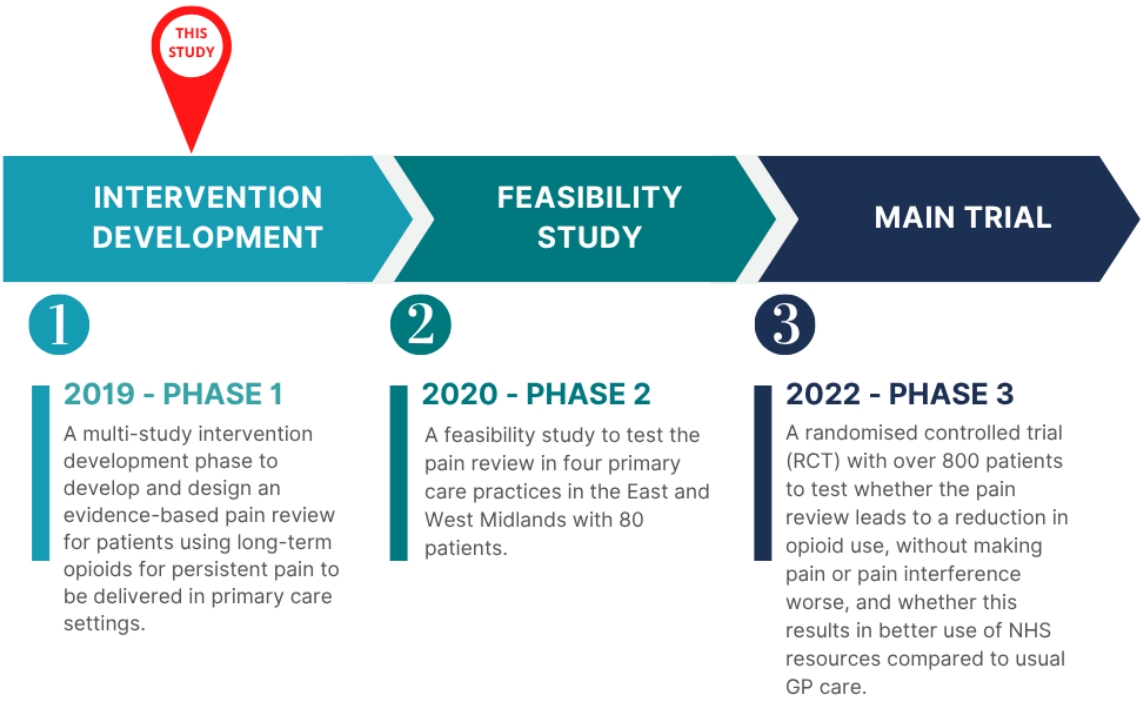
S1: PROMPPT programme timeline



Topic Guide S2: Interview

1. Can you start by telling me a bit about your long-term pain?

2. What are your experiences of using regular medication and in particular opioids– things like codeine, tramadol, patches, oxycodone –for your long-term pain?

3. Have you had a review with the GP to discuss the medicines you use regularly to manage your long-term pain?

4. If you make an appointment to see the GP about your long-term pain – do you get asked about the regular medication you are using, including questions about opioids (e.g. codeine, tramadol, patches, oxycodone)?

5. Have you ever talked to a health care professional about the idea of reducing the amount of opioids you take?

6. Do you know what pharmacists do? / Do you know what clinical pharmacists do in GP surgeries?

7. How would you feel about discussing your pain medicines (including opioids like codeine, tramadol, patches, oxycodone) with a clinical pharmacist?

8. If you had the opportunity to discuss your pain medicines with a clinical pharmacist what would you want this review to include?

9. How would you feel about making a plan with a clinical pharmacist to try to reduce the amount of opioid medicines you take for your long-term pain?

10. If you made a plan to reduce opioids, how would you feel about having ongoing discussions about this?

11. How would you feel about discussing benefits/side effects, taking alternatives, self-management, referral to other services, making a plan to reduce the amount of medicine you are taking?

12. Is there anything missing that you think should be added to a review of the medicines you take regularly to manage your long-term pain?

13. How willing would you be to discuss those things with a clinical pharmacist rather than a GP (please can you explain your answer?)

