

Deep End Project: Primary care Professionals' Experiences of Reducing opioid and gabapentinoid prescribing in socioeconomically disadvantaged communities in the North East of England (TAPER).

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Executive summary

What is the problem and what did the Deep End pilot intervention aim to do?

Opioids and gabapentinoids are used to treat acute and chronic pain and prescriptions of these medications having risen dramatically in recent years. This is despite limited effectiveness for chronic primary pain (pain without a specific cause). The prescription rates and adverse effects of these medications tend to be higher in more socioeconomically disadvantaged groups in the UK, a trend that is seen locally with many Deep End practices having high prescription rates of these medications which are correlated with deprivation. Therefore, the Deep End North East and North Cumbria (NENC) Network supported the delivery of a six-month pilot to reduce opioid and gabapentinoid prescription rates in patients identified as high risk by implementing medication reviews and other allied work in six Deep End GP practices.

What research did we do and how?

This qualitative research evaluation was designed as an adjunct to the quantitative service evaluation being undertaken by North of England Commissioning Support Unit (NECS). We aimed to explore primary care professionals' views and experiences of the planned medication reviews and allied work to reduce opioid and gabapentinoid prescribing in high-risk patients by using interviews and observing relevant meetings. This included exploring the barriers and facilitators of the relevant work undertaken. 13 professionals across five Deep End practices including partner and salaried GPs, pharmacists and allied healthcare professionals were interviewed during 2022/23. A researcher also attended all the monthly peer-support sessions which were held for professionals participating in the pilot.

What did we find?

Five key themes were identified when undertaking deprescribing in opioid and gabapentinoids in Deep End GP practices covering areas of blanket deprivation:



The key themes included **why** practices signed up to the pilot (motivators for practice involvement). **Risk** was another key theme and was used to **decide which patients to include** as well as **how best to approach** the medication reviews. This work evoked a range of both negative and positive **emotions** in both staff and patients. For example, the medication reviews could be stressful and emotionally draining mainly due to patients' reactions. However, contrary to staff's expectations, this type of work could be easier and more rewarding than expected.

What were the key facilitators for the successful implementation of the intervention?

Another key theme was around the key facilitators for the successful implementation of the intervention which included:

- having **dedicated time** for primary care professionals to undertake the design and implementation of the medication reviews and allied work.
- being **person-centred** which helped to facilitate patient buy-in leading to adherence.
- having a **supportive team** that played to its strengths whilst developing skills, knowledge, and expertise for undertaking this work.
- keeping a clear focus on aiming to embed the **culture change necessary within practices and wider system** to ensure that patients are not on inappropriate doses of these medications for inappropriate reasons.

What did success look like for the practices involved?

The ways in which success was viewed from the participating practices varied and included:

- 1) developing a **systematic approach** for their deprescribing work within the practice
- 2) prescribing **safer doses** if a patient was on previously dangerous doses
- 3) **securing an agreement** with the patient to reduce their opioid and/or gabapentinoid prescription(s)
- 4) achieving **any reduction for inappropriate prescriptions** of opioids and/or gabapentinoids.

How can success be measured?

Collecting both quantitative and qualitative data were reported to be important to provide a more complete understanding of the impacts of the intervention. These elements help consider the context in which these practices function. Any data collection should be iteratively reviewed with the relevant GP practices to ensure not too onerous.

What next?**Key recommendations:**

- **For the Deep End Network:** Funding dedicated time for this work was seen as a key ingredient by the Deep End practices. The Deep End network should continue a model with this at its heart when considering roll-out. Amalgamating the existing resources (such as this pilot's invite letter templates and protocols) as well as any training and support on offer (for example, from the Deep End Network or Integrated Care Board (ICB)) that interested practices can access to support this work is considered important to optimise decision-making and time-efficiency. If widening out the work, consider introducing a pre-requisite that Deep End practices should have at least two members of staff willing and able to become a team for this work is important to overcome some of the key barriers identified in this pilot.
- **For Deep End Practices:** For any practices undertaking this work, agreeing internally the pathways by which this work will be undertaken, including how staff will be supported, is important. This should include how to approach the medication reviews, non-engagement, and patient refusal.
- **For commissioners and wider system:** Qualitative and quantitative measures that are developed iteratively with staff should be captured in the evaluation and interpreted considering the uniqueness of each practice. The measures of success of any allied work across the ICB, especially if incentivised, should be complementary.

Abbreviations:

GMC	General Medical Council
ICB	Integrated Care Board
NECS	North of England Commissioning Support Unit
NENC	North East and North Cumbria
NICE	National Institute for Health and Care Excellence
SES	Socioeconomic status
TAPER	Deep End Project: Primary care Professionals' Experiences of Reducing opioid and gabapentinoid prescribing in socioeconomically disadvantaged communities in the North East of England

Introduction

Opioids, such as codeine, morphine and fentanyl, are commonly used for the treatment of pain (1). Other types of opioids include heroin and methadone. Gabapentinoids, such as pregabalin and gabapentin, are traditionally used to treat specific types of epilepsy but can also be used to treat neuropathic pain (2). Both opioids and gabapentinoids can provide symptom management for some patients but they do not work for everyone (3). For example, increasing evidence exists that short-term use of opioids for chronic non-cancer pain compared to non-opioid medications shows no difference on a range of outcomes (such as pain, depression, sleep and function) (4). The evidence for the long-term effectiveness of opioids for chronic non-cancer pain is very limited with a growing body of evidence of dose-dependent increased risk of harms (4). Furthermore, both opioids and gabapentinoids can lead to dependence, misuse and adverse events, which include death (1, 2, 5). Deaths relating to drug poisoning registered in England and Wales continues to increase with 4,859 registered deaths in 2021, of which approximately half involved an opiate (6). Approximately two thirds of registered drug poisoning deaths in 2021 were related to drug misuse (3,060 drug poisoning deaths) with the North East having the highest rates in England and Wales (6). An increase in dangerous drug combinations, including deaths involving pregabalin and gabapentin with a rise of 18.9% and 12.7% respectively in 2021, was seen in comparison with 2020 (6).

With the evidence of increased risk of serious harms appearing to be dose-dependent for opioids, understanding the factors that are associated with higher doses is important (4). A systematic review and meta-analysis found that high-dose opioids in primary care were significantly associated with depression, male gender, unemployment and emergency department visits when compared with low-dose opioids (7). Furthermore, the prescribing rates and adverse effects of these medications are higher in more socioeconomically disadvantaged groups (1, 8, 9). For example, a range of risk factors exist for opioid overdose and include people with lower socioeconomic status (SES), older age, having an opioid use disorder, high dosages of prescribed opioids, using opioids in combination with other substances that can suppress respiratory function, and having co-existing health conditions, including liver disease and mental health conditions (1). For gabapentinoids, misuse is more commonly seen in those with psychiatric disorders or history of substance misuse/disorders, particularly relating to opioids (10, 11). Caution is advised when prescribing gabapentinoids for the elderly and people with co-existing health conditions, such as respiratory disease, as well as co-prescribing with another medication that can suppress the central nervous system (12).

