroplasty?	<p>If I delay surgery will this mean I will have a poorer outcome?</p> <p>Will I need knee replacements, how will I know when this should happen?</p> <p>It seems quite clear I will need new knees, they are getting worse. How do I know when this should happen?</p> <p>What tests demonstrate I need surgery or not?</p> <p>How reliable are they in assessing when a replacement joint is necessary?</p> <p>What if I choose to delay surgical options?</p> <p>If surgery is needed when is the best time to have it?</p> <p>When should physio give way to surgery?</p> <p>If I delay surgery what is the time line for needing surgery?</p> <p>Can early surgical intervention optimise long term outcome?</p> <p>What is the best time to have surgery (i.e. when do the likely benefits outweigh the risks) - according to each type of joint affected?</p> <p>Is there a point where I 'miss the boat' for treatment?</p> <p>When is the best time to have a joint replacement?</p> <p>What is the optimal moment in the progression of the disease to undergo surgery, disregarding relief of pain? I am thinking of the negative effects of loss of function and muscle strength, ... (Continues - Notes)</p> <p>Is it a better longer term outcome if you have surgical interventions much younger (e.g. 30s or 40s)?</p> <p>Are surgical treatments recommended for early stage osteo-arthritis?</p> <p>Why can't I have a knee replacement in my 40s? Surely this is when I need to be fit and active not crippled in pain.</p> <p>How quickly can these be organised - I do not want to wait until the pain is unbearable and then find I have a long wait for treatment.</p> <p>Will surgical option early give me more activity when I am younger than reduced activity to delay surgery when I am older and less active?</p> <p>When should surgery be considered?</p> <p>At what point in knee OA does arthroplasty become a good/reliable treatment choice for patients?</p> <p>Do I have to have an operation? If so will I need a general anaesthetic or can it be done under a local?</p> <p>At what point should surgical intervention be made?</p> <p>When is it best to have an operation?</p> <p>How bad does my OA have to be for surgical options to be considered?</p> <p>Should surgery be put off as long as possible or undertaken as soon as possible?</p> <p>When is surgery necessary?</p> <p>If you delay surgery until you've tried other non surgical treatments, is there a risk that the surgery will be less effective than if you'd had it earlier?</p> <p>Am I a suitable candidate or am I too young?</p> <p>At what point does a replacement become necessary?</p> <p>What's the best point at which to have surgery (ie before it's really bad when muscles are still relatively strong and healing therefore quicker, or wait until it's dire and everything weaker as a result)?</p> <p>Surgeries are changing younger patients having replacements.</p> <p>What are options for surgery - eg hips what is it possible to repair in arthroscopy - does early intervention change necessity for replacement</p> <p>When you should decide enough is enough and ask for surgical intervention, I worry about the stability of my knees</p> <p>Optimal timing of joint replacement</p> <p>Why do I keep getting told I'm too young for a hip replacement</p> <p>When should I have surgical treatment?</p> <p>What is the optimum time / stage in the OA to have a knee replacement?</p> <p>Will I need an operation</p> <p>How soon will I need a knee replacement?</p> <p>My age is 76 years and surgery appears to be contra-indicated now?</p> <p>At what point does surgery become essential?</p> <p>Is it better to have the operation now, whilst I'm healthy, or later when things are worse?</p> <p>Will I need to have an operation?</p>		Uncertainty identified by 21 patient/carers, 10 clinicians, 3 carer&clinicians

		is it better to operate sooner rather than later to avoid muscle wastage and deterioration?		
S9	What are the most effective surgical treatments e.g. arthroscopic, biological, realignment, osteotomy in people with early OA?	What strategies should be adopted to ensure the best outcome based on the persons age and lifestyle. What are the wider health implications of delaying knee replacement in younger people with OA - in terms of immobility, long term painkiller use, depression etc. what are the options if I am too young for a joint replacement?		Uncertainty identified by 3 patient/carers
S10	What is the best way of measuring outcomes (pain, function, quality of life, joint preservation) of non arthroplasty surgery with people with early OA?	What is the NNT/NNH of this surgery for people who most resemble me? What is a good outcome for such a treatment? What minor surgery options are available, and how effective are they, for how long? Or are they temporary panaceas How successful is an operation? What might the long term effects of surgical intervention be? Likely long term benefits of any surgical option Long term prognosis following surgery? What is the success rate of knee surgery? How successful is surgery. How long lasting is any improvement likely to be? percentage of positive outcomes What indicators show a good outcome What is the success rate, What is the satisfaction rate post op? Can surgery be avoided, more info on complications with nerve pain after hip arthroscopy, better info on post surgery as its a blanket document regardless of how much surgery you've had How long will the cure last? Why is usable data about knee arthroscopy not readily available. Indeed why is most outcomes data so hard to understand?		Uncertainty identified by 10 patient/carers, 5 clinicians and 1 carer&clinician
S11	What is the best way of delivering care short and long term post surgery for early OA?	Will the surgery need to be repeated? What is the period of success of surgery, before problems re-occur? How likely is it that they will need another operation within how many years? Whilst the outcomes from surgery can be very good for some patients, it's not clear if the improvement is due to the surgery or a placebo effect. Knowing this information would significantly affect decision-making for patients and clinicians. how long do they last, Will the operation have cured it or will I have to have another? If so, how long before it is likely to reoccur? if I needed a further operation on the same joint, would that be ok?		Uncertainty identified by 4 patient/carers, 1 clinician and 1 carer&clinician
S12	In people with early OA is joint replacement appropriate and effective?	can we move away from replacement? Which patients with knee Kl grade 3 OA do well with a UKA? What surgical options are available prior to total hip replacement and in what circumstances are they appropriate? what are the barriers for surgery What surgical alternatives are there to full knee replacement? What are the risks of these? How effective are they compared with full replacement?		Uncertainty identified by 5 patient/carers, 2 clinicians
S13	Taking cost into account what is the most effective treatment for early OA between surgical and non surgical treatments?	I realise that the cost of the replacement joints, their life span and a surgeons time all equate to the tendency to delay needed operations that could prolong an individuals normally healthy life style. Is there any research being done into a more cost effective way of providing a suitable way of doing this. If a person remains active longer then this surely would benefit the NHS in other ways since an active individual is better than a static one. is NICE guidance agreed non-operative treatment cost-effective? Cost effectiveness and safety of opiates Why are there financial limitations on key hole surgery for the hip when knee surgery is commonplace and works? Which are cheapest?		Uncertainty identified by 2 patient/carers, 2 clinician and 1 carer&clinician
NON SURGICAL QUESTIONS				
N1	Is regular exercise and physical activity effective at reducing disease progression?	Do impact sports, such as running, really lead to knee osteoarthritis? Does excessive sport (daily for 4 hours) during adolescence make me more likely to develop OA? Is there a correlation between athletic involvement and OA? Does jogging cause osteoarthritis? is OA caused by exercise? How to remain active and participate in exercise Can they delay the progress of OA? Can exercise make it worse? Could the increased exercise that the government is suggesting, such as the 10,000 steps challenge, cause more damage to my joints in the long term? I like to run on a treadmill but am I making my knee worse or doing long-term damage? Which exercise can slow down the arthritis process? How safe is impact exercise, especially for obese patients, over the long term? How to remain active and participate in exercise How much exercise is needed to prevent surgical intervention and when should physiotherapy intervene to help? What is the best approach to slow the development of OA - exercise ("use it or lose it") or mollycoddle the joint to reduce stress and frequency? How can we predict how much load (frequency, duration, type of load) that an arthritic joint can withstand without swinging the joint into a negative state of decreased repair and hence progression of the disease? am I likely to get OA if I play a lot of sport Does running contribute? How important are biomechanical factors (eg Varus), the amount of joint loading through impact activities during exercise in determining the likelihood of progression of symptoms and functional decline over the long-term (2 years +)? The reason this is important is it will enable clinicians to advise and/or reassure patients of the safety of exercise that can be used to control symptoms and in long term weight management. can I run again? Does doing a lot of sport in your youth make it more likely to develop? what effect does high impact exercise have on future OA prognosis in those with incident OA?		Uncertainty identified by 6 patient/carers, 11 clinicians and 1 carer&clinician
N2	What are the most effective and cost effective non surgical management options, including combinations of treatments to improve outcomes in people with early OA?	Are non-operative measures better than placebo treatment? What kinds of treatments are available that enable me to optimise my function without causing more damage? Are there estimates for how long I should persist in implementing non-surgical treatments before it's apparent that they are not going to improve matters for me and that I should put my resources and energy into something else? Long-term patterns and outcomes of medication use; maintenance of exercise in the long-term through primary care physiotherapy What is the evidence for all non-surgical options and the risks? Why do people always look to surgery for treatment? There seems to be less evidence for these treatments? What is the body of evidence for Are there any successful long term treatments or is surgery the only option? I suppose the question is 'what non-surgical treatments are available?' What is the evidence for non-operative management of lower limb OA? Do non-surgical treatments work? What is the treatment effect of non-operative treatment compared to operative treatment (say with an HTO)? How effective and cost effective is aqua-fit for OA? How often should one do it to notice benefits? What treatments are most effective at the different stages of the condition?		Uncertainty identified by 13 patient/carers, 12 clinicians, 1 carer&clinician, 2 H&K PSP (1 clinician and 1 professional focus group) and 1 professional focus group