14. How confident do you think you would feel to discuss your use of pain medicines, including opioids, with a clinical pharmacist?

15. If you were invited to attend a review with a clinical pharmacist at your GP surgery - how likely is it that you would go? (probe reasons for their answer)

16. How appropriate is this type of review? (why/ why not it is felt to be appropriate).

17. How much effort would it take for you **to see** the clinical pharmacist **and discuss** how you use your pain medicines?

18. How fair do you think it is that patients with pain for longer than 6 months get invited to attend a review about their regular use of pain medication?

19. How will going to see a clinical pharmacist to discuss your pain medicines impact on your other priorities?

20. What problems do you think might occur if you go to the GP surgery for a clinical pharmacist review of your pain medicines?

21. How do you think attending a pharmacist review might impact on you (e.g. time, relationships, emotions, impact with your other health conditions)?

22. How acceptable do you think a review like this will be to other patients like you who take regular opioid medicines for long-term pain? (please can you expand on your answer – why / why not acceptable?)

23. What do you think a review with clinical pharmacists could achieve (probe for anything?). What do you think the purpose of having this type of reviews is for patients with long-term pain, like you?

24. Do you think there will be any other health benefits from seeing a clinical pharmacist about the medication you use regularly for your long-term pain?

Closing statement: That comes to the end of my questions. Is there anything else you would like to add about seeing a clinical pharmacist about your regular pain medication? On behalf of the research team and Keele University I would like to "Thank you" for participating in the Q-PROMPPT study and for taking the time to share with me your views today.

Topic Guide S3: Focus Group

Background questions

1. What should we call clinical pharmacists in our study? (e.g. practice pharmacist?)

2. Can you all share with the group the type of work that you do with patients with persistent non-cancer pain who are using regular opioid medication (e.g. codeine, tramadol, oxycodone, morphine)?

3. What goes through your mind when reviewing medications with patients with persistent pain?

Research team describe proposed PROMPPT intervention.

4. Can you talk about what you think about the PROMPPT intervention?

5. What can make it difficult for clinical pharmacists to do PROMPPT? (prompt: confidence, age/experience, knowledge, what knowledge required, skills, any ways of working that make it hard)

6. What will make it easier for clinical pharmacists to do PROMPPT?

7. How appropriate is it to talk about self-management with patients with persistent pain?

8. What resources (if any) do you use in consultations with patients when reviewing medications?

9. Pain concern form: What do you think about that? how use it? What like / dislike about it?

10. Interactive leaflet: What do you think about it? How use it? What like / dislike about it?

11. How would collaborating with GPs work? Issues with this, experiences of how it works well?

12. Can you make referrals?

13. What would you consider when deciding whether or not to book a follow-up appointment with a patient? Are there any barriers for booking follow-up appointments with patients?

14. What problems might occur if you were asked to deliver PROMPPT review in general practice?

15. What aspects of your environment (e.g. physical factors) might influence whether or not you can conduct PROMPPT and discuss reducing inappropriate opioid prescribing?

16. How do you think the views of others (colleagues, patients) might influence your decision to discuss use of regular opioids and potential changes to this?

17. Do you think patient emotions will affect whether or not you discuss use of regular opioids and reducing this?

18. Do you think your own emotions will affect your decision to discuss use of regular opioids and reducing this?

19. Are there any incentives that would motivate you to recommend to a patient they reduce the amount of opioids they take for persistent pain?

20. What skills will clinical pharmacists need in order to be able to deliver PROMPPT (support people with persistent pain to discuss their regular medicines use and consider reducing these, discuss self management)?
    - How easy or difficult are those skills?

21. How much experience or expertise do you think clinical pharmacists need to:

22. If you were to think about changing your own practice in recommending to patients they use less regular opioids/consider self-management how would you do it?

23. Can you talk about experiences of dealing with risk (patient is at risk of harming themselves)

Summary: That comes to the end of our questions. Is there anything else you would like to add about undertaking reviews of patients taking regular opioids for persistent non-cancer pain – AND discussing reducing their use of regular opioids?

Closing statement: On behalf of the research team and Keele University I would like to “Thank you” for participating in the PROMPPT study and for taking time to share with us your views today.