There is uncertainty about the effectiveness of varying primary-care delivered interventions to reduce or stop both types of medications in patients at high risk of adverse events. For example, a systematic review, which included studies based in primary care

amongst other settings, supported the effectiveness of opioid treatment agreements and regular urine drug testing in management strategies to reduce opioid misuse by patients with chronic pain (13). However, control groups were not used in all of the included studies (13) thus making it difficult to assess effectiveness (14). Additionally, a recently published systematic review of controlled and cohort studies suggested that a GP supervised tapering and multidisciplinary group therapeutic sessions may be effective in reducing and discontinuing long-term opioid treatment (15). However, the included studies for both systematic reviews were generally assessed as having either high risk of bias or variable quality with small sample sizes limiting the extent of the conclusions (13, 15).

There is existing guidance in the UK, for example, from the National Institute of Health and Care Excellence (NICE). NICE advises against the initiation of opioids and gabapentinoids in patients with chronic primary pain in people aged 16 years and over (16). NICE has recently developed guidelines for safe prescribing and withdrawal management in adults taking medications associated with dependence or withdrawal (17). NICE recommends the following actions for patients with chronic primary pain taking these medications including decisions around tapering (16, 17):

- foster collaborative and supportive relationships, with shared decision-making (where possible), at all stages of prescribing of these medications (including tapering).
- explain that these medications lack evidence for treating their condition.
- describe the risks involved with these medications especially if little benefit or significant harms are reported with support to reduce and stop, if possible.
- agree a shared plan for how to continue safely if patients report benefits at a safe dose with ongoing review **or** agree a shared plan about tapering these medications with support. The approach taken should be tailored to the patient.
- If tapering the medications, symptoms of withdrawal should be covered with details of the support available.
- if a shared decision is not possible and it is not in the patient's best interest to continue the prescription, tapering can be implemented following General Medical Council guidance.

This guidance therefore supports being person-centred which includes working collaboratively with patients and tailoring the support that each respective patient needs to develop their skills and knowledge to make informed choices about their health and wellbeing (18). Person-centred care is also underpinned by shared decision-making which involves patients and healthcare professionals working together to reach an agreed plan (19). Shared decision-making may include compromising and negotiating but equal value is placed on the preferences of the patient and the expert knowledge of the clinician (19, 20). Shared decision-making

acknowledges the patient's right to decide about their care as long as they are fully informed of their respective options (19). Shared decision-making therefore includes agency, which is 'the ability to act or choose which action to take' (21). Benefits of shared decision-making include increased adherence to treatment and satisfaction regarding treatment outcomes (20).

Deep End North East and North Cumbria (NENC) Network

Deep End North East and North Cumbria (NENC), established in 2020, is a network of primary care professionals who work in GP practices in the most socioeconomically deprived areas of the North East and North Cumbria (22, 23). It is recognised locally that many Deep End practices have high prescription rates of opioids and gabapentinoids (22). These prescription rates have been correlated with deprivation (8, 9, 22). Following the success of a NENC Deep End practice undertaking medication reviews for these medications with high-risk patients with support to move to a tapering programme, the NENC Deep End Network supported a six-month pilot to reduce opioid and gabapentinoid prescription rates. This was for patients identified as high risk (22) to facilitate prioritisation of this work in the context of the 'volume of clinical and social patient need' that creates the burden in the Deep End practices (24). This report outlines the qualitative research evaluation to explore the experiences of primary care professionals involved in the delivery of a tapering programme.

The intervention (TAPER)

NENC Deep End provided protected funded time for each practice that signed-up to review their opioid and gabapentinoid prescribing in high-risk patients and address accordingly with patient medication reviews. The opportunity was advertised in 2022 by the NENC Deep End Network with six self-selecting practices from within this network signed up to the pilot. The practices varied in size (list size ranged from 2,500-11,000 patients) and their location (25). As Deep End practices, the proportion of their list sizes who lived in the 15% most disadvantaged neighbourhoods in England ranged from 46.6%-83.9% underscoring the extreme and blanket deprivation of communities served by these practices.

The support offered included one session per week for six months to backfill GPs' or allied professionals' time to plan and deliver an intervention to reduce their opioid/gabapentinoid prescribing with a further session a month for the evaluation. Monthly peer-support meetings as well as additional training or support requests were available upon request which included the support of the practice that had undertaken similar work previously were offered. The participating GP practices respectively decided how to approach the work at their relevant

practices. This included development of a policy or guidelines for some of the practices. Essentially, the intervention (TAPER) involved:

- identification of which staff would be involved in the pilot.
- identification of which patients would be included which also involved running searches on the relevant primary care's IT systems.
- how to inform the relevant patients of the work and agreeing this internally. For example, some practices used letters to invite the patients for a medication review or to inform the patient that a reduction would be occurring with an opportunity to discuss with practice. Other practices used ad hoc phone calls.
- how to structure the medication reviews, including deciding if thresholds for forcing a reduction would be implemented, particularly if on unsafe doses, or to implement urine toxicology to assess compliance with the prescribed medication (and help rule out divergence to others) and verify the presence of other medications (prescribed or not) that may indicate a higher risk.
- undertaking the medication review and agreeing support with the respective patients including frequency of reviews.

Aim and objectives

The aim of this qualitative evaluation was to explore primary healthcare professionals' views and experiences of implementing the medical reviews and allied work to reduce opioid and gabapentinoid prescribing in high-risk patients in Deep End practices.

The objectives were to:

1) Seek the views and experiences of the involved healthcare professionals regarding the:

- acceptability of their implemented intervention
- barriers and facilitators of their implemented intervention
- their opinions about the ways in which their implemented intervention does or does not work

2) Inform future developments in primary care to address health and care inequalities by making evidence-based recommendations about further development and implementation of these and allied future interventions.

3) Identify areas of further related research to support action to address health and care inequalities.

Methods

The six self-selecting practices from the NENC Deep End Network that signed up to the pilot were invited to take part in the qualitative evaluation. A seventh NENC Deep End practice, which had previously undertaken a similar project that had influenced this work, was also included. This qualitative part of the evaluation consisted of two components which were interviews with healthcare professionals at relevant practices as well as observation in the monthly peer-support meetings.

For the interviews, a study information sheet was emailed to perspective interviewees, and participants were asked to complete an e-consent form using Microsoft Forms. Each interviewee was interviewed by C.PC, using the online platform Teams or via telephone, lasting up to one hour. Interview questions were based on an iteratively developed topic guide, informed by Normalisation Process Theory (26, 27), a theory of implementation which explains how new ways of working are embedded and integrated into healthcare (27). Interviewees were asked a range of questions including their approach and experience of undertaking the pilot as well as other work relating to the deprescribing of these medications. Brief notes were taken, and the interviews were recorded, transcribed verbatim and anonymised. Additionally, C.PC attended each monthly peer-support session during the pilot with anonymised notes taken according to a template. Interviews were coded inductively and analysed independently by two researchers (C.PC and J.P.) with the participant observations notes being coded inductively and analysed by C.PC. The approach to analysis was based on thematic analysis (28) to identify key themes. Ethics approval was obtained from Newcastle University's Research Ethics Committee (reference number 18523/2022).

