Academic Health Science Network
North East and North Cumbria

Rapid Insight Report Opioids and Pain

What this report is setting out to do:

This report is a rapid insight into the services available to patients across North East and North Cumbria to manage chronic (non-cancer) pain. It also includes drivers for the historic high rates of opioid prescriptions to manage pain and the development of interventions to support patients to manage their pain better and reduce use of inappropriate medication. The Academic Health Science Network (AHSN) North East and North Cumbria (NENC) have created a picture across the Integrated Care System (ICS) of both the rates of opioid prescribing and have mapped some of the resources to manage pain within the ICS (Supporting Better Management of Chronic Pain in NENC Report).

It has been recognised that inappropriate opioid prescribing for persistent pain is a symptom of several wider issues, most significantly lack of awareness or availability of other ways to manage chronic pain.

Chronic pain (sometimes known as long-term pain or persistent pain) is pain that lasts for more than 3 months and affects 34% of the adult population. Pain can be secondary to (caused by) an underlying condition (for example, osteoarthritis, rheumatoid arthritis). Chronic pain can also be primary. Chronic primary pain has no clear underlying condition, or the pain (or its impact) appears to be out of proportion to any observable injury or disease.

Background

NENC has a high use of opioid medicines with all Sub ICB Location's (SICBL) having a higher overall prescription volume than the national average (Figure 1).

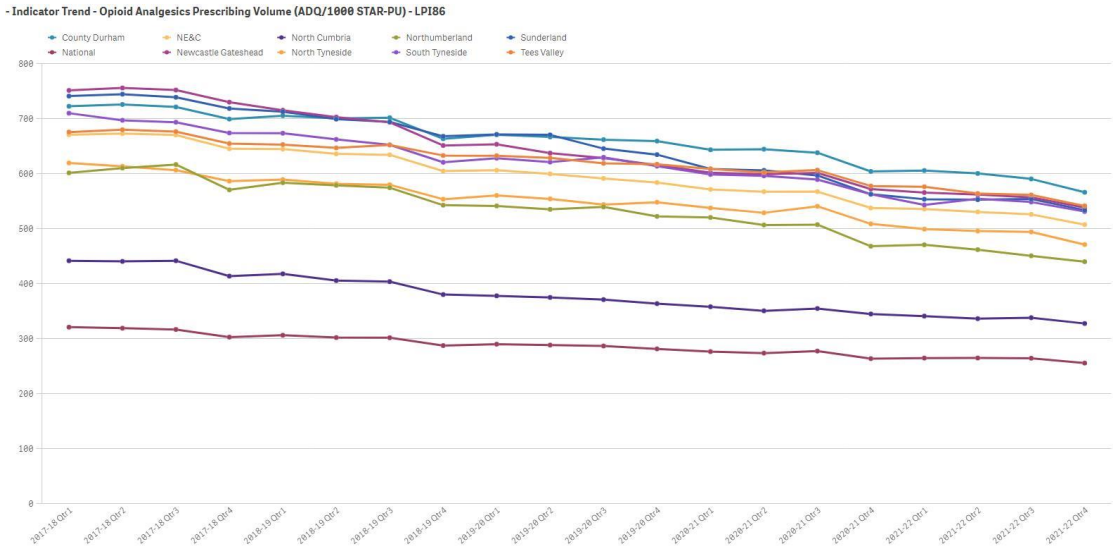


Figure 1. Opioid Use with all Sub ICB Locations in NENC compared to national average.

However, all places are reducing opioid prescription at a faster rate than seen nationally. As the concerns of the overuse of opioids to manage chronic pain has become more accepted and the dangers of high dose prescribing, the rate of these prescriptions has

fallen at an even faster rate. Figure 2 shows the percentage of high dose opioids as a percentage of all opioids, all NENC SICBLs are lower than the national rate with some places making significant impact on their rates (North Cumbria, North Tyneside, Northumberland and Newcastle Gateshead).