S4: Patient facing pre-consultation form

This is draft documentation used during intervention development only. This was subsequently changed as a result of continued intervention development and feasibility testing.

PRIVATE & CONFIDENTIAL

Pain Concerns Form

Why have I been given this form?

- You have been given this form to help you and the clinical pharmacist talk about the concerns you have about your pain and the medicines you use for pain.
- It will help you both to focus on the things that are most important to you during your appointment.

What do I have to do?

- Before your appointment with the clinical pharmacist, please fill in this form and bring it with you to the appointment.
- Write your name and date of birth below.
- Read each statement and tick the box ☑ if you agree.

Name:_____ **Date of birth** ____/____/_____

About my pain	Agree
My pain is not getting any better.	☐
My pain is getting worse.	☐
I don't understand why I still have pain.	☐
My pain is not taken seriously.	☐

PLEASE TURN OVER

This is draft documentation used during intervention development only. This was subsequently changed as a result of continued intervention development and feasibility testing.

PRIVATE & CONFIDENTIAL

Read each statement and tick the box ☑ if you agree.

Because of my pain…	Agree
I can't do my usual day-to-day activities e.g. housework, hobbies and social activities.	☐
I can't continue in or return to work.	☐
My pain stops me getting a good nights sleep.	☐
I feel stressed, *or* I feel anxious.	☐
My mood is low.	☐
I feel frustrated or embarrassed that I can't do things.	☐
I see my family and friends less than I used to.	☐
I feel lonely and isolated.	☐
I want to talk about the impact of my pain at my appointment	☐

Regarding the medicines I take for pain…	Agree
I am concerned that these medicines do not help my pain enough.	☐
I am concerned about how many medicines I take for pain.	☐
I am concerned about the combination of medicines I take.	☐
I am concerned about the short-term and/or long-term effects of my pain medicines.	☐
I am concerned that my pain medicines will be stopped.	☐

Other concerns relating to my pain or my pain management are...

THANK YOU FOR COMPLETING THIS FORM

PLEASE BRING IT ALONG TO YOUR APPOINTMENT WITH THE CLINICAL PHARMACIST

S5: Interactive leaflet

This is draft documentation used during intervention development only. This was subsequently changed as a result of continued intervention development and feasibility testing.

PROMPPT

Keele UNIVERSITY

Pain Review Plan
&
Self-care Information

Patient name:

Date of review:

Pharmacist name:

All the resources suggested in this leaflet are available online via the PROMPPT website. To access the resources you can either:

Scan the QR code below using the camera on your smartphone

or

Enter the following link into your internet browser

https://www.promppt.co.uk/protected/resources.html

SCAN ME

Your PROMPPT username is: user
Your PROMPPT password is: info2023

Pain Review Plan

Thank you for coming to see me, here is a brief reminder of the pain management plan we agreed for you:

Follow-up appointment:

If you need to contact me, please call .....
I will get back to you as soon as I can.

I have recommended some information you may find useful below:

Self-care information

Based on our discussion, I have ☑ ticked the areas I think are most important to you to find out more about.

Please have a look at any of the information that is of interest to you.

You may also like to share this information with family and friends to help them understand so that they can support you.

All the information is available online. You can find it by following the instructions on the front page of this leaflet and entering the username and password provided.

Some of the information resources listed are written leaflets for you to read, some are websites and some are videos you can watch.

If you have told me that you do not have access to the internet and/or prefer printed information, I will provide you with paper copies of the information leaflets.

Understanding persistent pain

- ☐ Understanding persistent pain and what to do about it — Leaflet
- ☐ Understanding pain in less than 5 minutes and what to do about it (5 minute video) — Video

Learn about the self-care steps you can take to live well with pain

- ☐ Ten Footsteps: Your journey to living well with pain — Leaflet
- ☐ The pain cycle and self-care cycle — Leaflet
- ☐ Pain and Me: Professor Tamar Pincus talks about chronic pain acceptance (3 minute video) — Video
- ☐ Pain and exercise: A comprehensive guide "About Exercise" — Website
- ☐ Hints and tips on exercise from people living with pain — Website
- ☐ Pain and driving: Information for people taking prescribed pain medicines — Leaflet
- ☐ Pain and sleep: How to sleep well with pain — Leaflet
- ☐ Pain & relationships: How does criticism affect pain — Leaflet

Opioids & persistent pain – what's the problem?