		can hydrotherapy decrease pain		
		Are there non surgical interventions to assist in the repair of the joint?		
		Benefits of physio both post surgery and as an alternative		
		Specific physio, increasing in rate (and for more than 6wks)?		
		If I am not medically well enough for an operation is there any other treatment that I can have		
		What non surgical approaches are available?		
		What non surgical option work, and why?		
		Which of these treatments have a good shelf life in terms of keeping the symptoms away?		
		Is Hydrotherapy offered to patients with arthritis as a standard treatment to alleviate symptoms and for wt management . ?		
		how good is non surgical option		
		If exercise is too painful and I do not like taking painkillers what is the next alternative non surgical treatment		
		There is very little evidence to support many suggestions for non surgical management of OA- are patients making truly informed choices?		
		If the joint is worn, how will physio help?		
		What options are there for treatment? Which ones work best?		
		what are mu no-surgical options?		
		Physiotherapy - what interventions are best?		
		What is the best treatment to take as I would like to avoid taking oral medications ?		
		How can I avoid surgery ?		
		What is the best intervention for patients with knee/hip osteoarthritis to address the biomechanical, physiological, and psychological disease factors contributing to disease progression?		
		Does intra-articular pulsed radio-frequency (PRF) affect knee pain in patients with knee osteoarthritis?		
		Does pulsed radio-frequency (PRF) of the saphenous nerve affect knee pain in patients with knee osteoarthritis?		
		Can early multi-disciplinary treatment improve mobility and function for patients with knee/hip OA?		
		What is the most effective conservative treatment to improve outcomes in patients with knee/hip OA?		
		And how realistic the chance of useful improvement is after any form of intervention, whether non-surgical or not, and up to a total replacement.		
		is biomechanical training just as good as realignment surgery? what are outcomes?		
N3	For people with early OA, what are the most effective and cost effective exercise programmes for clinical improvement?			Uncertainty identified by 12 patient/carers, 10 clinicians and 2 carer&clinicians
		How can I exercise when I suffer from pain?		
		Are there any exercises I can do?		
		Should I stick to gentle exercise and what is recommended?		
		How do I judge the amount of exercise which will help, against that which will make the symptoms worse?		
		What type of exercise?		
		How much exercise and how often		
		what physio or other exercises will help me maintain my joint mobility / and reduce pain?		
		Current or previous exercises?		
		is it best to exercise through pain?		
		What is the best way to control pain? Specifically, what exercises are beneficial?		
		Should I do the exercises even if they are painful?		
		Can I keep jogging?		
		Can I strengthen the muscles to take the strain off the joint?		
		Should you continue to exercise even if it causes you joint pain?		
		How much exercise can I and should I still do?		
		Exercise, how much, how often		
		What exercise can I do without exacerbating the pain?		
		What exercise would not be suitable for a knee problem		
		What exercises should I avoid?		
		What is the optimum dose (intensity of exercise, duration of individual exercise sessions, number of sessions per week, overall length of programme to see effect) of exercise?		
		How much exercise should I do?		
		is exercise a fad or is it proven to help in non sporty individuals?		
		If I undertake exercise will this help		
		Should I continue to exercise, e.g. walk if my knee is painful? Will I be making it worse?		
		does being less sedentary improve knee or hip OA		
		Does any exercise help?		
		What kind of exercise? How often?		
		When my pain is a nuisance I increase my exercise, is this appropriate ?		
		What exercises might help?		
N4	Is it possible to influence the progression of OA by modifying identifiable risk factors?			Uncertainty identified by 13 patient/carers, 9 clinicians, 1 carer&clinician, 1 H&KPSP (clinician)
		what can be done to prevent / postpone the original onset of arthritis		
		Why don't we do more joint preserving work in the working age population?		
		Is there anything you can do when you're young to reduce the chance of getting arthritis. when you get older?		
		Once you've been diagnosed is there anything you can do to slow/ stop further deterioration?		
		preventative measures?		
		my mothers knees are so distorted she could no longer have surgery how do I make sure mine do not get to this stage		
		What treatments are looking at prevention		
		is it feasible to prevent osteoarthritis from developing to the point where it has a strongly negative impact on my function?		
		How can I prevent this getting worse?		
		How can you slow down its progression?		
		What should I do to minimise it?		
		What can be done to prevent it from getting worse?		
		What can I do to improve my joint health or prevent further damage?		
		How can I prevent it getting worse?		
		is there a way to slow the disease process down?		
		is there anything I can do to maintain mobility as long as possible?		
		is there anything I can do to prolong the life of the natural joints?		
		Which interventions are going to preserve my joint?		
		How do you slow down the progression?		
		I want to know what I can do to prevent it progressing am currently doing swimming and pilates and have a very active life style		
		Can I stop it progressing, How?		
		Are there any prophylactic measures available for patients at risk for hip and knee OA?		
		Why is orthopaedic research and industry skewed towards salvage procedures and not more towards halting progression of OA?		
		Do any of our treatments actually influence prognosis?		
		is there anything that can delay progression?		
		Can you prevent it by using joints more carefully when young?		
		How can we stop the actual disease process progressing?		
		Can we stop or slow down hip arthritis from early intervention?		
		What can I do to prevent this?		
		What can middle aged people do to prevent or limit OA?		
		What can a middle aged person to help prevent arthritis?		
N5	What options are available for OA self management and how effective are they?			Uncertainty identified by 5 patient/carers, 5 clinicians and 2 carer&clinicians
		What can I do to help myself?		
		How can I self-manage my osteoarthritis more effectively?		

		How can I help myself? Dr just gives painkillers but how do I self manage flare ups. How can I manage my OA more effectively with non-surgical treatments? What are the most important active ingredients that help prevent/delay/manage osteoarthritis e.g. stretching, strengthening, mobility, specific nutrients etc. How much improvement am I likely to see from self-help methods (eg exercise, diet)? Is it helpful for patients to monitor their own symptoms? Do patients mind being asked to monitor symptoms using email? What are the most effective treatments for osteoarthritis- how can I help myself? How can I help myself Can I alleviate the symptoms by self-help? What is the best way for me to manage MY osteoarthritis? What should I definitely avoid or consider? How are symptoms best managed? What can I do to help it improve? What self-management strategies (e.g. exercise) are most effective in delaying or precluding the need for joint replacement?			
N6	What is the most effective and cost effective physiotherapy for treating people with early OA?				Uncertainty identified by 7 patient/carers, 2 clinicians
		I've heard hot &/or cold treatments help - is this true as Should I consider physiotherapy? Would physiotherapy help? Previous physiotherapy? Use of hot/cold? Can physio-therapy be a substitute for surgery? How effective can physiotherapy be in relieving symptoms? better to apply heat or cold? How can physiotherapy help? How can physiotherapy help? How can physiotherapy help, also exercise and reducing weight... How do these compare in effectiveness with surgery?			
N7	For people with early OA going to primary care what is the best and most cost effective and appropriate pain relief strategy?				Uncertainty identified by 22 patient/carers, 10 clinicians, 1 carer&clinician, 4 H&K PSP (2 clinicians and 2 professional focus groups)
		I have been looking into more pain relief. My doctor just says I am maxed out on what I can take but I still get pain. If long term use of paracetamol is not recommended what safe pain relief can I use? What is the best approach to pain management? What is the best way to control pain? My pain is intermittent - do I need treatment all the time? What can I do when I'm having a 'bad' day with pain? What alternatives are there to painkillers? I walk and swim regularly but have found recently that swimming is causing my pains to get worse. I hate taking pain killers since I understand there can be organ damage as a consequence as well as the sickness What pain medicines should I use? Are there any proven new medicines (tablets or injections) which will help OA pain? Use of painkillers (helpful or damaging) What effect does physiotherapy intervention have on pain management - specifics - frequency, intensity, type, education, weight management. What should I do if my arthritis flares up to minimise discomfort? Pain medication - effect of? What are the long term side effects of regular use of pain relief medication? particularly for those diagnosed below the age of 45 years. What is the most effective source of pain relief for OA? and how does this differ across patient characteristics and length of time with the condition? How can I manage the pain and is the pain relief short/long term. Are pills continuous or as and when and what are the associated risks with each ie pain relief vs risk? What are the best pain relief Are long term pain relief and anti inflammatories going to be harmful? do I have to stay on ibuprofen forever and what damage will that do to my stomach lining when I'm only 34 What pain relief? Pain relief such as acupuncture and gentle mobilisations. What pain medication is beneficial What's the best pain relief? Would the pain management help? The only treatment provided so far is co-codamol pills. It seems paracetamol is now frowned upon. What alternatives are there to relieve pain? side effects of taking of medicines for a long time Do I have to take painkillers? How long can I take painkillers safely for? If I take painkillers now, what about if things get worse, and then they don't work. How can I reduce the pain over the whole night so I can sleep through? Other than general, broad spectrum, analgesics are there drugs specifically for the relief of OA pain? What are the long-term effects of taking analgesics for OA? I don't tolerate pain management medication well: are there well specified, well researched, options for managing pain relating to knee osteoarthritis? I read paracetamol may not work, but it does for me. When should I take my anti-inflammatory drugs What are the long term side effects of taking pain relief and is pain relief addictive? Is a cognitive behavioural therapy (CBT)-based pain management programme clinically and cost effective in the management of hip/knee pain either before or after joint replacement surgery in patients with What is the most effective type of analgesia for patients with knee/hip osteoarthritis? Are there effective alternatives to oral analgesia for pain relief in patients with knee/hip OA? Can I have a steroid injection to help the pain? Are there early treatments that can reduce pain from growth of disease? Do genicular nerve blocks reduce chronic pain in patients with knee/hip osteoarthritis?			
N8	What new drug treatments are effective in treating people with early OA?				Uncertainty identified by 5 patient/carers, 14 clinicians and 6 H&K PSP (3 clinicians and 3 patient/carer)
		Medication that helps to ease symptoms? Are any of the recommended treatments more effective if given in defined early stages? Are there any cartilage supplements that prevent/slow down cartilage degeneration? Can physiotherapy or injections improve early hip arthritis? Should I be having steroid injections in my knees to settle synovitis? Are there any pills that I can take for osteoarthritis other than pain killers? Are there any ointments that I can use to rub on my knee? Are there any proven new medicines (tablets or joint injections) which will slow down the progression of osteoarthritis? Are there any medicines (tablets or joint injections) which will help to prevent osteoarthritis after a joint injury? Is there any evidence that hormonal replacement therapy or similar treatments will help OA pain or disease? Does the use of viscosupplementation delay the need for surgery and if so by how long? Does viscosupplementation alter the biomechanics of the knee joint? What other medications are available to those with OA other than NSAIDs? gels vs pills?			