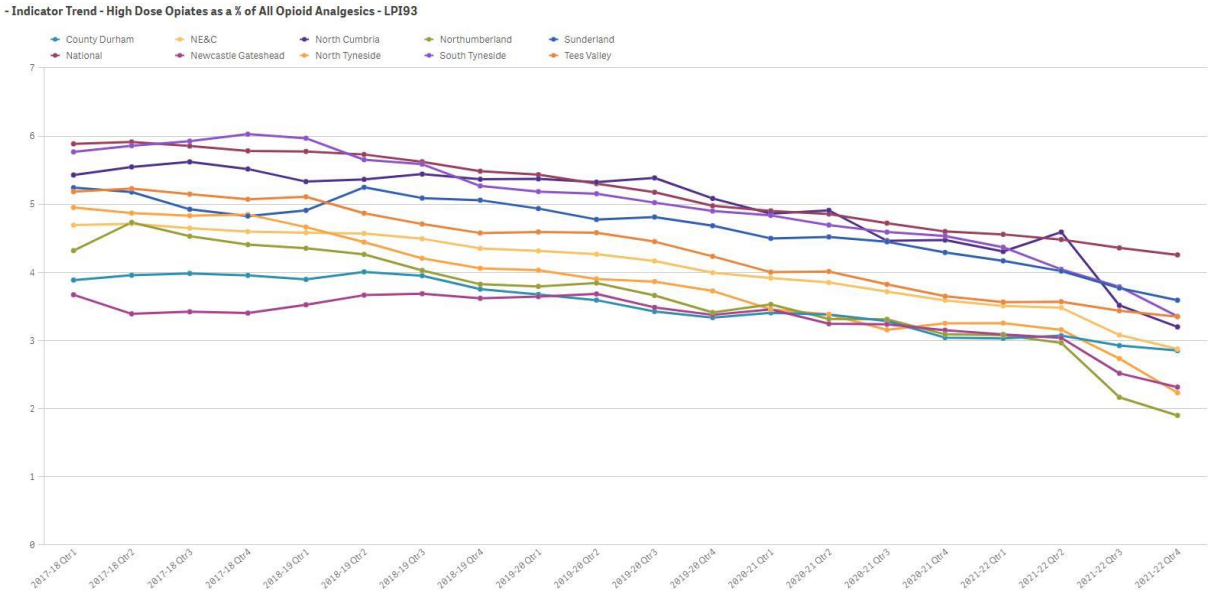


Figure 2. Percentage of high dose opioids as a percentage of all opioids in all NENC SIBLs compared to national average.

Figure 3 shows the volume of high dose opioids being prescribed with all places having falling rates and four places now having lower than national levels (Newcastle Gateshead, North Tyneside, Northumberland and North Cumbria).