Results

16 primary healthcare professionals were invited to take part from the seven relevant primary care practices with 13 consenting to participate from five practices. Seven interviewees were either salaried or partner General Practice Doctors (GP) and six interviewees were either pharmacists or pharmacy technicians (P) or allied primary healthcare professionals (A). Additionally, all monthly peer-support sessions (n= 4) were attended by the researcher (October 2022 – May 2023).

Five key themes were identified:

1. Motivators for practice involvement
2. Risk
3. Emotional responses to the work

4. Facilitators
5. Defining and measuring success for intervention

Motivators for practice involvement

Several motivators for the practices to undertake this work were highlighted. For example, a key motivating factor was that undertaking this work was the right thing to do due to the harms associated with these medications (including drug-related deaths) and that the evidence and guidelines have changed with a national drive to reduce:

‘The evidence now was that this [opioid and gabapentinoid prescribing] was not doing people any good – in fact, doing people harm, so not just not attack- not addressing pain, but actually creating other problems also. So, there was a very strong feeling to stop practising in a way that was harmful to people.’ (A1)

Also being an outlier was a reason for practices to be involved as well as having staff member(s) interested in the topic.

‘Yes, and, you know, we were aware that we were an outlier on those [opioid and gabapentinoid prescriptions], you know, which is embarrassing, yes’ (GP1)

‘I think for me it's something that's always been on my radar. I think from the day that I, you know, started in this role, you know, I've encountered patients who I believe to be on inappropriate gabapentinoids, inappropriately high doses and inappropriately long-term opioids’ (P1)

Risk

Risk was a key theme throughout the interviews and divided into two subthemes:

- Patient selection
- Approach to the medication reviews

Patient selection

All the practices used risk to identify and prioritise which patients to invite. For all practices, ‘high-risk’ was considered when patients were on high doses of opioids or gabapentinoids with some practices including additional factors such as timing of last medication review, age, comorbidities, previous history of drug or alcohol misuse and/or other concurrent high-risk

medication. This all related to identification of the patients who were at the greatest risk of suffering the largest consequences.

'So I've started with anyone [on] morphine 120 [milligrams] and above, which is good as we didn't actually have that many. So now I'm starting on the higher doses of your gabapentin, you know, 600 [milligrams] plus a day, same with your pregabalins, and then anybody on acute issues.' (P2)

'We started by, I guess, essentially stratifying sort of groups of patients, so picking off very high-risk patients. So, they'd be patients on opiates, say, above 120mg over a 24-hour period. Then a more moderate zone – I guess this is talking about opiates initially – more kind of moderate zone of stronger opioids, but not up to the 120mg level. Then we had weaker opiates, generally that's your tramadol and codeines below that, so those three layers.' (GP7)

'So high risk meant on these medications long-term and had an overdue medication review, so hadn't had a medication review for over a year, so hadn't had a discussion about them. Or on a high dose of oral morphine equivalent, I think I chose greater than 100mg, so anyone on strong opioids basically would be called in for review. Anyone with high-risk features in their history, so looking at the opioid risk tool which looks at high risk for misuse. Things like basically previous drug misuse or previous alcohol misuse or previous prescription drug misuse, those things that put them at higher risk of having problematic use, so people who had a history of that and were on regular opioids, they were high risk.' (GP2)

Once the criteria were agreed in the relevant practice, IT systems were used to identify these at-risk patients. However, limitations of these systems included how medications were coded and staff's IT proficiency skills thereby creating unintended consequences. This included, for example, an added administrative burden for some practices and the risk that not all patients would be identified.

'Unfortunately because of some limitations with the technology and also my personal limitation in running searches, because I'm not an expert at running searches. I do believe that there will be some people who slip under the radar there.' (P1)

'I had a list, where I'm still going through that list and having to cross out people who actually are not even relevant to this pilot project. And cross-checking it with the other lists that we've got [...] there must be a more efficient way of doing it, but, in my practice, we just don't have the infrastructure to be able to do that, [...] Because I put my hand up to do the pilot project, it has kind of fallen to me' (GP6)

Approach to the medication reviews

Risk was also used to determine how best to approach the medication reviews. Shared decision-making was strived for but if not possible, forced reductions were taken by some practices. In these cases, risk was used to determine the thresholds for removing agency so that the patient had to reduce their medications doses (or even stop) either due to life-threatening risks to that patient or lack of medication compliance linked to safety concerns about diversion to others.

So if we really couldn't get them [patients] on board – of course ideally we would wait to get the patient, but if we really, really couldn't get them on board, then we'd force the reduction.' (P4)

'If the urine toxicology showed that they weren't taking what they were prescribed, which happened in quite a few cases, or showed that they were taking that plus cocaine, amphetamine or whatever else, then we'd stop it unilaterally on safety grounds.' (GP2)

Risk was considered when deciding the required actions to take during the medication review or the steps to take if the patient did not engage with the work. This often was according to the medication dose(s) with an assessment of the likelihood of potential harm.

'Sometimes in that first appointment, I wouldn't actually action any change unless it was a patient that I was genuinely concerned about because of, you know, the doses that they were on.' (P4)

'So I try and follow it up [patient non-engagement], I mean I try and follow up another month later or another couple of weeks, I put a note in. Then, I think, it depends on the dose as much as anything, because if they're not on a particularly high dose [.....] if they're on 50mg of codeine three times a day, I'm not quite as worried about them as I would be on somebody on 120mg of morphine. Do you see what I mean?' (P5)

Risk communication helped persuade patients to engage with the dose reductions. The way in which this was approached varied. Common aspects that were viewed as important included patient education about chronic pain and how managing it had changed, potential side-effects, adverse effects or consequences of taking these medications such as death, addiction, tolerance and dependency (including withdrawal). It was acknowledged communicating these concepts well was not easy.

'So I think the biggest barrier is just the difficulty of treating chronic pain. It's the difficulty of relaying the messages around the new evidence of chronic pain. Relaying that to patients is very hard.' (P1)

'And for the patients who are on that over 120mg [of morphine], I say that, "There's some new evidence that's come out to say that, you know, at these doses it's very, very likely to cause, to cause you some harm either now or in the future and it's actually very unlikely to be helping anymore with your pain.' (P1)

Some interviewees reported that analogies worked well to help patient understanding.

'What I say to people, I've been saying this for years, "Painkillers are like beer. When you're 15," because they're 15 or younger around here, "and have your first beer it's quite nice. After a few years you need a couple of pints." "Yes, that's true Doctor, they don't work so well." I say, "Painkillers are exactly the same, the more you take them the less they'll work."' (GP3)

Emotional responses to the work

This work evoked a range of both negative and positive emotions in both staff and patients. Firstly, uncertainty about how best to approach the work existed for the healthcare professionals as even though the guidelines had changed about prescribing these medications, limited guidance existed about how to go about the reductions in practice, what to do if the current guidelines did not work or what to do if the patients did not engage. There was uncertainty about how the patients would react to the work as well as how much time this work would generate. This all led to apprehension for the healthcare professionals involved.