- ☐ The problem with opioids — Leaflet
- ☐ Which medicines are opioids, and which are not (1 minute video) — Video
- ☐ Brainman stops his opioids (2 minute video) — Video
- ☐ Why it's important to review people who take regular opioid medicines for pain — Leaflet

Reducing opioids – what to expect & what might help

- ☐ What to expect when you reduce opioids and what might help — Leaflet
- ☐ Louise's story. Find out about Louise's experience of stopping opioids and how she found walking helpful. (24 minute video) — Video
- ☐ Lisa's story. Find out about why Lisa decided to make changes to her pain medicines and how keeping in mind what was important helped her do this. (4 minute video) — Video
- ☐ Sean's story. Find out how Sean found tai chi and mindfulness helpful when coming off opioid medicines. (6 minute video) — Video

Other useful resources

- ☐ A list of other resources, for example books and websites that you may also find useful. — Leaflet

Table S6:
Facilitators and barriers to pharmacist delivery of a PROMPPT review and to support an opioid taper, where appropriate

TDF domain & subthemes	Summary of facilitators and barriers	Example quotes
Knowledge		
1. Experience of consulting in primary care	**Facilitator:** • Experience of consulting with patients in primary care • Knowing about services and referrals **Barrier:** • Lack of experience consulting with patients in primary care • Difficult to maintain knowledge about services and referrals	*I think it's more of a complex cohort of patients and so you need experienced clinical professionals who have been doing this for a few years and know General Practice as a whole holistic approach and not just opioid pain management. (focus group 1)* *It's through experience over the years and having to deal with types of patients possibly. I didn't necessarily have that skill but it was kind of brought out through my experiences as a clinical pharmacist over the years with these types of patients which I'm very grateful for. (focus group 1)* *the clinical pharmacists would need to know all those pathways I think so that erm, so that they get holistic support (participant 05)* *we don't know the referral criteria, like [Participant Name] said, because we've not been trained in it, I've had to learn from other people's referrals. No one has sat down and taught me. (focus group 1)*

2. Knowledge about pain, pain management, and opioid deprescribing	**Facilitator:**
	• Knowledge of:
	  ○ Persistent pain
	  ○ Pharmacology
	  ○ Opioid tapering
		so some of the pharmacists that work in the practices now have a better background of that kind of medicine management and…an understanding of opioids and the issues around pain management so I can't see there being any problems with it (participant 16)

	○ Holistic approaches to pain management **Barrier:** • Gaps in knowledge around: ○ Polypharmacy ○ Tapering guidelines	*I think that's quite important to know about the bio-psychosocial model and about central sensitisation and about the efficacy of opioids for chronic pain. (focus group 2)* *I think lots of practices don't know how much to reduce by and often will try to reduce by a quarter and go too far too quickly and then people rebound (participant 14)* *Clinical training in terms of combinations that shouldn't be co-prescribed and those that antagonise each other. Which of these combinations bruprophenol and co-codamols? Why have they been given together? (focus group1)*
3. Patient knowledge of a PROMPPT review	**Facilitator:** • Patient understands role of clinical pharmacist • Patient understands the purpose of a PROMPPT review **Barrier:** • Patient confused about the role of a clinical pharmacist • Patient unsure of the purpose and relevancy of a PROMPPT review	*from a patient point of view they appreciate that it's coming from the pharmacist and they understand obviously that we are medical experts and we understand these medicines and how they work and what they're for and the limitations (participant 21)* *So they understand what they're coming for and that's a good set-up, isn't it? They know they're coming in talk about their painkillers and the main concerns they want to address in that appointment. (focus group 1)* *I had one last week who walked out halfway, when he found out that I was a Pharmacist and yet I'd introduced myself and what I did (participant 06)* *I think often it's very difficult because people are very defensive when they initially come to you so they think you're going to take their painkillers away and ruin their life. (participant 14)*