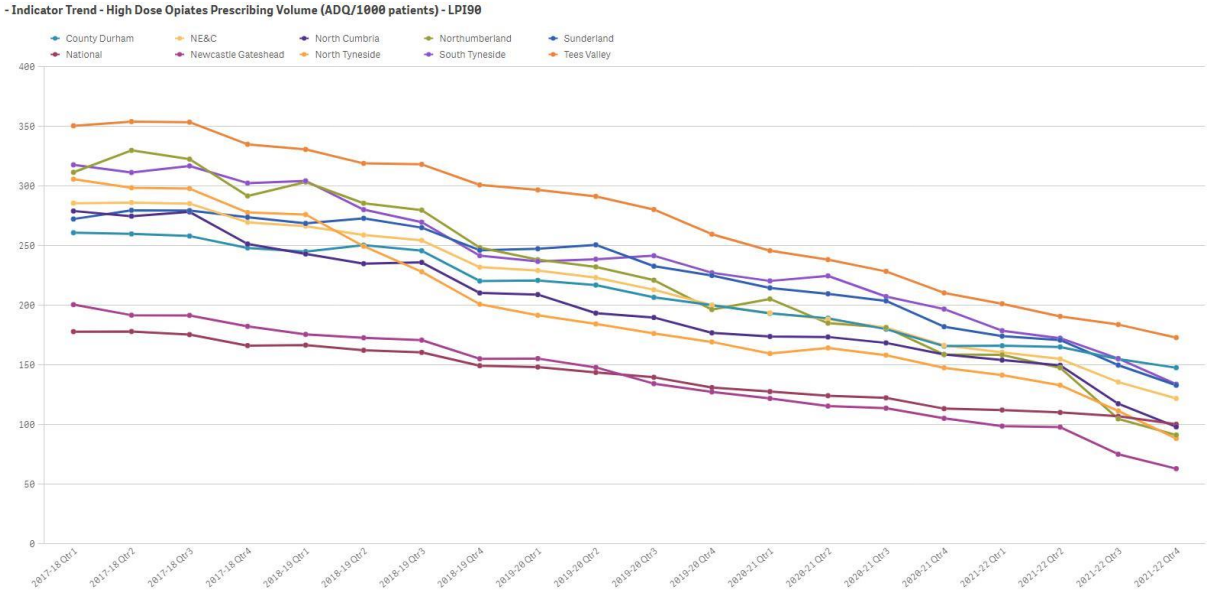


Figure 3. Volume of prescribed high dose opioids compared to national average.

National Opioid Landscape

Opioid analgesics have a place in the management of acute pain and end of life care but there is limited evidence that their use in chronic pain is of any value, and indeed plenty of evidence that they cause harm. Medicines Optimisation teams have been concerned by the over reliance on opioids in the management of chronic pain for some time and have been working, mainly at place, with their systems and prescribers to reduce use. More recently the national Patient Safety Collaborative (PSC) has commissioned the Academic Health Science Networks (AHSNs, 15 across England) to support the reduction in opioid use. Alongside this initiative the current Primary Care Network (PCN) Direct Enhanced Service (DES) incentivises Structured Medication Reviews (SMRs) for patients on dependence forming medicines.

National Pain Landscape

National drivers for changing the way in which chronic pain is managed include the Best MSK Health [Best MSK launch] and revised NICE Chronic Pain guideline [ng 193], (which can be read in conjunction with ng 59) and SMR review of patients on dependence forming medicines (as part of the PCN DES contract). Policy is dictating that social care, mental health and musculoskeletal service be integrated, streamlining a patients journey through the system and promoting a patient centred approach.

ICS Pain Landscape

The North East North Cumbria has a higher prevalence of MSK problems with reported higher than average long term MSK problems (2019 data). The England average for long term reported MSK issues was 17.0%, compared to NENC, 22.5% (R18.6-23.8). This factor coupled with higher rates of deprivation have contributed to higher rates of opioid prescribing in NENC compared to the rest of England.

Population Health Drivers

Following the COVID -19 pandemic, the NHS acknowledged the impact of deprivation on health care inequalities and created the Core20PLUS5 approach – which focuses health care on the 20% most deprived population in the country as defined by Index of Multiple Deprivation (IMD) , PLUS population groups which could include those who are known to have poorer access to healthcare and poorer outcomes (homeless, substance misuse, learning disabilities, ethnic minorities, young carers and people experiencing multi morbidities). The five clinical focus areas are maternity, severe mental illness (SMI), chronic respiratory disease, early cancer diagnosis, hypertension case-finding and optimal management and lipid optimal management.

In the NENC region, 20% of the most deprived people in the country take up 33% (approximately 1 million) of the region's population of approximately 3 million. 40% of the countries most deprived people take up 70% of the NENC population (over 2 million people).

This is the scale of deprivation in the region, however in some localities this is more pronounced. For example, in Middlesborough, 50% of the population sits within the 20% most deprived in the country.

Deprivation contributes to the regional life expectancy gap, whereby women in the region can expect to live 8.1 years less that the national average and men 10.4 years less. What contributes to this disparity in life expectancy is the long-term health conditions experienced by the more socially disadvantaged populations. In this population, the onset of chronic conditions often presents earlier in life, despite life being shorter resulting in increased contact with healthcare services. Some of these long-term conditions are related to chronic pain.

There is a disproportionate correlation between the accidental death rates and social inequalities, more deaths being recorded in the more disadvantaged areas, and it is in these areas that there is a correlation between volume of medication being prescribed. The drivers behind this prescribing behaviour need to be understood.

In males, the second highest reason for the gap in life expectancy is classified as 'external causes' and includes accidental poisoning, drug related deaths and suicides. 1.2 years of the life expectancy gap in males is deaths due to accidental poisoning and has a greater impact than lung cancer on this population, making the years lost to accidental deaths significant (See Figure 4).