		Can an injection help How long can steroids manage the pain of arthritis? use of injections/ supplement hyaluronic acid injections? will tablets help Do injections help? Corticosteroid versus hyalgan? 'alternative therapies' any evidence? Are there any drugs available to relieve the stiffness associated with OA? any medicine to improve collagen formation What is the benefit of zinc in patients with hip/knee osteoarthritis? What is the benefit of hyaluronidase in patients with hip/knee osteoarthritis? What are the risks and benefits of steroid injections into hip to relieve pain Does hyaluronic acid (eg. durolane) reduce chronic pain in patients with knee/hip osteoarthritis? Are disease-modifying drugs possible for patients with knee/hip osteoarthritis? Does the use of infiltration of local anaesthetic/NSAID mixtures into knee joint affect outcome in patients with knee OA?			
N9	What are the best treatments for people with early OA, who also have other musculoskeletal conditions (such as Rheumatoid Arthritis and back pain)?				Uncertainty identified by 8 patient/carers, 1 clinician
		I have painful hips & lower back pain, would appreciate more info Could these (the symptoms) be symptomatic of another problem? How does OA relate to osteoporosis? How can you differentiate between sacroiliac joint pain and hip pain? Can services be developed that will support people with osteoarthritis to exercise and that will be happy to manage these people even in the presence of other cardiac and respiratory illnesses? How can you avoid back problems developing. Do medicines used for RA help OA at all. I have both. What pain relief is available for those with other medical conditions? Can OA in the hips lead to lower back pain? (in the past 18 months I have had lower back pain and despite lots of tests no cause found - the physio said he believed it was because my muscles in that area are h If because of a comorbid condition I have early onset osteoarthritis, does this mean that the progression of the disease will be more aggressive than those in the general population who develop osteoarthritis Are there any related conditions I should be aware of?			
N10	When does Body Mass Index (BMI) impact on the progression of early OA?				Uncertainty identified by 7 patient/carers, 6 clinicians, 1 carer&clinician, 1 H&K PSP (clinician)
		How much weight does a person need to loose to have an effect on the structure of the joint? How much weight does a person need to loose to an effect on the symptoms? How much weight would a patient need to loose to improve the arthritis? How can my diet help with relieve symptoms of osteoarthritis? How can diet, exercise and alternative therapies help? - I am interested in these interventions What way could exercise, diet and alternative medicine help? I would like to know what I can do to help myself eg weight loss without medication or surgery Have been advised about help with diet, medicines or exercise Bariatric patients are on the rise - more info on the contribution of BMI and management of weight loss. Diet changes to reduce weight? Can you tell me about diet, exercises, pain relief without medication? Patient to lose weight if overweight and what are they doing about it. May need dietician referral. Diet advice. What diet has been found to help? How can you address weight gain with limited mobility What kind of weight is ideal? What is the optimal process for managing obesity in patients with knee/hip OA?			
N11	When and how should joint injections be used in early OA?				Uncertainty identified by 2 patient/carers, 4 clinicians
		What role do corticosteroid injections have in the management of early knee osteoarthritis? They are often used in later disease to stave off the need for operations, but when should they be considered in ea How should we be objective about their (corticosteroid injections) use? e.g. assessing for synovitis using ultrasound? How many times per year can a patient safely have local steroid injections? How many steroid injections can a patient have? Are repeated steroid injections bad for joints? - How frequently can they safely be administered? If like to understand about steroid injections and benefits, Use of viscosupplementation (hyaluronic acid) and is there an optimum 'stage' of arthritis it should be used at? Is pain relief such as steroid injections available on the NHS? How long are these expected to last each time they are given and are we limited as to how many we can receive on the NHS?			
N12	What is the best way of making sure that people correctly follow non-surgical treatment advice (compliance)?				Uncertainty identified by 1 H&K PSP (clinician)
		What is the best method to increase patient compliance with conservative treatment for the management of symptomatic knee/hip osteoarthritis?			
N13	What is the best dietary advice to reduce symptoms/progression of early OA?				Uncertainty identified by 12 patient/carers, 10 clinicians, 1 carer&clinician, 3 H&K PSP (2 clinicians and 1 patient/carers)
		What is the contribution of weight problems to the prognosis of any therapy? What percentage of patients show improvement of structural changes after weight loss? What percentage of patients show structural improvement after losing weight? I am interested in finding out how diet or alternative medicine can help. What impact do lifestyle changes - diet and exercise - in supporting treatments like acupuncture? Are there any general dietary recommendations, which really make a difference? Can diet help prevent arthritis? Will changing my diet in any way help (not losing weight as this is obvious) more the type of foods which are classed as "inflammatory"? Will losing weight help? What is the relationship between OA and weight? Does losing a few pounds make any difference to prognosis? Are their alterations to my diet that would help improve the stiffness and pain? How does my diet impact on my knee health? Will losing weight reduce my pain Diet- does what you eat have an affect, Does weight loss make any difference to painful joints How do I sensibly change my diet. I think I should lose weight but what should I eat to morevert flare ups. What effect does weight loss really have on the OA disease process? Can you prevent OA by diet, health supplements, exercise etc. I would like to know what extras I should put in my diet. I do a lot of cycling, my diet is reasonable but where should I be going with things like fish or supplements How does diet affect arthritis? Do any changes to my diet help? Diet and osteoarthritis seem to be relatively under researched. whilst this is a challenging area to research are there foods that are pro inflammatory or anti inflammatory.			