'I think just not really knowing what to do with people with pain [after trying recommendations in the guidelines], it's such a grey area in primary care.' (P2)

'It's something I was nervous for, at the start because I think opioids can be quite a scary subject, as a whole. It's about not knowing how the time pressure was going to fit in.' (P3)

'What do you do if they refuse to even consider any kind of withdrawal or switch? I guess that's kind of individual decision for everyone involved, but yes, how far do you push these things?' (GP5)

Amidst the uncertainty, practices used different ways to engage patients in the work which were often chosen according to the healthcare professionals' perceptions of how their patients would view the approach. For example, some practices thought notifying the patients about the work was helpful, for example sending letters to invite them for a medication review to help prepare the patients for the conversation. Whereas other practices thought this might facilitate

non-engagement as patients would not want to engage due to fear of the medications being stopped.

'But I'm going to try to limit the ad hoc phone calls to people who have not had any initial issue or contact about the opioid, because otherwise it could be, it could just fall flat on its face really. They'll just put the phone down, if they don't want to reduce their medication. So we need to give them some sort of heads-up.' (GP6)

'Because I suppose one of the controversies with the letter is that, you know, if someone is very protective over their opiate medicines and they get a letter saying, you know, 'We think that you're on too high a dose, please book an appointment,' there's a real danger that they might then go to ground and not reply to any communication with the surgery because they, you know, feel as though they're at risk of losing those drugs that they might be quite protective over.' (P1)

There was also an uneasiness about swapping to another medication due to uncertainties around potential unintended future consequences or effectiveness of this approach.

'I'm not sure how good swapping them off the gabapentin and pregabalin and putting them on duloxetine is, but that is something that I do, but you worry that in five years' time, is duloxetine going to be in the same?' (GP5)

For the patients, uncertainty also appeared to be present. This appeared to be mostly centred around the possible negative consequences of engaging in this work resulting in anxiety and being reluctant to dose reduce or to reduce any further.

'I guess they [patients] had the fear that I was going to, or I guess, one of the doctors was going to come and take away their painkillers. So I think if they thought if they started the process that it would never stop and we would taper down and stop completely.' (P4)

'So reticent about reducing? I think they're [patients] just worried in case they're in pain, or in more pain.' (P5)

Interestingly, anxiety was also viewed as a reason for patients to engage:

'Strangely, one trigger seems to have been those who are very worried about their health. So slightly... erm some people with health anxiety, the letter has upset them and made them think

that they're harming themselves with these medications, and they're very keen to come off.'
(GP4)

When patients engaged, the consultations were often difficult and stressful for the healthcare professional due to patients' emotional response and resistance.

'And I think that's one of the things the reviews - depending on who you've got in front of you, it can be quite emotionally tiring.' (GP6)

'And emotional energy, because they're [the consultations] really draining, some of them' (GP2)

'You know, if this is the first time a patient's being told that they have to reduce their dose, it can be quite an intense environment.' (P1)

Interviewees reported experiencing angry, manipulative and/or threatening behaviour during the consultations.

'You know, they [the patients undergoing deprescribing reviews] try and make us feel cruel, you know, for- that's probably the most common, you know, defence mechanism I've encountered from the patients that I've spoken to is, you know, I had a patient the other day who said, you know, "Why don't you just kill me, then?" "No, I'd rather just go in my box all that, kind of, thing," and get very upset, you know, start to cry. And it can be, you know,- as someone who, you know, obviously I choose to do this job because I want to try and help people, you care for people and you know in your heart of hearts, you know from the evidence and you know that it [deprescribing] is the right thing to do for them.' (P1)

'Because I have had patients who've threatened, you know, to harm themselves or hurt themselves if I went ahead with the dose reduction.' (P4)

The negative reactions and resistance from the patients appeared to stem from an underlying concern that reducing the dose(s) would negatively impact their quality of life fueled by:

- not understanding why being on these medications was now a concern when they had been taking them for a long time initiated by a healthcare professional with seemingly often no perceived side-effects. This was sometimes despite still being in pain.
- having negative experiences trying to manage their pain or reduce previously (for example with rebound pain or withdrawal)

'What I am struggling with are the patients that have been on long term, high dose, or they're involved in, you know, secondary care, pain clinics, or musculoskeletal services or anything like that, who are on them, and they're kind of questioning, "Well, why are we changing now? I've got no problem, why should I change?'" (P2)

'And yeah, some people just feel as though they're not on that much and they're okay, and they're not getting any side effects, so if it's not broke, why fix it.' (P5)

'They see it as, you know, "I've been prescribed this medication for pain, for pain relief and I'm still in pain and they're trying to get rid of the one thing that helps."' (P1)

'Yes, the people who've kind of been down a chronic pain pathway and they've been to pain clinic and pain management services and they've not really engaged with anything, they've been negative about all the approaches to their pain, those are the people who don't want to reduce either.' (GP4)

Interviewees reported frustrations due to a perceived lack of alternatives as either the alternatives:

- were contraindicated
- were not perceived as suitable or acceptable for the patient demographic
- involved barriers (such as long-waiting lists)
- had already been tried but had not worked or
- the threshold for the alternative(s) had not been met

'I think in a struggling working class area, you know, where you have people with joint pain, you know, who are taking painkillers for joint pain, if you turn around and say, "I'm going to take your painkillers off you, but I'm going to send you to Talking Therapy [psychological therapies] instead," that can be a very difficult thing to sell. Even though we have good evidence for it.'
(P1)

'And that the lack of good alternatives for people who - the lack of good alternatives for people who are old and frail and who suffer from chronic pain.' (P1)

'But I think the wait list for the [local Integrated Musculoskeletal] service is quite lengthy at the moment' (P2)

Despite being difficult work, the healthcare professionals reported that it was sometimes easier and more rewarding than expected.

'It's not easy work. It can be quite stressful, it can be quite confrontational sometimes. Equally, it's relatively satisfying when you do get buy in from patients.' (GP7)

'I mean, some people were quite responsive to trying to reduce. You know, I think there's always this feeling among doctors, you know, that trying to reduce them will always be met with a hostile and defensive response, but actually, there are people who are quite keen and willing to reduce and feel better when they get on less medication, so it's not, it's not all a battle.' (GP1)

'So there are those patients who I've been, who I've spoken to who have actually shocked me in how much that they're willing to get on board with it. There's not as much, you know, honestly you take a big gulp before any of these conversation and sometimes it's really not as difficult as it might seem before you pick up the phone. And some patients are very willing and very understanding.' (P1)

'Some come in very, very, amenable and happy to just press ahead, and really want to come off the medication.' (GP4)

This was motivating for staff to continue with the work as felt to be making a positive difference to patients' lives (despite the resistance) as well as feeling appreciated and proud of the work.

'The lady, the mum of the gentleman who are both on pregabalin and tramadol, was having problems with sleep apnoea. The hospital were really quite keen for us to try to reduce these. She was really quite negative. Since she's done it, she's aware she's a lot more awake. The son says, "Yes, you did the right thing for my mum.' (GP3)

'And it's so nice to think I can say what I've done there, and it feels quite substantial. And I think the practice appreciates it, and I think feeling valued in your job makes your job a lot easier to do.' (P3)

Despite the emotional labour, keeping a positive mindset was also deemed to be important.