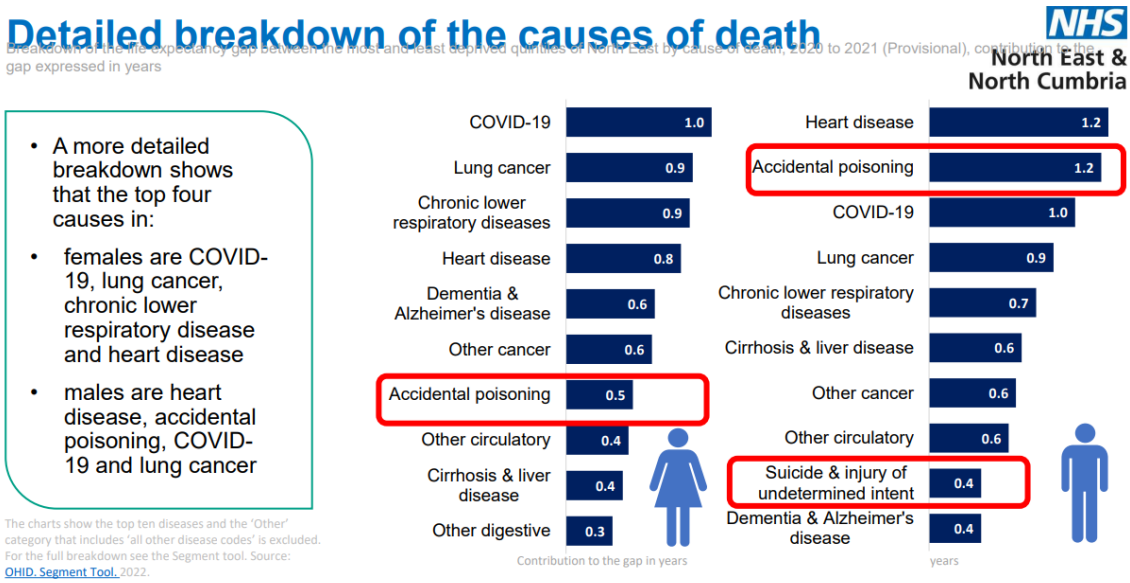


Figure 4. Causes of Death in Males and Females in North East and North Cumbria

In suicides, suspected suicides, and accidental deaths where the coroner cannot make a verdict, the role of opioids is significant. A thematic analysis of coroner's reports show empty opioid packages or toxicology evidence demonstrating that medication played a big part in such deaths.

There is a coupling effect connected to some deaths. Suicide is coupled to a context – it is not simply the act of a depressed person – it is depressed people, at a particular moment of vulnerability and in combination with a particular, readily available lethal means. In this case, particularly of the socially disadvantaged of the region – this lethal means is access to strong opioids.

Opioid medication must be carefully prescribed and monitored to ensure proper use, particularly in more socially disadvantaged populations.

Problem - when and why are opioids being prescribed?

There is an increasing reservoir of opioids in circulation due to lack of post-surgical medicine review and lack of medicine reviews following acute pain presentation. This results in unnecessary repeat prescriptions without medical review along with historical long term use of opioids.

Elevated number of patients taking high morphine equivalent dose of opioids making accidental deaths and suicides more prevalent.

There is a two-fold requirement to 'turn off the flow' and stop patients moving into chronic long term use of opioids and 'release the dam' by reviewing and reducing prescribing for those patients that have been taking opioids long term and/or at a high dose.

Access and Use of Opioid Medication

Chronic use of opioids (taking opioid medication for 3 months or more) is associated with significant harms. In most cases, opioids should be used for the shortest time possible for acute pain. Patients initiated on long acting opioids had the highest probabilities of long-term use (27.3%).

If a patient is given 1-month worth of acute opioid prescription there is then a 30% chance of that patient being on opioids one year later. It is therefore important to ensure that the minimum amount of opioid medication is supplied for an acute indication (e.g. post-surgery) and any request for repeat supplies are reviewed appropriately.