		Obesity and OA - will losing weight 'get rid of' OA symptoms? What foods help joints? Also keeping my weight in check - is this important? Does weight loss and exercise reduce pain in hip OA? Are there dietary factors which influence outcome in patients with knee/hip osteoarthritis? When is the most beneficial time in the osteoarthritis disease process to make dietary modifications to improve outcomes in patients with knee/hip osteoarthritis? Dietary factors?		
N14	Are commonly available over the counter (otc) supplements (such as glucosamine or fish oil) effective for relieving symptoms of early OA?	Chondradine Goglusomate /Codliver oil capsules daily, do they really help? Are there any herbal joint supplements which work? Can over the counter remedies help in the early stages? and in the latter stages? Do dietary supplements such as glucosamine and chondroitin sulphate have any effect? What about long acting hyaluronic acid derivatives? do supplements help I would like to know if supplements like Glucosamine, Chondroitin, or creams such as Flexique actually are effective. There are lots of 'over the counter' medications, eg glucosamine, chondroitin, various supplements. Where can you get reliable data on their effectiveness? Is there a supplement I can take? Are there any alternatives that will help arnica glucosamine etc Just liver oil? fish high oils? Are supplements any real use? What supplements should I take and what should I be sure to include in a diet Can I take any supplements to help the pain? What supplements can I take? do other supplements help. Does supplementation with glucosamine/chondroitin affect symptoms in patients with knee/hip osteoarthritis?		Uncertainty identified by 9 patient/carers, 4 clinicians, 1 H&K PSP (clinician)
N15	Can alternative therapies improve clinical outcomes for OA when used together with conventional approaches, and who would benefit most?	Does the most useful role for alternative medicine lie with treating those patients who have other health problems in addition to OA - i.e. multimorbidities? Is there any role for "alternative" therapies? How does alternative approaches impact outcomes on more traditional approaches		Uncertainty identified by 2 patient/carers, 1 clinician
N16	What orthoses/supports will help early OA?	Not really. Nothing ever been discussed with me, apart from GP telling me to lose weight. I manage to get by with certain footwear (trainers) and shock absorbing insoles. I never kneel, run, or dance now. If I can I be fitted with a brace to help support the joint? What types of orthosis work best? Which patients are more/less likely to benefit from orthotic treatment? If orthotic treatment works then why isn't it more widely accessible? Do off-loader braces work in knee OA? Orthotics in footwear? Type of footwear - shock absorbing shoes? Bracing/support - is it wise or makes it worse in long run? Should I wear a knee support Podiatry/knee supports following surgery?		Uncertainty identified by 3 patient/carers, 4 clinicians
N17	Which alternative therapies provide most benefit for people with OA?	Does alternative medicine work? Is exercise good for the joint? Does alternative medicine work? Do alternative medicines help What evidence is there that any of these alternative remedies help to reduce pain, maintain mobility and delay the need for surgery? (Continues - Notes) benefit if alternative therapies compared with physical therapy Alternative medicine and effective pain relief What alternative approaches are available to help with me pain Can alternative therapies help in osteopathy/chiropractor? Can meditation or mindfulness help reduce pain in osteoarthritis? Is there any alternative medicine that I can take? Massage? I'd like to know more about alternative medicine Do you think herbal remedies are just as good? Where is evidence to suggest to patients? Are alternative therapies available, Where can I get information about alternative medicine and how it might affect my tablets? What alternative therapies might be beneficial? Any and all advice as to how to alleviate the pain and other problems before resorting to surgery would be of interest. Including "natural" and other types of alternative treatments Should I keep trying different remedies?		Uncertainty identified by 12 patient/carers, 3 clinicians and 1 carer/clinician
N18	Is acupuncture effective in relation to conventional medical treatments for early OA?	Can acupuncture help with pain relief and functional range of movement in OA of hip and knee? How effective is Acupuncture in giving pain relief for osteoarthritis? Does it (Acupuncture) have the same effect on all joints or does it work better for some areas than others? Is acupuncture helpful? What is the dose of acupuncture needed for an effect. What type of acupuncture is most helpful (trigger point, traditional, ear acupuncture)? Is acupuncture an effective treatment for arthritis and is it effective at managing pain levels? How can complementary medicine treatments such as acupuncture best be combined with orthodox approaches? How does acupuncture compare in effectiveness against common medications, exercise and other guideline endorsed interventions? What are the experiences of OA patients with acupuncture treatment? Is acupuncture best combined with other traditional Chinese medicine components in a complex whole systems therapy or is it as effective in standalone mode? To what extent is it possible to reduce or postpone the need for surgery for OA patients through acupuncture treatment? Can sub-categories of OA patients be identified for whom acupuncture would be particularly beneficial? Can traditional Chinese medicine diagnostic patterns be used to stratify OA patients and thus improve clinical trial outcomes, either for acupuncture/chinese medicine or for orthodox medicine treatment? What are the long-term benefits of acupuncture for OA patients and how many treatments, at what frequency, provide the optimum dose to achieve this? What type of exercise is beneficial: is acupuncture beneficial: can hydrotherapy decrease pain Is acupuncture beneficial acupuncture? I have felt that acupuncture is very effective in treating OA hip and knee. Can this be available on a self referral scheme via the NHS as it tends to be cheaper than being on long term pain killers. Does acupuncture help Can acupuncture improve pain and function in patients with knee/hip osteoarthritis?		Uncertainty identified by 4 patient/carers, 8 clinicians, 1 H&K PSP (clinician)

		what is the value of incorporating acupuncture within surgical approaches, pre-, peri- and post-operative, to reduce medication requirements, improve outcomes and strengthen/speed-up post-op recovery?	
	OTHER IMPORTANT QUESTIONS		
O1	Can early OA be slowed down, reversed or cured?		Uncertainty identified by 3 patient/carers, 1 clinician
		Are we in sight of a cure? Can the disease & damage be reversed at all? Will there be a cure found for osteoarthritis? Is it curable? Is it a cure? Is it worth it?	
O2	What standardised non-surgical integrated pathways for early OA improve patient outcomes and experience?		Uncertainty identified by 18 patient/carers, 3 clinicians and 1 carer&clinician
		Why is accessing medical help for Osteo and Rheumatoid Arthritis so difficult? When will GPs refer patients rather than just writing prescriptions for pain killers? I am a pensioner with very little money otherwise I would look at going private. I was fobbed off with my knees saying that I was too young for the surgery. Will I now have to wait until I am too old and infirm to how do I get a specialist referral from GP? what is the point of asking for a diagnosis? - doctors seem to offer little advice on management Is there any point in getting a diagnosis because doctors don't seem to do anything about it. Never had a consultation regarding my problem What makes a patient decide to visit their GP with joint pain? yes. How can I get an NHS referral to a specialist. Why does help with physio stop after a couple of weeks for but nothing gets better Why does osteoarthritis have to be Medicaid and managed by healthcare professionals. So many people in the community live with this every day, having more easily accessible interventions would help enorm I am concerned that I receive no Review of my condition at my practice. The NHS agrees Arthritis is a Long Term Condition but NHS England and hence the CCGs are not filtering funding down to the GPs to car What approaches will the NHS fund ? How can I get treatment for Osteoarthritis? Do regular reviews (e.g. an annual appointment with a GP or other health professional) improve management of the condition? How much physio can I expect to have on the nhs What are the actual rates of access? Are they fairly accessed? How many of these treatments can be accessed by people in the community? How accessible (to me) are these non-surgical treatments? Is there an extensive waiting list for a Pain Management service? What support is there for non-surgical treatments? E.g., if I live somewhere where I am limited to no more than 6 physiotherapy sessions in a year and there is no GP exercise referral scheme to assist me with If I opt for self-management through non-surgical treatments, am I more or less going to be abandoned to care for myself with relatively little or no follow-up support? How well resourced is the Pain Management service given that the staff numbers and facilities seem to differ markedly from one Health Trust to another. How do I access alternative approaches to surgery? Who do I talk to about these approaches if my GP is biased ? Why is treatment difficult to access? why is not enough non surgical option offered by NHS If I am offered non-surgical treatments, will I be followed up automatically to see if they have worked and if not will I have to be referred again by my doctor and go to the end of the queue for surgical treatme How can patients access advice, once diagnosed? The only treatment offered is mild (adequate) pain relief and advice to exercise - not easy when in pain. Is there anything I can pay for that will be better than NHS treatment? If long term condition why is there such poor follow up Who can help me access surgical treatments? Why is treatment so difficult to access? keyhole surgery randomly offered in NHS I was not given any options.	
O3	What are the best interventions to keep people with early OA working?		Uncertainty identified by 2 patient/carers, 1 H&K PSP (clinician)
		How long will I have to have off work? How long will be off work for? What is the best intervention to keep patients with osteoarthritis at work?	
O4	How can we predict disease progression in people with early OA of the knee/hip?		Uncertainty identified by 12 patient/carers, 12 clinicians, 3 H&K PSP (1 clinician and 2 patient/carers)
		If I have a chondral defect or Gd 2-3 changes how rapidly should I expect before my daily activities and sport are affected? How rapidly does it progress. What is likely to happen in the long term. Will it just slowly get worse or how variable is it? Will it get worse If over a certain age would there be degenerative change in joints anyway. Gradual or sudden onset? How long have they had it? What does it mean - am I going to only get worse? How long these last? (Pain, stiffness, swelling, heat) how much will it deteriorate? What is the prognosis? How advanced is it? How likely is it that the first indications of osteoarthritis will develop into significant OA? Over what time timeframe? Is there a well understood path for progression, depending on when knee osteoarthritis is first diagnosed? How can we predict disease progression in people with osteoarthritis of the knee/hip? Once osteoarthritis is diagnosed while in your 40s, is further degeneration inevitable, or can it be stemmed? How fast does the disease progress What are the distinct stages in the progression of OA? Over what time scales can I expect to see my quality of life deteriorate and in what ways? Why does hip arthritis develop much faster than knee arthritis? An estimate of how long the joints might last before needing replacement. Over how long does deterioration happen? Will it get worse? Over what time period? How much chondral tissue is lost each year or does it vary person to person. How quickly will my hip or knee deteriorate? How fast will it progress? Is deterioration of the joint (and or levels of pain) linear? If osteoarthritis is a pathophysiological fluctuating state of joint destruction and attempted repair, what influences the effectiveness and frequency of the attempted repair stages? what's the trajectory of the condition, when am I likely to need surgical intervention(s), at what rate is my hip likely to decline? What is the balance between cartilage repair and destruction and what regulates it?	
O5	What is the best multidisciplinary care model for effective management of OA in primary care?		Uncertainty identified by 10 patient/carers, 5 clinicians, 2 carer&clinicians, 1 H&K PSP (professional focus group)
		Where is the best place to treat early OA?	