Skills		
4. Person-centred shared decision-making	**Facilitator:** • Patient-centred communication skills • Incentivising patients to engage **Barrier:** • Gap in communication skills training	*I tend to give them a person centred approach and partnership with the patient, say where they are in their cycle of change and readiness to change. And kind of taking that approach like you're working with them and they feel as if you are working with them rather than you telling them what to do. So I think that kind of collaborative approach with the patient is key (participant 22)* *We've been doing it by restricting the quantity that they get and so they are having to come in for those reviews and if they don't, then obviously it's flagged up (focus group 2)* *if you go to pharmacy-based training on opioids, it's very drug heavy, you know, and I don't really need it to be drug heavy, I need some support around how to talk to these people (participant 23)* *again some kind of tools to help know whether patients are dependent on their medicines and then maybe some guidance on those challenging conversations about how best to deal with that. (participant 22)*
5. Supporting patient pain management	**Facilitator:** • Working with patients to review pain management plans • Skills in prescribing and deprescribing	*In some people's mind, when you start talking about reduction, they think you're talking about stopping and it's very important to say, 'This isn't about stopping your pain medication. This is about fine tuning it and getting it to the right level. (focus group 2)* *I think pharmacists are a lot more aware of the equivalents and can access that information very easily to make sure that when they down titrate they do it safely (participant 14)*

Social role and professional identity		
6. Part of pharmacist's role in primary care	**Facilitator:** • PROMPPT review aligns with pharmacist role in primary care • Opportunity to promote role in primary care	*it is a perfect clinic for pharmacists – primary care pharmacists, whether they are prescribers or non-prescribers because it's, it's utilise your knowledge about medication for, for a clinic and I think that it's one of the best things the pharmacists could do (participant 20)* *if they want to get the very best out of the pharmacists, the very best, I think it's utilise and capitalise on our input and in order to do that we need to build in some pain and think about how we managing patients and not just be inundated with appointments and prescriptions (participant 16)*
Beliefs about capabilities		
7. Confidence to deliver PROMPPT reviews	**Facilitator:** • Adopting an holistic approach to pain management • Confidence protected knowing not all will patients reduce their opioids **Barrier:** • Difficult when patients don't want to change or engage • Deprescribing is more difficult than prescribing **Both:** • Variability in confidence in making pain management plans	*I think if I'd got the resources and the training I'd be happy to discuss it, that's definitely part of my role so erm, it would be a case of making sure I was confident to discuss it and had all the resources ready (participant 19)* *you can't solve all of their problems. I've come to live a little more comfortably with the fact that I can't necessarily solve their problems but I can potentially make a small part of their life a little bit better (participant 15)* *I think often it's very difficult because people are very defensive when they initially come to you so they think you're going to take their painkillers away and ruin their life. (participant 14)*

		I guess some of the difficulty comes about because over the last 10-20 years, they've been constantly prescribed things that we're now questioning. (focus group 1) *if we were to produce a self management plan what would it, I wouldn't feel confident right now to do that because I don't have nothing in place or, you know, kind of an outline of what that would look like. (participant 21)*
Beliefs about consequences		
8. Patient benefits	**Facilitator:** • Belief review will improve management of persistent pain in primary care • Belief review will improve patient health and wellbeing • Increase patient understanding of pain, pain medicines, and pain management	*Its important because a patient feels wanted and cared for, that's important (participant 6)* *I've seen patients who have reduced opioids and the patients have felt a lot better afterward (participant 18)* *I do medication reviews and you start talking about individual medicines, people will say, well thank you very much, no one's ever explained that to me before and I think there are definitely advantages of clinical pharmacists during the reviews, so if they have a better understanding of why they're prescribed things and erm what the overall aim of taking it then you know, the compliance is better and that would go with opioids as well if they think, oh I didn't realise that there was this risk or that risk actually erm, this is how intolerance works or erm, if its normal to experience a certain degree of pain or maybe I can do this, that and the other to maybe reduce my pain erm, rather than just take all these tablets (participant 5)*
Intentions		