1 in 7 patients who receive a repeat prescription of acute opioids were on opioids one year later. Lack of review of patient acute prescription increases likelihood of a patient taking opioids for more than 3 months moving them into chronic use and increases risk of harm.

Urgent and Emergency Care providers find it difficult to manage patients who present at their service with pain. Lack of access to patient specific plans and records can mean that opioids can be provided where requirements are difficult to assess which in turn can perpetuate drug seeking behaviour and undermine reduction strategies in place with the patient's primary care practitioner.

Combined opioid over the counter medication is available from community pharmacies for patients to purchase without the need to involve their practitioner. This can add to the overall

amount of opioid that the patient is taking. Education and advice at community pharmacy point of contact is essential.

Patients overall dose of opioids may be increased, often without any or comparable improvement in their pain control which causes increase in patient harm. Those on morphine equivalent dose of 120mg per day of more are deemed to be high dose opioid users. It can be difficult for prescribers to calculate oral morphine equivalent when the patient is taking various opioid medications, which can include patches and liquid taken on an as required basis.

Pain Education/Science

Medication to actually kill chronic pain does not exist. 30% of analgesic drugs, work 30% of the time, in 30% of the people with an efficacy of 30%. Joint injections last about 2-3months before needing to be repeated.

Existing GPs, and other healthcare professionals in their late 30's or 40's received approximately 1-12 hours of pain science education while 20% of the population experiences chronic pain. 20% of surgical patients end up with chronic pain.

As the understanding of pain science increases, the beliefs of both patients and healthcare professionals need to be challenged and a better solution than the current reductionist model needs to be integrated into the healthcare system that addresses the biopsychosocial model and takes a Trauma Informed Care upstreamist approach.

Pain science involves prediction, processing, and protection, it is the body's alarm system, however the brain cannot distinguish between emotional and physical pain.

Pain can be categorised into nociceptive or acute pain resulting from inflammation, infection injury and will respond to medication and interventions; neuropathic pain resulting from nerve damage and nerve injury conditions; and nociplastic pain which is the result of a person's experiences.

Healthcare specialisms can sit in various domains:

Complicated – where a process can be created where a cause consistently produces a predictable effect.

Or complex where cause and effect do not necessarily correlate. This is where pain sits. Multiple factors contribute to the presentation of pain (microglia, epigenetics, sleep, physical activity, microbiomes, sleep, physical activity, trauma and its impact, behaviour change models, central sensitisation, obesity, predictive processing, the opioid crisis).

To make sense of this world, make a decision within this chaos, that is appropriate for the healthcare professional, the patient and for that decision to be sustainable, the boundaries of primary, secondary and community care must be crossed and understanding the habitat in which pain patients are living must be understood.

It is not realistic to expect to control pain, however mastery to live well with pain, with resilience and continuous progress is possible. A successful outcome is to have the stability and resources to change behaviour, make mistakes and recognise the patterns.

Pain Patient Presentation

An upstreamist, trauma informed care approach is being adopted in many psychologically informed pain services. This approach recognises the previous biopsychosocial experiences a person may have been exposed to result in their current presentation.

It has been identified that Adverse Childhood Experiences (ACE's) influence health outcomes. The San Diego ACE's study from 1996 has been successfully replicated in many countries.

In 2014 Bellis et al demonstrated in the UK that ACE's contribute to poor life course health and social circumstances and are linked to involvement in violence, early unplanned pregnancy, incarceration and unemployment, suggesting a cyclic effect can have higher risk of exposing their own children to ACE's.

Fifty percent of the population experience one ACE before the age of 18. Twenty-five percent of the population experience four or more. A study in a UK secondary care pain clinic in 2018, showed that over a 10-week period, 40% of new patients had experienced four or more ACEs on evaluation, confirming that people with ACE's are three times more likely to have chronic pain.

High ACE scores, limited support and resilience result in nervous system dysfunction, immune dysfunction (auto immune conditions and cancer) mental health issues and metabolic syndrome, which reduce life expectancy on average by 20%.

Adverse experiences or trauma are defined as a normal response to abnormal events, when a person was unprepared, the trauma was unexpected, and nothing could be done to prevent it.