'And you know you've got your clinic in the afternoon which is going to be opioid reduction and you're sitting there thinking, "I wonder if anybody's going to agree to it today?" So if you're thinking like that initially, then you tend to approach it like that rather than trying to be positive and thinking, "Let's see if I can help this patient reduce their opiates." It's just trying to

remember that it's beneficial for the patient, [...] it's not just me trying to reduce something.'
(P5)

Facilitators

Several facilitators were identified with four key subthemes to achieve and sustain success when deprescribing opioids and gabapentinoids which were:

- Having dedicated time for designing and implementing this work
- Being person-centred to facilitate patient buy-in leading to adherence
- Supportive team playing to strengths whilst developing skills, knowledge and expertise
- Culture change is the ultimate goal

Having dedicated time for designing and implementing this work

This work was considered time-consuming and complex with patients who tended to have complex histories as well as complex lives and may have already not been able to reduce these types of medications in the past. This was a key barrier.

'They [patients] have a multitude of problems that they're prescribed a lot for, and by the time they, kind of, get to the higher dose opioids, they're on Gabapentin or Pregabalin, it's 'cause they've tried everything else' (P2)

'I think, pain, is a bit of an onion. There's so much more to it than the actual tablet, or the pain. And also, pressures people have. So, I've spoken to patients where they are- they would be able to manage a bit better, or maybe be able to reduce another one, but they're a carer for their parent, and that adds an additional pressure on an underlying illness that flares the pain' (P3)

It was acknowledged that due to the current time pressure in primary care, shortcuts may be taken to ease the strain.

'I do think time is the biggest single barrier to the whole thing, that if somebody comes in about something else, which you hardly have time to deal with, you're, obviously, reluctant to open up another whole can of worms that would probably take twice as long again to properly address' (GP1)

'But it [deprescribing] is relatively time intense. I think even for someone who wants to engage, it's relatively easy just to leave them on their codeine prescription, and just keep issuing it each month. It doesn't take much thought, or much workload.' (GP7)

Therefore, facilitating time for primary healthcare professionals to plan, design and implement the deprescribing work was vital.

'So it was about basically giving us a bit of protected time to look at the list and then try and devise a way in which we can really streamline it and make sure we don't lose patients or allow patients to go down a different route. And we could do that anyway, like we could have done that without doing part of the pilot, but it's just this pilot gave us a little bit more thinking space, I think or offered that time and that resource, to have a bit of thinking space, to do that work.'
(GP6)

'I couldn't have done the reviews without the time being put aside.' (GP4)

By facilitating this time and resource, this pilot was considered a good example of the benefits of being in the Deep End Network amidst the pressures that they are under.

'It does take quite a bit of resource, and I think that has been a significant barrier to us. That's where, I guess, Deep End's additional funding has opened up some of that for us.' (GP7)

'I do think this is a good example for the Deep End Network, it's beneficial to practices, I think [.....] And I think there's a strong argument that we should be doing this sort of thing without this funding and we should be, but it's sometimes just so hard to even get started on a project when everyone is so busy, and it has been great just to give us that space to get started.' (GP5)

Being person-centred to facilitate patient buy-in leading to adherence

Being person-centred was a key facilitator to the tapering work because it facilitated buy-in from the patients. Often the initial consultation followed a similar structure but was tailored to that specific patient. This structure included developing rapport by understanding the reasons behind why the patient was on the medication(s) by reviewing the patient notes prior to the review, considering the way other factors in the patient's life might affect their capacity to undertake a reduction as well as exploring the patient's thoughts and views. There was a balance regarding assessing and acting on risk as previously discussed *versus* developing rapport with the patient to assist with buy-in.

'I think it's sometimes finding out a bit more about the patients and actually finding out what they're doing, where they're at. I think those sort of conversations tend to mean that you can understand the patient, you can see where they're coming from and what's actually important

to them and what isn't. And then I think if you can find that out, you can then put your perspective into their perspective so that they know that you're with them and you're explaining how the reduction might benefit them in the long run.' (P5)

'I found it was important to try, at least, try to build that, a good relationship with the patient [.....] But quite often I wouldn't necessarily action any change in the first meeting, but depending on my availability, I could see them really frequently, so I had some patients that I was seeing on a weekly basis.' (P4)

Some interviewees spoke about the importance of showing the patient that they cared by listening and being compassionate. These elements appeared to be viewed as helping to develop patient trust. Building rapport was a gradual and slow process.

'If a patient burst into tears, you've got to be able to respond and, and react to that in a, in a human way.' (P1)

'It's slow, it's slow work, and you can't speed it up because then you lose the faith of your patients and you've got to have them on board to be able to manage it. And I think it's better to go slowly and successfully than too fast and lose their confidence.' (P5)

'And that is taking time, you know, I don't hit as many patients as I'd like to in one day because I am really trying to kind of build that rapport at first.' (P2)

Some decisions about how to approach the work promoted agency, which is the ability to act or choose which action to take (21), whilst other approaches removed it. Elements that promoted agency included the importance of pitching the communication, for example the way in which patients were invited, in a format that made sense for that patient, taking into consideration any additional needs they might have. These elements promoted agency as patients need to be able to understand the relevant information before being able to make an informed choice about which action to take.

'So, there are patients that are illiterate. There are patients that don't have the text message service. There are patients that don't have access to the internet. So, we had to be really mindful. We can't just say, "We're going to do this but here's a website." Because actually, that's not going to work for everyone. So, we needed to give multiple options to people but also lay them out quite clearly.' (P3)

As part of person-centred care, shared decision-making was strived for and viewed as an important aspect of this work.

'The idea is you're standing beside them [the patients], you're not standing over the table from the patient. You're standing beside them saying, "Look, here's the issue, here's your point of view, here's my point of view, let's try and negotiate a way through it." That's something you get better at, I suppose.' (GP2)

Shared decision-making also included flexibility such as considering the options and choices, where possible and as long as safety was not compromised. For example, choices around how to undertake the reduction was considered useful to help the patient feel they had some control. Therefore, patients' preferences regarding the following were explored to varying degrees in the medication reviews:

- which medication to reduce first, if on multiple medications
- how frequently the reviews should occur and by what means (telephone or face-to-face meeting) during the reduction
- the dose to initially reduce by

'I very much try to approach this with 'they need to know the safety aspects of it and the risks and the long-term effects, but if they don't want to, I'm not going to push it, because that needs to be a shared decision in the future.' (P2)

'Then I think kind of taking them slowly, probably two things, taking it slowly and negotiating with the patient about how you're going to approach it, and almost getting them to make the decision about how they want to reduce, what they're going to reduce, are they going to pick their gabapentinoid? Or are they going to pick their Oramorph? Or are they going to pick their MST, their longer-acting opiates? That seems to be quite effective, and getting some kind of buy in, even if it's small seems to be the way.' (GP7)

'And giving patients so that they feel that they have control over the matter, I've given control over the length of reduction, quite often anyway, unless like I said it was dangerous and we needed to get it down. But if not, then I would give them control over that.' (P4)

Providing support for the patient during the reduction according to their needs was vital and being flexible about the subsequent steps, where possible.