		Whose answers do I trust? There are usually a lot of conflicting answers.		
		What role should physiotherapist play in supporting GPs and practice nurses in managing OA in primary care and identifying who needs referral to orthopaedics or rheumatology		
		Where can I get more support for my OA?		
		Should I book an appt with a doctor or nurse?		
		Will I be put under the care of a dedicated consultant at my local hospital?		
		Who is the best health professional to provide ongoing support to patients with OA?		
		Following blood tests and diagnosis, who will I be referred to and why. I.e. Rheumatology / Orthopaedics		
		Service offered by Pharmacy/ GP ?		
		Who can help you me?		
		This is usually managed by GPs in primary care. But they don't have sufficient time, skills or knowledge to help the very many people with osteoarthritis. (Continues)		
		Went doesn't someone else (nurse, physiotherapist, healthcare assistant) take the lead role in helping people with knee, hip, back or upper limb pain? It doesn't require medical supervision and they're not		
		Who is the best person to advise me?		
		Do people do better when they see a physiotherapist with OA expertise for diagnosis and individual exercise prescription and how cost-effective would this be?		
		Who can support me with non surgical treatments?		
		Who are the best people to help me?		
		Osteoarthritis and lower limb conditions professionals only look at one area and not treated holistically. How can you get holistic treatment?		
		How can it be managed?		
		Is there a difference in outcome between treatment provided by GPs, physiotherapists, or occupational therapists in patients with early knee/hip OA?		
		Practical tools to stratify patients by their likely prognosis when they present in primary care		
		I would like to know who to go to for more in depth explanations of a pain just below the knee other than just a diagnosis of osteoarthritis from my dr.		
O6	What factors and patterns of disease are responsible for progression of OA?			Uncertainty identified by 7 patient/carers, 6 clinicians, 1 carer&clinician
		Has a cause been identified yet?		
		Which phenotypes are most likely to lead to joint failure?		
		What ages and what eases symptoms.		
		If the person has put on weight as this adds pressure on the joints		
		I have a stiff and painful knee, why? what caused it?		
		what causes it.		
		Why is it worse on some days than other?		
		What might make the OA worse?		
		effect of psych/social factors on progression and adherence to conservative management		
		What things will make it worse?		
		How does it develop and what can I do to slow it down?		
		Do isolated cartilage defects progress to OA?		
		Does occupation contribute?		
		Like to know how it might deteriorate and the possibly effects		
		Need strong guidance over impact of genetics, environment and food/ drink on development and rate of growth of the disease?		
		Did the cyst in my hip joint cause my arthritis ?		
		I have assumed it will be contained by exercise but I would like to know if it is going to become completely debilitating		
O7	Is timing of OA diagnosis important for disease progression and applying interventions/treatments?			Uncertainty identified by 12 patient/carers, 8 clinicians and 1 carer&clinician
		When should I seek to find a diagnosis, and who should I go to to get diagnosed?		
		When I was finally diagnosed, I was told I should have been treated 10 years earlier. What early diagnoses tests are there?		
		why does it take so long to get a diagnosis especially for younger people?		
		how worthwhile is being diagnosed with early OA		
		How will I know early enough to be able to do something about it?		
		What and when should tests be carried out to diagnose OA?		
		At what age do symptoms usually present?		
		At what stage of symptoms expect a doctor to consider diagnostic tests		
		Could my arthritis have been slowed down by early diagnoses		
		What are the advantages/ disadvantages of an early diagnosis e.g could anything be done to reduce deterioration		
		Physiotherapists have told me there is a reluctance to give a specific diagnosis of OA before 45 - is this true and if so why?		
		Tests to show if osteoarthritis is in other joints of the body rather than waiting for pain to develop and then having to have surgery		
		how helpful is a diagnosis of osteoarthritis?		
		How often should the diagnosis be reviewed to check on any deterioration? What methods should be used?		
		Is there any value in screening in the pre-symptomatic stage to identify disease before it has functional effects and focus on exercise (and other treatments in development) at this stage?		
		If I 'self-diagnose' myself with arthritis, is it worth getting it checked out anyway? Could it be something else?		
		Should I be screened earlier for osteoarthritis because I have the connective tissue disorder Ehlers Danlos Hypermobility type?		
		Is prognosis improved by more accurate diagnosis and better information?		
		Is there any benefit in identifying people at high risk of osteoarthritis - does early identification improve longer term outcomes?		
		Can treatments be better targeted?		
		What predicts poor outcome and how can this be modified		
		Would detecting it early allow measures to be put in place to reduce severity of progression?		
		Identification of factors which predict those at risk or persistent post operative pain specific to this patient population		
O8	In people with early symptoms of OA, which diagnostic tests should be used?			Uncertainty identified by 26 patient/carers, 23 clinicians and 4 carer&clinician
		Interpretation of diagnostic test results to treatment pathway given the poor correlation between radiography / MRI and symptoms		
		How can you detect it early OA?		
		Are new scans/tests good at helping diagnose my condition?		
		An Xr does not tell us anything about the level of symptoms that can drive pain and potentially be detrimental to the joint health - so should we be re-thinking how we assess patients with knee pain?		
		Are there any biological markers (blood/urine/saliva) which could diagnose OA?		
		what tests need to be done to diagnose osteoarthritis?		
		Do I need an MRI scan or is an XRay enough?		
		What tests are available to me to confirm whether or not I have osteoarthritis and how easily can they be organised.		
		I had an xray and was told I had early onset osteoarthritis, but was told nothing else. (Continues)		
		Do I need an x ray ?		
		Can we define whether I have OA form a blood/urine test?		
		Can we tell if I have OA form my symptoms alone?		
		Is an MRI scan a better investigation than an X-ray?		
		Is MRI a useful way of defining the pattern of OA?		
		Is there a diagnostic test for OA?		
		Is an MRI scan good for osteoarthritis?		
		Are there any new tests (blood or synovial fluid tests or imaging) which would detect osteoarthritis reliably at an earlier stage?		
		Is MRI or ultrasound helpful in making a diagnosis of OA, in addition to X ray?		
		What are the symptoms of osteoarthritis and how is it diagnosed		
		What tests are available		
		I would like a definitive diagnosis, so need a set of tests that will diagnose.		
		What kind of tests will show if I have osteoarthritis?		
		Signs of acute inflammation - swelling?		
		X-ray?		

		<p>What is the most definitive test to find out what is causing the pain in my joint?</p> <p>What tests can be done?</p> <p>What investigations do you need to confirm?</p> <p>Are symptoms enough.</p> <p>How is severity of OA measured both in terms of impact on quality of life and from radiographical evidence and how can this best be shared with patients. (Continue)</p> <p>Are scans beneficial in diagnosis</p> <p>Early indicators - false positives?</p> <p>What is the definition for moving from one to the next?</p> <p>where is Arthritis best diagnosed?</p> <p>xray to clarify</p> <p>Will it show on X ray</p> <p>Do I need an MRI</p> <p>What tests are best for doctors AHPs to do to be able to discern joint problem as oppose to referred spinal pain.</p> <p>is xray a reliable way to diagnose arthritis?</p> <p>What is the current gold standard test to confirm onset of arthritis?</p> <p>have any xrays, MRI's been done?</p> <p>Swelling?</p> <p>No specific tests known to detect OA, or there any?</p> <p>Are they different each joint? (specific tests)</p> <p>X-rays prove I have osteoarthritis but not really/cycwhat to do next.</p> <p>The need for a better diagnostic algorithm</p> <p>How helpful is keyhole surgery compared to having an mri scan</p> <p>tests for osteoarthritis</p> <p>I have had an MRI and x ray on both knees, which answered the question</p> <p>do i need an xray</p> <p>What forms of diagnosis are available, specifically for knees?</p> <p>What tests are used to diagnose osteoarthritis</p> <p>How advanced is it?</p> <p>What tests can they do?</p> <p>What tests must be done to confirm its OA.</p> <p>How will it be diagnosed?</p> <p>what tests are there</p> <p>What is the most effective way of diagnosing early osteoarthritis?</p> <p>At what point does a painful joint become an arthritic joint?</p> <p>How many people are undiagnosed if no arthritis shows on x-rays? Mine diagnosed via arthrogram and MRI - never showed up on X-ray before that or after as it happens!</p> <p>Early satisfactory diagnosis, with reliable tests</p> <p>Do images (whether MRI/Xray) have any useful contribution to assessing the degree of osteoarthritis or any value in indicating how much functional loss/pain might be associated with it?</p> <p>Can you look into the joint to see how bad the arthritis is?</p> <p>How will my OA be diagnosed?</p> <p>What tests are there?</p> <p>That sometimes the joint that is worse on X-ray is not the more painful one</p> <p>X ray changes?</p>		
O9	What tests are useful to monitor the progress of OA?			Uncertainty identified by 3 patient/carers, 3 clinicians
		<p>How do you monitor the progression of the disease?</p> <p>Can we do a base line test and then test it again in the future to see if there have been any changes, either better or worse?</p> <p>What is the grading system and where am I on it?</p> <p>Other than increase in pain what other tests are available to monitor the progress of OA?</p> <p>Are there any tests (blood or synovial fluid tests or imaging) which would predict how likely osteoarthritis is to progress?</p> <p>Can I be further tested for osteoarthritis. My hips are painful but now so is my knee and back. Following surgery will these improve?</p>		
O10	Does the amount or type of joint abnormality seen in the early stages of OA have impact on outcome?			Uncertainty identified by 5 clinicians
		<p>Joint deformity?</p> <p>Does the shape of the affected joint equate with severity of the structural disease?</p> <p>Does the shape of the affected joint equate with the symptoms?</p> <p>Does the shape of the affected joint correlate with the severity of the arthritis?</p> <p>is there a deformity?</p> <p>There is a perception amongst clinicians that varus or valgus deformities or moment forces may accelerate cartilage loss. This perception doesnt appear to be evidence based, however there is little evidence to</p>		
O11	What are the best decision making processes for people with early OA (e.g. using the Patient Pathway, Shared Decision Making tool), especially when the decision involves surgery?			Uncertainty identified by 8 patient/carers, 2 clinicians, 2 H&K PSP (1 clinician and 1 professional focus group)
		<p>Are shared decision-making aids regarding treatment options cost effective in managing patients with knee osteoarthritis?</p> <p>If my joints hurt but I can tolerate it, is there any reason for me to engage with services yet?</p> <p>What can I try first?</p> <p>Would an on-line resource help to guide non-operative treatment?</p> <p>Does provision of osteoarthritis Patient Pathway information to patients with early symptomatic knee/hip/OA delay the need for physical interventions in these patients?</p> <p>How to choose between medication and surgery</p> <p>How do I best decide if surgery or non-surgical treatment is best for me?</p> <p>threshold for surgery</p> <p>How is it decided which treatment would suit each clinical presentation?</p> <p>How is it decided which are the best surgical interventions for each individual?</p> <p>Never talked through these options</p> <p>Can I decide what treatment I get?</p> <p>How bad does my pain have to be before I can get surgery?</p> <p>How does surgeon make decision that surgery necessary?</p>		
O12	What is the best way to deliver information and advice on surgical and non-surgical treatments?			Uncertainty identified by 15 patient/carers, 7 clinicians, 2 carer&clinicians, 2 H&K PSP (professional focus groups)
		<p>How much does the public know about OA?</p> <p>Are there any leaflets or is there any information about osteoarthritis?</p> <p>What information to patients find beneficial</p> <p>What information is most beneficial to patients on first presentation of knee/hip osteoarthritis symptoms?</p> <p>What is osteoarthritis</p> <p>What is osteoarthritis?</p> <p>information provided to pts on diagnosis re conservative management, pts and HCPs cognitive beliefs re OA</p> <p>Should we be giving education upon first session?</p> <p>what is osteoarthritis,</p> <p>What interventions should I be receiving at Primary level i.e. scans, physio, information about my condition and possible treatment?</p> <p>What kind of information is available about osteoarthritis self assessment for people with painful knees?</p>		