For pain management to be effective, the person involved must feel psychologically safe and supported, before behaviour change can take place to manage their pain more effectively.

Therefore, it is important to acknowledge that people experiencing persistent pain may have been exposed to trauma and it is important to be curious about what happened to a presenting patient before they arrived in the healthcare system.

In order for this to happen, the way health care professionals understand and communicate about pain must be prioritised.

Communication Across the Healthcare Ecosystem

It is recognised that the issue of pain management and harms caused by opioids for chronic non-cancer pain must be communicated across every level in the health care system. Work has already begun to facilitate this:

Public Health Campaigns

Several projects have been created across the region to help disseminate the messages regarding pain killers and pain management to help change the public's perception of this topic.

Flippin' Pain (flippinpain.co.uk) - the premise of the website is to change the way the public think about, talk about and treat persistent pain. Events are planned virtually and face to face and are advertised on the website.

Painkillers Don't Exist (painkillersdontexist.com) is a web based public health campaign which educates about what can and cannot be expected regarding the effectiveness of pain killers. It is a North East based website centred in the Sunderland and Durham area bringing together education, advice and patients stories.

Health Care Ecosystem Messaging

Make Every Contact Count (MECC)

MECC is an approach to behaviour change that uses the millions of day-to-day interactions that organisations and people have with other people. Opportunistic delivery of consistent and concise healthy lifestyle information. Evidence suggests that the MECC approach could potentially have a significant impact on the health of our population.

Specific messages have been created about smoking, alcohol and healthy weight then disseminated through various organisations.

Currently there is no messaging around harm caused by opioids prescribed for non-cancer pain.

Individual

To facilitate a mutually beneficial outcome between patient and clinician, several primary care providers across the region are changing the way they work with regular attending patients who experience persistent pain.

Familiar face approaches are being adopted, whereby those patients who experience the chaos of persistent pain and regularly attend primary, urgent and emergency care are identified and invited to attend longer focused appointments. In these appointments a better understanding of the patient, their circumstances, and the ecosystem in which they live can be gained and more appropriate signposting to services can be achieved using shared decision making, motivational interview techniques and coaching.

Training in coaching and shared decision making is available through the Personalised Care Institute Personalised Care Institute.

Although the process of shared decision making is more time consuming, evidence is being collected that demonstrates it is more effective as it reduces regular attendances as patients

begin to access the personalised care services that are more appropriate to support their needs.

Patient and Public Engagement and Involvement – understanding the patient.

It is important that the patient has the time to share their pain story and that they are understood.

"I'm sure the doctor who initially put me on morphine at the beginning didn't think, 'I'm going to give him this drug and it's going to destroy his life', – He thought 'this will help him'.

I'm sorry it doesn't. In the long run you have to find something different to manage the pain".

Mark's Story Mark's Story

"Living with pain is hard but dealing with people who don't understand is harder". Unknown

"It's taken me five years to get to where I am now. I understand I can live with some pain in my life. I was looking for the magic pill that does not exist. By accepting that the painkillers were doing more harm than good, that they were actually at the root of many of my problems, I am now in a much better place".

"I've lost 8 ½ stone. I walk most days. Everything starts to hurt more when I stay still, so the solution is to be more active. I'm a better mum because I'm present. I'm much more social, I love listening to music and when my restless legs kick in, well, I turn up the music and have a dance instead of turning to pills that stopped working a long time ago".

Louise Trewern

Solutions

Strategies to Reduce Opioid Prescribing

Patient Safety Collaborative (PSC) – Medicines Safety Improvement Programme Opioid Reduction

The Academic Health Science Network (AHSN) has a commission for 2022/23 from the national PSC to support reduction of inappropriate opioid use in non-cancer pain.
The project advocates a 'Whole Systems Approach' (Figure 5). As part of this project the AHSN has been scoping pain services across the ICS and the collaborations that exist within the ICS to tackle pain management and inappropriate use of medicines.