'So, I think it is sending out a message that we understand, "This is [a] difficult change to make for you, and we're trying to give you as much support as possible to make that change."' (A1)

'And there has, since then, been some [patients] whereby they've reduced to a point, and they've said, "I think this is my lowest effective dose." And it's about being a bit transparent and saying, "Okay, no problem. We'll pause you there. We might re-look at it."' (P3)

All these aspects appeared to help with adherence to the agreed plan. Some practices considered concordance by agreeing a negotiated plan taking into consideration both the patient's and the healthcare professional's perspectives. However, concordance allows that there may be an agreement to differ without resolution (29). Whereas other decisions that some practices implemented removed agency and concordance. These decisions typically were taken due to risk and safety as previously discussed, or to enable achieving the agreed goal. These decisions included patients being required to opt out of the work, forced reductions or during the reduction, patients could remain on a certain dose for a longer period of time but not increase.

'The same thing we do in the letter is put this, "If you don't come within three months then we're going to have to start to reduce it without your help."' (GP3)

'Some of the rules, I don't want to call them rules but they sort of were where if we made a reduction we wouldn't backtrack on the reduction but we could prolong the period of time that we might stay at a specific dose.' (P4)

Conversely, the decision by some practices not to push too hard or remove agency by forcing the reduction were due to concerns about the impact on that patient's mental health or that the patient was likely to find another way of getting the medication.

'I sometimes think that if they've got more depressive qualities, if there's something else going on, and I've seen people for mental health, Talking Therapies, all that type of thing, I'm beginning to think actually I'm not sure I'd be very comfortable reducing them because actually I don't want to push them into a situation where they can't cope.' (P5)

Being persistent was reported to be important and even if it appeared not to be the right time to start tapering the medication(s), agreeing to review this decision in the future was a useful alternative.

'And when you do find out what's going on in their lives, you can realise that sometimes maybe this isn't the right moment. I suppose I then will say, "Okay, I can see that it's not right now, but we do really need to address this at some point, I'll give you a ring in a month's time."' (P5)

Supportive team playing to strengths whilst developing skills, knowledge and expertise

Each practice implemented a team approach which often included pharmacy support, such as pharmacists undertaking and/or leading the work. Playing to healthcare professionals' strengths but also helping staff to develop their skills, knowledge and therefore expertise for the practice was considered to be useful. This included deciding who the most appropriate professional to undertake each review was.

'I think it's good work for a pharmacist to, to do actually. I, I think it suits my skills. It suits, you know, sort of, the, the, the work that I would be doing anyway, it fits in quite nicely. It's just, kind of, like an extra step in a way.' (P1)

'So we're trying to identify who is the right person to see each patient that is coming from that list.' (GP6)

There were limitations to what could be offered by certain occupations and some patients questioned the validity of the recommended reduction if it was not from a doctor or the professional who had originally prescribed the medication (e.g. secondary care doctor). However, this could be overcome with teamwork, providing consistent messaging from the different professionals, and considering the needs of the patient.

'And I think coming in as a pharmacist, maybe a certain barrier there I'd find with certain patients was that they had a perceived idea that a doctor had, obviously a doctor, had usually started these medicines, but they had an idea that the doctor thought these medications were fine. So sometimes coming in as a pharmacist, they would think I was sort of going against what a doctor wants. So, I think in those patients, me and GP7 working together was quite good because we could bounce the patient to and fro so they know that it's obviously a joint decision for the whole practice, it's for their benefit, it's not going, you know, against what a doctor said in the past.' (P4)

'And some again, don't understand it, they're confused as to why they need to stop, they think it's worked for X amount of years, why would I stop now, and well, I know X doctor and they see me regularly and they've never mentioned it or they're happy for me to be on it, so I don't want to talk to you I want to speak to my GP.' (P2)

'I do think it is about everyone saying the same thing, "This is not the best thing for your health. There are risks to this as well as benefits."' (GP3)

Clear consistent communication also help to avoid undermining the work which included good documentation and staff knowing and following the approach (with development and sharing of evidence-based policy/guidance for the practices and prescribing hubs with reminders).

'It's that communication so that you're working together as a team. I find, also, if my colleagues have done the same thing, they've written down a really clear plan, I'll say, "This is the plan, we need to stick to this plan. Nothing you [the patient] have said means the plan should change, you've not broken your leg or something or had a..." You know, if they come along with something different then yes, you change the plan but if there's no change then we're keeping to the plan.' (GP3)

'I think it's important that they're [wider team at the practice] aware that work is going on so that they don't contribute to the problem, which sounds harsh.' (P1)

'I've created a very simple, kinda NICE guidelines sheet to follow, of all the, kind of, commonly causes of pain and what NICE guidelines say to prescribe.' (P2)

A supportive team approach was important to share the burden of the work due to the associated challenges, such as difficulty in persuading the patient or making difficult decisions such as when to force a reduction.

'And there were some patients who were generally on really unsafe combinations and doses of medicines who, we did, after several, you know, conversations and consultations with the patient, we did end up dose-reducing sort of against their will, but that was like a shared decision with myself, their GPs and... I know it was only a small proportion that we did that for'
(P4)

The other ways of fostering a supportive team approach included having or offering debrief and/or supervisory sessions, sharing resources (including from other practices), working in a communal space during the day to facilitate checking in:

'Then, P4 and I are trying to do a fortnightly debrief if we can, partly just to discuss things we've learnt, things that are working well. Then also to offload a little bit, and destress about some of the more difficult consultations that we've had.' (GP7)

'So we've always made a point of having a bit of communal time every day [.....] So there's an opportunity every day you're there to discuss people if you're not sure what to do' (GP1)

'So yeah, I think it was key to have that supervision, to be able to check in with one of the GPs and discuss it.' (P4)

Teamwork was not the only important aspect; the development of skills, knowledge and expertise of the team undertaking this work was another key element. This was approached in several ways such as learning by experience (e.g., undertaking and reflecting on the approaches taken), learning from others (including experts such as the clinical lead at the nearby Pain Clinic and adapting existing external resources) and staff training.

'So, I think we looked at why previous attempts hadn't worked.' (P3)

'I suppose the other thing is the actual consultations themselves are high challenge consultations and need...Like you get better at doing them.' (GP2)

'P4 and myself have already just up skilled ourselves a little bit, I guess, just by looking at online resources, reading, just so we feel a little bit more sure of ourselves when we're talking to patients. We've just, kind of, up skilled and brought up our level of understanding, I think, compared to our peers, and that's helped....' (GP7)

'And one of the GPs produced a talk to remind prescribers about the other things you can do for pain rather than just prescribing opiates, and the issues around prescribing them.' (P5)

Culture change is the ultimate goal

Ultimately, all the facilitators lead to the ultimate goal of needing to change the culture to ensure success and sustainability of this work: patients should not be on inappropriate doses of these medications for inappropriate reasons. This includes both new prescribing and deprescribing of these medications and encompasses not only primary care but also the wider sections of the healthcare system. Some interviewees were even explicit about this requirement.