		<p>What support is there to help me prevent this getting worse?</p> <p>Disease definition;</p> <p>Is there any help available post diagnosis?</p> <p>How effective is advice about non-surgical treatments? How easy do people like me find it to implement that advice?</p> <p>Are there any help groups online?</p> <p>I'd like to know more about all non surgical treatments but my GP has not discussed any options with me other than take OTC pain relief.</p> <p>What are my options?</p> <p>Other than google, what should I be reading up on.</p> <p>Why don't people get more information about these treatments?</p> <p>What kind of information is available about osteoarthritis prevention through exercise prescription and/or changing in life style for people with painful knees?</p> <p>Why was I not told of the likely prognosis? Because it is common and not overtly life threatening, doctors dismiss it.</p> <p>I need to know all about it - it's never been discussed with me</p> <p>What kind of information is available about causes and development of knee or hip osteoarthritis for the third age population through the health care providers?</p> <p>What is the recovery like post operatively?</p> <p>What is done via a keyhole operation?</p> <p>I would like to know more about the latest thinking. For example - Is it true that somewhere in the world they are developing cartilage substitutes which will do away with the need for replacements?</p> <p>What kind of information is available about surgical procedures for people already diagnosed of knee osteoarthritis??</p>		
O13	How do factors such as general wear and tear and injuries affect the development of OA?	<p>Is it just due to wear and tear or is there something else going on?</p> <p>I have a labral tear in my hip, does this cause arthritis?</p> <p>When does joint damage become osteoarthritis?</p> <p>Any past trauma?</p> <p>Why has my knee worn out</p> <p>Will wear and tear always develop into severe arthritic joints</p> <p>Can ongoing pain from a knee injury lead to osteoarthritis?</p> <p>What is the contribution of factors such as general wear and tear, and injuries on the development of OA?</p> <p>Should I seek a surgical opinion regarding a torn meniscus when the evidence now suggests that in the presence of OA it is part of the degenerative process.</p>		<p>Uncertainty identified by 3 patient/carers, 5 clinicians and 1 H&K PSP (patient/carer discussion group)</p>
O14	In people with early symptoms of OA, what is the sensitivity and/or specificity of the tests used to detect OA (i.e. how certain can we be)?	<p>How can this diagnosis (of OA) be scientifically proved?</p> <p>Do I have early osteoarthritis?</p> <p>Can the severity be judged fully without surgical intervention?</p> <p>Are my symptoms mostly due to synovitis?</p> <p>How severe is it?</p> <p>Is there anything specific I should look out for so I won't delay diagnosis?</p> <p>Why is my knee hurting? why is my knee swollen? Could it be osteoarthritis?</p> <p>How do you diagnose osteoarthritis?</p> <p>how is it actually diagnosed and treated</p> <p>Diagnosing levels of arthritis -how this correlates to prognosis, levels of pain.</p> <p>Increase in temperature?</p> <p>Functional limitations?</p> <p>Simple self diagnosis?</p> <p>Definitive diagnosis excluding other possibilities.</p> <p>How can you tell I've got OA?</p> <p>How does one differentiate between mild OA knee and a treatable differential diagnosis eg meniscal pathology ?</p> <p>Pain, stiffness, swelling, heat, when & what causes it?</p> <p>how do you know it is OA and not something else?</p> <p>how can you diagnose OA, if that is what it is?</p> <p>how certain can you be its OA.</p> <p>How to know if I really have OA or something else?</p> <p>What are the first indicators of osteoarthritis? Are these different at the hip and knee?</p> <p>How do I know for sure it is OA?</p> <p>How early is it possible to identify osteoarthritis?</p>		<p>Uncertainty identified by 11 patient/carers, 9 clinicians and 1 carer&clinician</p>
O15	In people with signs of early OA, how can we predict (including tests) severity of pain, disability and structural progression?	<p>If it's painful do I ignore the pain and carry on or heed it and stop? If I carry on am I causing further damage?</p> <p>what is happening to my body, why won't anyone help me, why does my whole body hurt so much???</p> <p>is pain a signal that should not be ignored and a portent of future deterioration, or something which should be suppressed as much as possible so that the joint can continue to be used as normal?</p> <p>How can you identify cartilage that is likely to degenerate before any actual degeneration is evident?</p> <p>Pain?</p> <p>As you get older you often get pain or stiffness in joints, say after exercise or gardening. You don't want to consult the Dr for every twinge. How do you know when its bad enough to see a Dr?</p> <p>What aggravates the pain?</p> <p>Why do I get pain with movement / activity, will it improve or worsen</p> <p>Do some people experience more pain than others when their OA is at similar levels?</p> <p>Can Quantitative Sensory Testing differentiate between central and peripheral nervous system pain in patients with knee/hip osteoarthritis?</p> <p>Does pain mean more damage is being caused?</p> <p>How do I know if I'm masking the pain and doing more damage?</p> <p>What factors contribute to the pain felt by patients with an osteoarthritic knee/hip joint?</p> <p>What causes (is the mechanism for) the pain that patients with knee/hip OA report?</p> <p>Are there any tests which would predict risk of osteoarthritis after a significant joint injury?</p> <p>Screening methods to predict the likely outcome followed with any possible preventive measures</p> <p>If all 70-year olds have joint degeneration - what is it that makes some folk painful and debilitated and others not.</p> <p>How do some people appear to have severely arthritic joints and yet very little pain, while others are vice versa?</p> <p>How does the impact of pain from early arthritis differ from that in later arthritis?</p>		<p>Uncertainty identified by 6 patient/carers, 10 clinicians, 1 carer&clinician, 2 H&K PSP (2 clinicians)</p>
O16	How effective is information and advice about surgical and non-surgical treatments for early OA?	<p>don't know what direction to go in a diagnosis is ok but I want and need more help</p> <p>information and preservative advice</p> <p>How can the impact of OA on personal relationships be limited?</p> <p>Do you think we should run OA talks once a month for patients?</p> <p>Thank you for your work and keep up the good work. We love to gain information, could you do some study days nationally around the uk, could you come to some main hospitals, like orthopaedic hospitals to give a short talk and Q&A session for clinical staff</p>		<p>Uncertainty identified by 14 patient/carers, 8 clinicians, 1 H&K PSP (professional focus groups)</p>