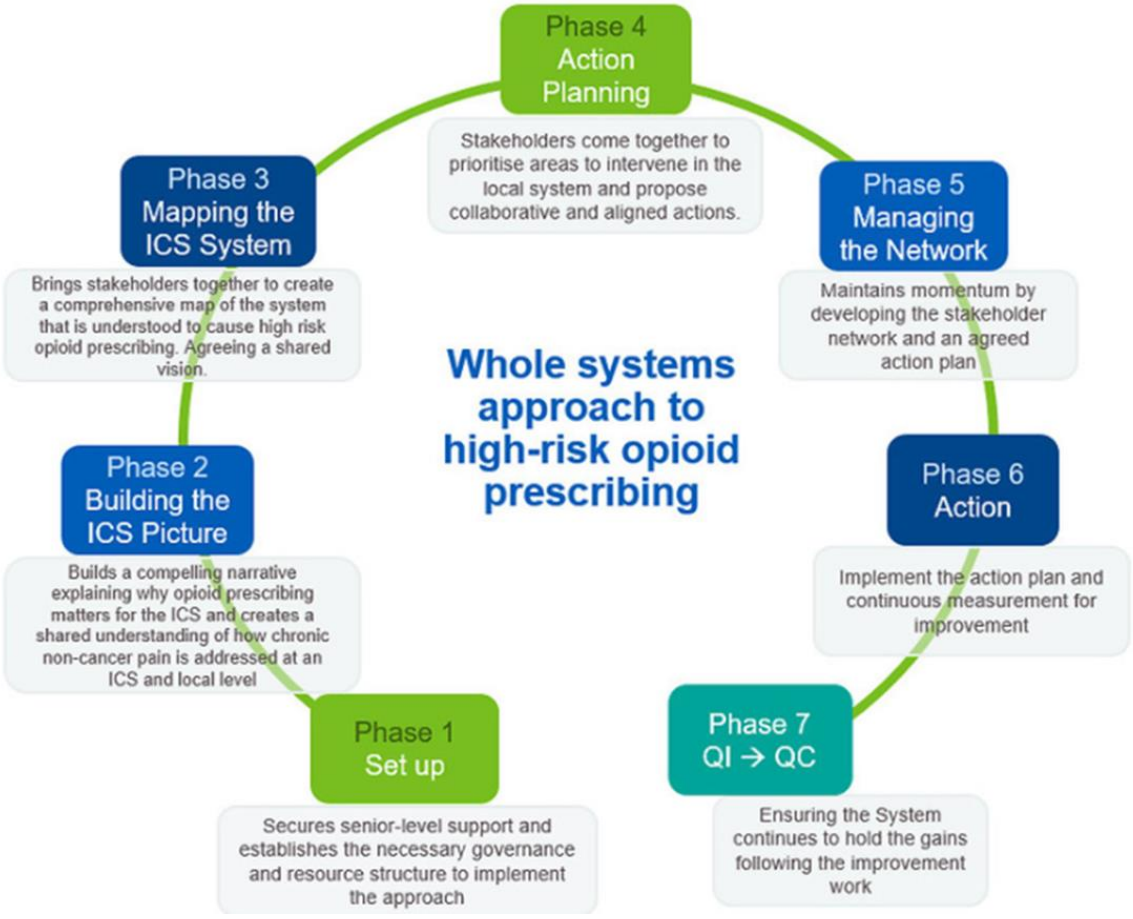


Figure 5. The 'Whole Systems Approach' from the national PSC to support reduction of inappropriate opioid use in non-cancer pain.

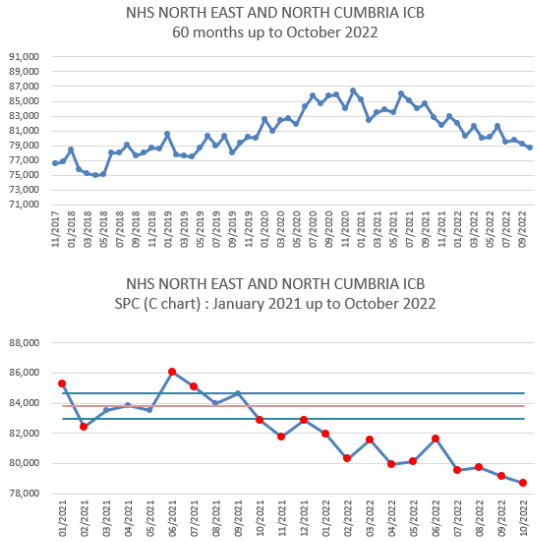
The intention of the programme is to support systems to engage with stakeholders, identify the issues, test and implement solutions. The AHSN has been undertaking a scoping exercise of the pain services across the region and opioid reduction strategies in use. Part of the national team's work has been to work with the NHS Business Services Authority (NHS BSA) to develop a dashboard (available via BSA ePACT) of GP practice opioid prescribing data to help identify patients who might benefit from a Structured Medication Review as part of the Primary Care Network (PCN) Directed Enhanced Service (DES).