'I think it's about trying to instil a culture around opiate prescribing because I feel like if we're chipping away at people's MST and Zomorph at one end, and then other members of staff are starting people on Zomorph and MST for inappropriate indications at the other end, then it's going to be never-ending.' (P1)

'Yes, that's a change in culture because before people would go, "I've got pain." "We'll give you painkillers." It was a quicker consultation just to up the ladder than it was to say, "Woah, why are we doing this, what's the right thing to do?" I think that's the change which we're having to do as clinicians.' (GP3)

Demedicalising pain was viewed as important to facilitate this culture change. This included helping patients learn to live well with pain but acknowledging that chronic pain is complex and hard to cope with.

'I spend a lot of my life speaking to people of 70, 80, or 90 [years old] saying, "Why isn't my body very good?" You have to say, "Well your body is getting older, it's not going to work so well. This is normal. To have some pain is normal, you don't have to have a tablet to take it away.' (GP3)

'And it's about having that appreciation that we can't make pain go away. We can make the suffering go but living with pain is something that we need to focus on.' (P2)

'Chronic pain is the label, but often it's not just pain, is it? It's the whole complex scenario of social situations, mental health.' (GP7)

'Chronic pain is a horrible thing to live with. I always acknowledge that and I always acknowledge that it's going to be a bit of a journey to get them where we need them to be with with our medicines.' (P1)

There was an acceptance that healthcare professionals had a part in creating the situation whereby patients are on inappropriate doses of these medications. Communicating this to the patients was viewed as useful to help the patients understand why deprescribing was now being recommended.

'Often we've created this problem, it's not the patient's fault, I think that's what we kind of forget, sometimes, we all know what is now a problem that is purely of our own creation when you look at the historic prescribing, you know it was appalling, people started with pregabalin and titrated up to maximum dose with no real clear benefit to them whatsoever. So I do try to explain that to patients and sometimes say look, we are reviewing these medications, we want to reduce people from it, it as our fault that you're on this medication, it's probably not safe in the first place.' (GP5)

Limiting the number of these medications being started in the first place was viewed as important.

'I think an important part of this work is making sure that that we're doing it, we're getting it right at both ends because actually, you know, the easiest way to stop people from getting onto high doses of opiates, it's to not prescribe them in the first place, in my opinion.' (P1)

'The other part of it was very much making us all aware about it and kind of agreeing, I guess, to be much more reluctant to start them.' (GP1)

Additionally, if having to start them, recommendations by the interviewees were to use low doses initially and manage patients' expectations at the outset that these medications are only short-term with ongoing review.

'Or if you do start things [prescriptions], give smaller amounts of prescription and time-limit them.' (GP3)

'...that if patients are started [on these medications] there should be a review process and a patient shouldn't just have it put on repeat and then just continually doing it. Within three months, they should have been reviewed, check it's working. Is it appropriate to continue with it? If it isn't, then it should be stopped.' (P5)

Considering alternatives (such as referring to other teams if appropriate, for example to physiotherapy, the nearby hospital pain service or psychological therapy or signposting to self-help resources) as well as having a multidisciplinary approach or group sessions to help support patients with chronic pain were also considered useful. This was despite the previously described barriers (such as long waiting lists) which would need to be overcome. These aspects sit alongside the deprescribing work.

'So the idea is to try and discuss it with them and broach their possibility of reducing, giving them the pros and cons, suggesting Living Well with Pain approach, suggesting other means of managing their pain rather than just with painkillers, and referring them on where we can.' (P5)

'I think we probably could do more along the kind of multidisciplinary team approach. So you know, I have thought we'd be good if we could combine a kind of physio-pharmacy session where someone comes in and sees the physio about the pain that they've got, and then sees the pharmacist about reducing their medication, you know, that kind of thing.' (GP5)

Also, this culture change may help reduce or even remove the expectations from patients that healthcare professionals will cure their chronic pain and/or that pharmacological alternatives should/would be provided. This may help alleviate the pressure that the healthcare professionals feel about providing another pharmacological treatment.

'I guess, ultimately, we often offer patients some other medications instead, because that tends to be the most successful consultations, if you're taking something away, it's very, very difficult not to replace it with something.' (GP5)

'The other response that we get commonly as well is, "Okay, so if you stop my morphine, what am I going to get instead?" It's very common because, you know, the patients have a sort of expectation that, you know, this pain that they have every day, if it can't be treated with morphine, then it's going to have to be treated by something else.' (P1)

'You know, we want to help people and we want people to feel that we're helping them as well, which isn't always quite the same thing. Yes, so it's very hard and other options are limited [...] There are people who are really in pain and we want, we want to help and we have the power of being able to prescribe and give them things, and it's hard not to.' (GP1)

Defining and measuring success of the intervention

As seen in the previous section, culture change was seen as the ultimate goal to ensure sustainability of this work. But it was often not how interviewees defined and measured success of the intervention they had developed in their Deep End practices. Most practices reported the work had been successful whereas one practice did not due to how difficult it had been to set-up due to infrastructure and staff capacity.

'I feel really bad saying this, but we don't think it has been that successful. And just because I found it difficult to start it [.....] So we're trying, but it does feel like it's an added pressure to the practice, because we can't seem to get it. I think it's a reflection that we're quite a small team, and we've had a lot of change in the last sort of three months. But we'll keep trying...'
(GP6)

Success was viewed in several ways and included developing a systematic approach to tackle this work sustainably and setting the groundwork as this work was viewed as a long-term project:

'I think, for me, if we can just think about having some of these discussions with the patient and then, as you say, embedding how we're going to keep it going. So even if it is just searching for codes or having that or somehow having a better process to flag these people on opioids, and therefore need a longer discussion, I think that would be good.'
(GP6)

Another element of how success was defined for this intervention was around safer prescribing including starting less of these medications in the first place:

'Less prescribing of the medication, so less gabapentinoid, less morphine, less tramadol. Two, less initiation of the medications.' (GP3)

Achieving any reduction for inappropriate prescriptions of these medications, being on safer doses if a patient was on previously dangerous doses or even patients agreeing to reduce were viewed as other measures of success.

'...I think anybody who you can reduce is helping.' (P5)

'So from that point of view, we used to have a number of patients on really, yeah, unsafe prescriptions and I think the prescribing has become safer, I think it's... By that token, I think it was a success.' (GP2)

'Somebody might say to me, "Well I'm going to get my knee replaced, I'll reduce my tramadol when I've had my operation." I'll say, "That's fine." Make it quite clear in the notes, post-operation, we're going to reduce tramadol. To me, that's a successful consultation, if that makes sense.' (GP3)

Some of the success in achieving a reduction in the prescribing was attributed to the approaches that practices took as some were stricter than others. For example, as previously discussed, some practices forced reductions if the risk was too high as previously discussed or included an opt-out system whereby if the patients did not engage, a reduction would automatically start:

'And I think one of the reasons this has been so successful is it's an opt-out letter. But with the backing of support. So, if we don't hear from you, we understand that you're quite happy with us to reduce this, and that is what will happen.' (P3)

Collecting both quantitative and qualitative data were reported to be important to provide a more complete understanding of the work's impacts. Despite the practices being involved in the design of the template to capture the quantitative data at the start of the pilot, collecting these data during the project were considered burdensome. This was mainly due to a lack of clarity and how finding the information was both time-consuming and difficult.