	<p>Education is the key, if more people understand why they have pain they can manage it before coming to physio, lets keep our waiting lists down and invest money into right classes / education groups. This is the future of physio. Kind regards.</p> <p>More work needs to done on living with osteoarthritis - very little is on offer to help and the impact on quality of life is huge</p> <p>What is the most effective way to improve patient awareness about knee/hip osteoarthritis?</p> <p>What is the best way to deliver information about knee/hip osteoarthritis to patients with this disease?</p> <p>What next after diagnosis?</p> <p>How do I get information helping me to decide if I have osteoarthritis?</p> <p>Is there a national booklet about OA? Do we give this out at each new patient appointment? I believe this would help education for future and slow down re-referrals in early stages.</p> <p>I would like to know what help I could get.</p> <p>Where could I find out more information on osteoarthritis?</p> <p>Is there any literature that I could read to help me deal with it?</p> <p>What treatment is available medical and surgery</p> <p>What are the options if any for me to get it treated/corrected Is there anything under research that I can avail to get treated for OA</p> <p>Is it possible for "helpful" leaflets to include information for those of who who do not need to lose weight, nor to be encouraged to, "Try and walk for 20mins a day and get some sunshine".</p> <p>Where do I find quality information about managing OA?</p> <p>Who can advise me about non surgical treatments?</p> <p>Information needs to be relevant to the individual</p> <p>Information on how to self manage progress of the disease. Lots of supposed cures/ treatments but is there actually any definitive guidance?</p> <p>What advice is best re taking medication</p> <p>What options are available please? This has never been discussed with me. All I was told was they'll get worse, until you have to have them replaced.</p> <p>Where can I find unbiased (i.e., without commercial interests) information and advice about non-surgical treatments?</p> <p>Where can I get more help or information?</p> <p>Group exercise in mixed abilities is better than individual - it provides a social need as well as a challenge; these could be accompanied by talks on diet monthly - perhaps organised via GP surgery? Is this possible? Participating in exercise can exacerbate the discomfort - even light exercises</p> <p>I would like to know different choices and do I need to go private to get a good analysis and second opinion</p> <p>Expert opinion and advice (non-biased, of course) - preferably available on line - on prognoses, both surgical and non-surgical treatments would be most helpful.</p> <p>Is there anyone I can talk to that has had the surgery or procedure already so I can ask them how effective it was?</p> <p>Where do you get objective advice on the relative risks and merits of different types of surgery?</p> <p>Is there anything activity that should 'never' do</p>		
O17	<p>Is it possible to quantify the individual risk of developing OA at any particular joint site?</p> <p>Is there some reliable way of testing to see if I am at risk?</p> <p>Can you quantify my personal risk of developing osteoarthritis at any particular joint site?</p> <p>If diagnosed with arthritis in the lower limbs, should I seek early intervention for hip or knee. Treating which joint would be most successful to allow early return to activity and also in terms of pain patterns.</p> <p>Which joints are the most likely ones to get OA?</p> <p>Will I always be susceptible to it?</p> <p>Is it possible to predict which patients will experience the greatest amount of time spent in severe pain, years lived with disability, and lost time from economically productive or valued roles?</p>		Uncertainty identified by 1 patient/carer, 4 clinicians
O18	<p>Are NICE (National Institute for Health and Care Excellence) guidelines for management of OA accessed and followed sufficiently in primary care and in secondary care?</p> <p>How well are NICE guidelines for management of OA accessed and followed in primary care, and in secondary care?</p> <p>Can Someone explain what is happening to me?</p> <p>Does applying NICE guidance to managing OA make a difference?</p> <p>Best practice management for OA, hips and knees?</p> <p>Why is there so much variation in clinical practice in orthopaedics regarding arthroscopy vs arthroplasty for mild-moderate knee oa despite clarity in NICE guidelines?</p>		Uncertainty identified by 4 clinicians and 1 carer&clinician
O19	<p>What is the likelihood of the disease spreading to other joints?</p> <p>I have been treated for osteo-arthritis in my knees by knee replacement surgery. Is it likely to show up in other joints?</p> <p>Will contralateral joints be more at risk of developing OA?</p> <p>If I do have osteoarthritis in my knee, is it likely that I will get it in another joint?</p> <p>What is the epidemiological link between hip/knee/ankle OA?</p> <p>Could I have it anywhere else if I have it in my knee?</p> <p>If I have OA in my knees, am I likely to have it in my hips too?</p> <p>Will my knees affect my hip movement</p> <p>Will the OA occur in any other joints?</p> <p>As I still wait to be referred by the GP to have my L knee looked at I now realise that my ankles and also one of my hip joints have also become a problem - a knock on effect to some extent?</p> <p>Will my other joints be affected?</p> <p>Propensity to develop arthritis in contralateral hip if already affected one hip.</p> <p>Whats is the likelihood of needing the opposite knee operated on at a future date</p>		Uncertainty identified by 6 patient/carers, 3 clinicians, 1 H&K PSP (patient/carer)
O20	<p>Is OA an inherited condition and what are the risks to my children/family?</p> <p>What is the youngest age you can get it?</p> <p>Is it hereditary, as I have it, are my children more likely to get it?</p> <p>What was it that I did that led to the osteoarthritis or was it an inevitable consequence of my genetic history?</p> <p>Why do so many people get it?</p> <p>Is it genetic?</p> <p>Family history of osteoarthritis?</p> <p>Are you more likely to get arthritis if your parents had it?</p> <p>My family has a history of "bad knees" - is it genetic?</p> <p>Is it more likely if there is a family history of osteoarthritis?</p> <p>My mother and grandfather had severe osteoarthritis and ended up in wheel chairs my knees creak as I walk up stairs and ache sometimes so am assuming I have the same problem.</p> <p>My parents have OA, is it hereditary, will my children develop it?</p> <p>genetic/familial/ins vs lifestyle</p> <p>Is there a genetic predisposition?</p> <p>Genetic factors - influence outcome and/or prognosis? Dietary factors?</p> <p>Is it hereditary?</p> <p>Is osteoarthritis hereditary?</p> <p>If my Dad had OA will I get it? What should I tell my children about OA</p> <p>Can it be inherited?</p> <p>Are patients with family history of OA in increased risk of having OA?</p>		Uncertainty identified by 11 patient/carers, 3 clinicians, 1 carer&clinician, 1 H&K PSP (patient/carer)

Q21	What is the relationship between women experiencing their menopause (and treatment for it e.g. HRT) and early OA?			Uncertainty identified by 1 patient/carers, 1 H&KPSP (patient/carer)
		is osteoarthritis affected by the menopause?		
		Does long term HRT (in patients who have had hysterectomy) influence joint deterioration?		

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52	S13: Taking cost into account what is the most effective treatment for early OA between surgical and non surgical treatments?	The original submissions are listed in All Questions data	February 26th 2016		2 x NICE Clinical Knowledge Summaries for hip and for knee (2015) neither of which address this question specifically http://cks.nice.org.uk/osteoarthritis	Outcomes; Measures for surgical priorities should reflect changes in tissue, and patient outcomes Merits or otherwise of doing research comparing different sorts of surgery rather than comparing surgery with no surgery?	8. Health and Social Care
52	S5: What is the best way (content and structure) of delivering rehabilitation (physiotherapy) after surgery for early OA?	The original submissions are listed in All Questions data	February 26th 2016		2	Outcomes; Measures for surgical priorities should reflect changes in tissue, patient and cost effectiveness	6. Evaluation of treatments
52	S6: What pre operative factors can predict the outcome of surgery in people with early OA?	The original submissions are listed in All Questions data	February 26th 2016		3	Outcomes; Measures for surgical priorities should reflect changes in tissue, patient and cost effectiveness	6. Evaluation of treatments
52	S7: In people with early OA are surgical treatments designed to repair, not replace the joint (such as stem cells, micro fracture and cartilage transplant) effective?	The original submissions are listed in All Questions data	February 26th 2016		4	Outcomes; Measures for surgical priorities should reflect changes in tissue, patient and cost effectiveness The results of this study would have great application to patient and clinical decision making.	6. Evaluation of treatments
52	S8: In people with early OA does timing affect the outcome for non joint replacement surgery e.g. osteotomy, arthroplasty?	The original submissions are listed in All Questions data	February 26th 2016		5	Original question: "Assuming surgery for osteoarthritis is necessary, does its timing affect the outcome?" 'necessary' was considered inappropriate so removed in the reworded question Outcomes; Measures for surgical priorities should reflect changes in tissue, patient and cost effectiveness	7. Management of disease
52	S9: What are the most effective surgical treatments e.g. arthroscopic, biological, realignment, osteotomy in people with early OA?	The original submissions are listed in All Questions data	February 26th 2016		6	Population; any age not just under 55 years Outcomes; Measures for surgical priorities should reflect changes in tissue, patient and cost effectiveness	6. Evaluation of treatments
52	S10: What is the best way of measuring outcomes (pain, function, quality of life, joint preservation) of non arthroplasty surgery with people with early OA?	The original submissions are listed in All Questions data	February 26th 2016		7	Outcomes; Measures for surgical priorities should reflect changes in tissue, patient and cost effectiveness	6. Evaluation of treatments
52	S11: What is the best way of delivering care short and long term post surgery for early OA?	The original submissions are listed in All Questions data	February 26th 2016		8	Lots of discussion about what is meant by follow up post surgery. Intervention; Technological assistance (using smart phones?) hospital visits and self care? Outcome; Long term progression? Measures for surgical priorities should reflect changes	6. Evaluation of treatments
52	S12: In people with early OA is joint replacement appropriate and affective?	The original submissions are listed in All Questions data	February 26th 2016		9	Outcomes; Measures for surgical priorities should reflect changes in tissue, patient and cost effectiveness	6. Evaluation of treatments
52	S4: In people with early OA do surgical procedures that involve cutting and re shaping bone (inc. realignment and osteotomy) work?	The original submissions are listed in All Questions data	February 26th 2016		10	Outcomes; Measures for surgical priorities should reflect changes in tissue, patient and cost effectiveness	6. Evaluation of treatments