9. Intention to review patients	**Facilitator:** • Patients willing to engage in a PROMPPT review **Barrier:** • Patient unwilling to engage with a PROMPPT review	*The main thing is to find out whether they're engaged because obviously, the ones that are engaged are a lot easier to talk to than the ones that aren't (focus group 2)* *but obviously some people they just won't want to engage (participant 23)*
Goals		
10. Do what's best for the patient	**Facilitator:** • Help patients to manage and live with long-term pain • Align goals with patient values • Appropriate and safe prescribing **Barrier:** • Patients want a pharmacological solution	*we're not aiming for a short-term solution. So my view is erm, to try to make her understand and get engaged, so, so we can go forward for long-term (participant 20)* *I prepare my agenda; I then go there; I look at the patient's agenda; I then try to amalgamate those two. (focus group 2)* *you won't get every patient off it, but you might reduce it and that's the whole aim is you reduce it and to save them from having so many long term side effects, long term problems (participant 14)* *There will be those that just resolutely want you to treat them and make them better (participant 15)*
Environmental context and resources		
11. Capacity and resource to deliver PROMPPT reviews	**Facilitator:** • Accessible evidence-based resources **Both:** • Capacity for PROMPPT reviews • Location of PROMPPT reviews • Variability in access to referral services & support	*I give them a back-pain leaflet, the Arthritis UK Society have an excellent leaflet which I download on my desktop. And I give them copies of that without giving any pain management and I say exercise is more important than pain management and I give them that and that's a tact that I use quite a lot. (participant 06)* *I know that it's difficult to de-prescribe opioids for patients due to lack of time. (focus group 1)*

		Ideally it would be face to face because I think body language is important. Er, but again, er, circumstantial if, you know, I'd much rather speak to them and touch base rather than it drag out even longer. So, if phone is the only way for a fixed period, then it's better than nothing really. (participant 23) *It's not joined up which I think is the problem. Even the GPs at the practice are not aware of who to send patients to. (focus group 1)*
12. A consistent approach	**Facilitator:** • Proactive pain review as practice policy • Multidisciplinary team approach • Structured approach to PROMPPT reviews **Barrier:** • Lack of continuity of care for pain	*I think all medicine should be reviewed regularly is what I would say. So at least within a 12-month period and whatever the medicine is, er, so not just pain meds but I think strong pain relief that, er, six monthly review should happen (participant 14)* *you've got to make sure that the local pain clinic are saying the same sort of messages and the rest of your prescribing partners in your practice, otherwise they'll just go to somebody else and get what they want (participant 05)* *I think to get consistency, some sort of template would be quite useful. I don't know what others think but a template lends itself to consistency of approach. (focus group 1)* *The patients are clever so they will phone up on a certain day if somebody X, Y, Z's on duty so you need to do, get a bottle of morphine…do you know what I mean, it definitely happens everywhere, it definitely happens where I work. (participant 14)*

13. Lack of definitive tapering guidelines	**Both:** • Lack of definitive tapering guidelines	*When I started doing it initially, I looked through some guidance and there was no clearcut answer around how fast or how much to reduce (focus group 2)* *I think we had a leaflet at that point if we were taking people down on their co-codamol which I think one of the health boards, er, Scotland had produced (participant 22)*
Social influences		
14. Pharmacist social support	**Facilitator:** • Pharmacist social support	*I've got a network of pharmacists I would do regular case discussions (participant 06)* *I think if you've got that support from other clinicians, I think that does help (participant 17)*
15. Patient-pharmacist rapport	**Facilitator:** • Patient-clinician rapport **Both:** • Others' views of pharmacists	*you don't want to come across as if I'm taking this away from you and, you know, you want them to feel very supported (participant 08)* *a successful consultation for me I think is one in which you've had engagement, you've – you've connected (participant 15)* *if the doctor endorses [seeing the practice pharmacist] then they know that you are going to seeing them from now on then it's kind of… they'll accept it (participant 17)*
Emotions		
16. Pain reviews are emotionally demanding	**Barrier:** • Pain reviews are emotionally demanding	*There's a lot of stress involved in these consultations and I would find that difficult. (focus group 2)*

		I mean there's some very sad stories when you're dealing with these people, when you listen, I mean you probably know, er, you can't help but be affected by them (participant 15) *I think your touched and perhaps worried by some things that patients tell you (participant 23)*