'What there isn't a code for is the gabapentins. So there's no code to say we're reducing the gabapentin. And there's no way of measuring – or I can't see a way of measuring, at the moment – gabapentin only, without pregabalin mixed with it.' (GP6)

Also, care is required about specifying the denominator and what is being counted as doses had reduced but more prescriptions were being issued. This then may affect other incentivised linked work.

'You will always have, any one particular month, there might be a fluctuation in the prescribing rate. And that's not a reflection of the same patients, it's a reflection of all of the patients. So I find that really frustrating, because you can't quantify it really, unless you look at literally the same patients.' (GP6)

'And they [a regional prescribing scheme] also look at pregabalin and gabapentin prescribing and success for them is a reduction in issues [of prescriptions]. And there is a bit of financial benefit to the practice if we can reduce our issues, but it's not huge. But interestingly, what they look at is not the total quantity of drugs, it's the issues. So P2 came to me and said, "I'm worried this is going to affect our [regional prescribing scheme] data."' (GP5)

Additionally, some practices had already undertaken work on reducing opioid and gabapentinoids prescribing prior to signing up to the pilot and were concerned how their data might be interpreted compared to other practices.

'...one of my concerns is that we have already picked, we talked about how we approached it in terms of particularly the low-dose opiates, we've picked a lot of the low hanging fruit early on. So, I think we might see it flattening out. I don't think that's a reflection of poor performance. I think that's a reflection of the work getting harder, and I think I'll be keen to emphasise that when we do look at the figures, really.' (GP7)

Discussion

Summary

This report summaries the key findings of the qualitative evaluation of opioid and gabapentinoid deprescribing in high-risk patients in NENC Deep End Practices. Time was a key facilitator for NENC Deep End practices to enable the design and undertaking of this work in their respective practices. The approach also enabled practices the flexibility to decide how best to implement the work according to their patient population. Person-centred care with shared decision-making was very much strived for. Undertaking deprescribing work could be difficult due to the way some patients react but also due to the difficult decisions that the healthcare workers must make, especially if patients on high-risk (including life-threatening) doses of these medications do not engage or refuse to engage or there were concerns about diversion to others. Sharing these difficult decisions with colleagues and working as a team appeared to help share this burden. The findings of this qualitative evaluation have informed the recommendations below which will be useful when undertaking similar work in primary care settings, particularly for practices that cover socio-economically deprived areas.

Policy and practice implications and recommendations from TAPER qualitative evaluation

The recommendations have been divided into the respective categories: the Deep End Network, Deep End Practices, and commissioners and wider system.

For the Deep End Network

- Funded dedicated time was a key facilitator in undertaking this work in Deep End practices and could be considered as an approach for other Deep End practices. This recommendation should be considered in conjunction with the quantitative data which is not yet available.
- If widening out the approach, a frequently asked questions (FAQs) document could be developed to help other practices have a better understanding of how to approach this work and what to expect when undertaking it. This may help dispel myths around deprescribing these medications.
- If widening out this approach, a pre-requisite for each Deep End Practice should be implemented. This pre-requisite should require that at least two named staff members from each practice be interested in and willing to become a team to undertake the work with some administrative support. Pharmacists should be included where possible.
- To help support practices, the Deep End Network should create either a document or online repository with the pooled resources that Deep End practices can use and adapt

(e.g. invite letter templates, policies/guidelines) to their patient population. Consider making available an offer whereby new practices link up with/be mentored by a practice that has undertaken this type of work before.

- Training and upskilling for the professionals involved is important. The Deep End Network should scope out and list the available training offers for Deep End practices so each practice can decide which offer(s) to access accordingly.

For Deep End Practices

When designing and delivering an intervention for opioid and gabapentinoid deprescribing:

- Each practice should agree internally how they will select, identify, and notify the relevant patients. To help with time management of rolling out the intervention, consider doing this in waves (e.g. high risk, moderate risk, low risk or delegating each risk category to relevant members of staff depending on patient numbers/skill set of the professional). Invitation for the medication reviews should be easy to understand and needs of the individual patient should be considered. This is particularly important if patients are for example visually impaired, unable to read or need translation.
- Each practice should agree internally how they will approach the medication reviews including steps to undertake for non-engagement or patient refusal to reduce. GMC and NICE guidance can assist with these decisions.
- Support for the professionals involved is recommended (e.g. regular debrief sessions/supervision) to help with the emotional aspects of this work. This could be within or between practices undertaking this work.
- Patient involvement in the development and evaluation of the resources and approach would be useful.

When considering the structure of the medication reviews with patients to optimise adherence to the plan:

- Communicating that the guidelines have changed is important alongside the evidence-base for managing complex pain. This should be done in an easy-to-understand way; analogies were viewed to work well.
- Being patient-centred and building rapport to facilitate patient buy-in was viewed as important. Key aspects included taking the time to listen to the patient (including why they are on these medications, how they feel about the medications, and other factors in their life that may affect engagement/concordance/adherence with tapering).
- Offering choices to the patient about the process of tapering, where possible, helps. This could include which medication to reduce first (if on multiple medications), how

frequently the reviews should occur and by what means (telephone or face-to-face meeting) during the reduction as well as the dose to initially reduce by.

- Offering support tailored to the patient during tapering is important. This includes regular check-ins with the patient at a suitable time and mode.
- If patient non-engagement, explore reasons for why to help address concerns. Consider offering another appointment with an allied professional that knows that patient well, for example, their named GP (if not the person instigated the review).

Commissioners and wider system

To facilitate opioid and gabapentinoid deprescribing and ultimately a culture change whereby patients are on the appropriate doses for appropriate reasons for appropriate durations, the following should be considered:

- Any allied work within the system, especially if incentivised, should be complementary. For example, any allied work should measure complementary measures of success, such as doses of prescriptions and not prescription issues.
- During any evaluation:
 - both qualitative and quantitative measures should be collected that consider the context for each practice (for example, prior work undertaken in this area).
 - develop the evaluation methods with healthcare professionals and patients, where possible, to ensure the process is acceptable, meaningful, and not overly onerous.
 - for quantitative measures, be clear about the denominator and what is being counted over what period. These measures should be interpreted considering the uniqueness of the Deep End and may take a considerable amount of time to demonstrate a sustained reduction.

Strengths and limitations

Several practices were involved in the pilot from across the NENC region with interviewees having different professional backgrounds adding to the richness of the findings. Data was collected not only from interviews but also from observations at the peer-support meeting enabling triangulation. The transcripts were coded by two researchers adding to the research finding's credibility. Furthermore, the findings and recommendations were shared with the practices involved in the pilot and reported to be an accurate reflection.

The practices were at different stages of undertaking deprescribing work and some practices had started similar work before the pilot. Interviewees were only interviewed once during the pilot and for example, the practice that did not think the pilot had been successful at their

practice, only one member of staff from that practice was able to be interviewed in the initial phases and therefore perceptions may have since changed. Regardless, the learning regarding the barriers this practice faced is useful and has been included in the recommendations. The quantitative data has not been seen by the research team which these findings should be viewed in combination with. A further limitation was that patients were not involved in the design or evaluation of the pilot; their involvement should be considered in future work.

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