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52	N1: Is regular exercise and physical activity effective at reducing disease progression?	The original submissions are listed in All Questions data	February 26th 2016	1		Very real dilemma for many with early OA with differing advice received from health professionals. Intervention; cardiovascular exercise and specific joint exercise Type of research; start off with systematic review (Cochrane review is for hip only at present) study needs to be longer term to capture disease progression, cohort and there is a registry of people with OA (non replacement) that could be used? Population; all people with early OA Outcomes; difficult to measure disease progression? Important to measure harms	2. Aetiology
52	N2: What are the most effective and cost effective non surgical management options, including combinations of treatments to improve outcomes in people with early OA?	The original submissions are listed in All Questions data	February 26th 2016	2		Important that this question addresses combinations of non surgical options as this replicates real life. Type of research; Clinical trials Intervention; to include complementary and alternative options especially acupuncture, debate about whether to include physiotherapy and hydro therapy. Population; older people with OA and with co-morbidities, we discussed whether this was also relevant for younger people Outcomes; Pain and function (life limiting and impact on daily activities) Health related quality of life measures	6. Evaluation of treatments
52	N3: For people with early OA, what are the most effective and cost effective exercise programmes for clinical improvement?	The original submissions are listed in All Questions data	February 26th 2016	3		Intervention; cardiovascular exercise and specific joint exercise e.g. muscle strengthening Population; all people with OA especially obese and overweight Outcomes; clinical outcomes and OA specific measures Patient focussed if able	6. Evaluation of treatments
52	N4: Is it possible to influence the progression of OA by modifying identifiable risk factors?	The original submissions are listed in All Questions data	February 26th 2016	4		Links to No 6 in Other Important Priorities, what are risk factors and are they modifiable? Progression needs clearer definition? Progression to be measured by X Ray deterioration, symptoms getting worse and function and activity level Risk Factors; genetic, BMI, psychosocial, sport, manual work (farmers and carpet fitters), weather, immobility, diet, muscle strength and injuries	3. Prevention of Disease and Conditions
52	N5: What options are available for OA self management and how effective are they?	The original submissions are listed in All Questions data	February 26th 2016	5	Self-management education programmes for osteoarthritis DOI: 10.1002/14651858.CD008963.pub2 http://www.ncbi.nlm.nih.gov/pubmed/24425500 Low to moderate quality evidence indicates that self-management education programmes result in no or small benefits in people with osteoarthritis but are unlikely to cause harm. Compared with attention control, these programmes probably do not improve self-management skills, pain, osteoarthritis symptoms, function or quality of life, and have unknown effects on positive and active engagement in life. Compared with usual care, they may slightly improve self-management skills, pain, function and symptoms, although these benefits are of unlikely clinical importance. Further studies investigating the effects of self-management education programmes, as delivered in the trials in this review, are unlikely to change our conclusions substantially, as confounding from biases across studies would have likely favoured self-management. However, trials assessing other models of self-management education programme delivery may be warranted. These should adequately describe the intervention they deliver and consider the expanded PROGRESS-Plus framework and health literacy, to explore issues of health equity for recipients.	Definition of self management needed, a course, guidance? It's about ownership of self management once established with effective options presented. Role of enthusiasm of practitioner as well. Intervention; self efficacy, empowerment and agency all concepts that apply here. Outcomes; reduction in hospital or primary care visits, measures of self empowerment, improved quality of life, stable or reduced pain and stable or improved function	7. Management of Disease
52	N6: What is the most effective and cost effective physiotherapy for treating people with early OA?	The original submissions are listed in All Questions data	February 26th 2016	6		Important question as majority of people will be signposted to physio (or a subset) in the NHS Interested in these questions; variation, intensity, frequency and specificity Intervention; distinct from exercise and activity - prescribed exercise and manual therapy Outcomes; patient focussed and quality of life	6. Evaluation of treatments

52	N7: For people with early OA going to primary care what is the best and most cost effective and appropriate pain relief strategy?	The original submissions are listed in All Questions data	February 26th 2016	7	<p>2012 OUT OF DATE Topical NSAIDs for chronic musculoskeletal pain in adults DOI: 10.1002/14651858.CD007400.pub2 http://onlinelibrary.wiley.com/doi/10.1002/14651858.CD007400.pub2/abstract</p> <p>Topical NSAIDs can provide good levels of pain relief; topical diclofenac solution is equivalent to that of oral NSAIDs in knee and hand osteoarthritis, but there is no evidence for other chronic painful conditions. Formulation can influence efficacy. The incidence of local adverse events is increased with topical NSAIDs, but gastrointestinal adverse events are reduced compared with oral NSAIDs.</p>	<p>Many people want to avoid taking lots of pain killers and explore alternatives and need a combination of approaches that are personal to their stage of OA, lifestyle etc. This question could be considered as a sub set of Q 2</p> <p>Intervention; packages of care (so not just analgesia), include frequency of treatment.</p> <p>Population; people with identifiable pain symptoms presenting in primary care (not necessarily just GP)</p> <p>Outcomes; relief of or improvement in pain, adherence to strategy</p>	6. Evaluation of treatments
52	N8: What new drug treatments are effective in treating people with early OA?	The original submissions are listed in All Questions data	February 26th 2016	8		<p>Changed the focus of this question on new drug treatments as existing ones not very effective and not suitable for everyone (e.g. NSAIDs). Also remove joint injections as specific question about these (no 11).</p> <p>Intervention; Topical and oral drugs new (or repurposed), use in flares, activity related pain and chronic and enduring pain</p> <p>Type of research; this would be good for a systematic review to begin with</p> <p>Population;</p> <p>Outcomes; benefits (pain reduction) and side and adverse effects (especially cardiovascular and peptic ulcer related)</p>	6. Evaluation of treatments
52	N9: What are the best treatments for people with early OA, who also have other musculoskeletal conditions (such as Rheumatoid Arthritis and back pain)?	The original submissions are listed in All Questions data	February 26th 2016	9		Not discussed due to lack of time	6. Evaluation of treatments
52	N10: When does Body Mass Index (BMI) impact on the progression of early OA?	The original submissions are listed in All Questions data	February 26th 2016	10		<p>This was discussed in context with No 4 but felt that it was important to keep separate as it is modifiable and worth attention on its own. Group wanted to acknowledge the complex nature of why people have high BMI and especially the mental health, and public health aspects.</p> <p>Removed 'point' and prefer concept of a scale and/or range within which BMI impacts on progression.</p> <p>Type of research; Epidemiology research and probably a cohort approach. Existing data sets in OA and high BMI?</p>	3. Prevention of Disease and Conditions

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52	O1: Can early OA be slowed down, reversed or cured?	The original submissions are listed in All Questions data	February 26th 2016	1		Uncertainties about effect of existing or new treatments somewhat open to interpretation regarding potential medical, surgical contexts for use. Type of research; longer term and/or clinical trial (self management adding on to existing treatment) e.g. 1. drug trial 2. surgical e.g. alignment surgery 3. non-pharmacological e.g. weight loss Intervention; Surgical – corrective alignment surgery, Drugs / injection, Brace/ orthotics/ non-pharma e.g. acupuncture, Weight loss Population; early disease: all patients, but may be younger, people who are at risk, early trauma/ sport, overweight, family risk, congenital Outcomes; Validated knee measure or hip e.g. KOOS (Knee Injury and Osteoarthritis Outcome Score), OKS-APQ (Oxford Knee Score - Activity & Participation Questionnaire), Occupational / activity EQ-SD index and VAS PROMS measures (Index = health-related quality of life - mobility, self-care, usual activities, pain/discomfort and anxiety/depression VAS = a self-rating of health-related quality of life, Pain, Imaging (MRI)/ X-Ray – but neither are definitive	5. Development of Treatments
52	O2: What standardised non-surgical integrated pathways for early OA improve patient outcomes and experience?	The original submissions are listed in All Questions data	February 26th 2016	2		Currently no clear pathways or agreed treatment interventions. Diagnosis and treatments vary by Clinical Commissioning Groups from one service (e.g. physiotherapy) through to many services which may or may not be based in a single site/ multidisciplinary team. Type of research; Health care services research/ delivery, Quality of care, integrated services, Qualitative research Outcomes; PROMS / PIOMS, Qualitative patient experiences and outcomes	8. Health and Social Care
52	O3: What are the best interventions to keep people with early OA working?	The original submissions are listed in All Questions data	February 26th 2016	3		Timing is important for clinical diagnosis regarding treatment i.e. stage of disease. Balancing benefit of intervention v failure needs to be on an individual basis. Need to put not one treatment but multiple treatments in context. Type of research; Cohort, Qualitative, Clinical Trial Intervention; Identifying multiple interventions, Education, Complex interventions v no intervention Population; Young people, Working people, People in physical Jobs Outcomes; EQ – SD (Quality of Life survey), Binary work outcomes (in work/ out of work), Sick days, Change of employment/ behaviour / activities	8. Health and Social Care
52	O4: How can we predict disease progression in people with early OA of the knee/hip?	The original submissions are listed in All Questions data	February 26th 2016	4		Type of research; Longitudinal, Cohort, Retrospective/Prospective studies Population; High risk groups e.g. knee injury, occupational groups, Young v older people Outcomes; PROMS/ PIOMS e.g. pain, Imaging depending on study	2. Aetiology
52	O5: What is the best multidisciplinary care model for effective management of OA in primary care?	The original submissions are listed in All Questions data	February 26th 2016	5		This question overlaps with Q 2 and Q 7 in non surgical and they could be considered together Types of research; RCT of complex interventions, Systematic review of models, economic analysis of this question could be very useful Population; People presently with OA symptoms in primary care Outcomes; PROMS	8. Health and Social Care
52	O6: What factors and patterns of disease are responsible for progression of OA?	The original submissions are listed in All Questions data	February 26th 2016	6		Some knowledge but needs to be better, need to personalise approaches. Need development of predictive tool Type of research; Longitudinal, Retrospective, Cohort, Epidemiological EP databases, Big data, Developing a predictive tool – risk factors (e.g. of family history) Population; large! Outcomes; PROMS/PIOMS, X-Ray/MRI	2. Aetiology