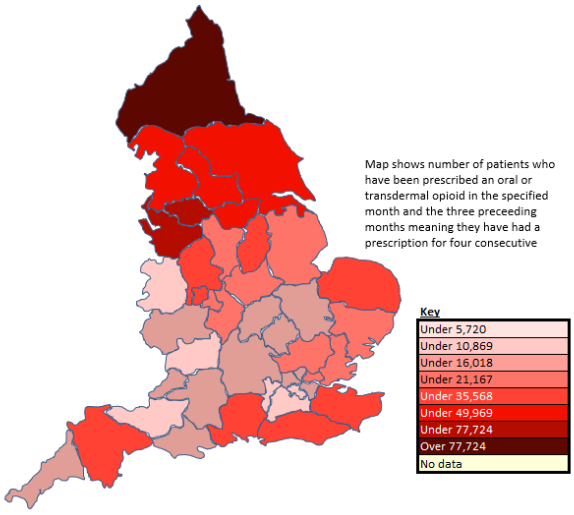
Overall aims of the programme:

- Commission for 22/23 to support system to improved chronic non cancer pain by reducing high-risk opioid prescribing.
- By end of 22/23, across the 15 AHSNs, to have 30,000 fewer people fewer people prescribed oral/transdermal opioids (of any dose) for more than 3 months (prevents ~484 deaths)

- Of the 30,000 above 4500 of these will have been prescribed a high dose (>120mg/day morphine equivalent) at baseline and have now stopped opioids (prevent 500 hospital admissions an avoid £1.75M in admission costs)

November 2017 to October 2022 (Figure 6)





Boundaries for C chart calculated using baseline data from January 2021 to December 2021. Highlights are above/below control limits, or 7 data points in a row below the mean.

ICS/ICB Engagement

We have engaged North East Senior Pharmacy Managers to highlight the PSC MedSIP opioid reduction programme. Managers include: Chief Pharmacists from all Foundation Trusts, Sub Integrated Care Board Location (SICBL) Groups (previously Clinical Commissioning Groups (CCG)), Ambulance Trust, Health Education England, Schools of Pharmacy, Local Professional Network (LPN) Leads, Community Pharmacy, Lead Specialist Pharmacy Services, Lead NHSE Pharmacy Integration Lead.

NENC already had a Regional Opioid Reduction Group consisting of Medicines Optimisations Leads, interim Integrated Care Board (ICB) Director of Medicines and Pharmacy, GP and clinician representation. The membership of this group has expanded to develop a more multidisciplinary group and has become the ICB Pain and Opioid Steering Group. The PSC MedSIP programme leads and MSK project lead have been integrated into the group to progress regional pain and opioid work.

IMPACTS

Community of Practice (CoP)

A number of ICB-wide Communities of Practice (CoP), supported by the AHSN, meet regularly and support the sharing of interventions to manage chronic pain management more effectively.

The PCN Pharmacy CoP held a session in June 2022 where a number of pharmacists, physiotherapists and pharmacy technicians presented their work in GP practices on managing chronic pain and reducing inappropriate use of opioids and gabapentinoids.

The Pain CoP has been in operation since May 2021 and was originally aimed at musculoskeletal (MSK) professionals, the stakeholder group has been widened to include any healthcare professional with an interest in pain management. Recent sessions have included a presentation from an expert on the biopsychosocial model of pain and conversations between a First Contact Practitioner (FCP) and a pharmacist about their multidisciplinary approach to helping patients to reduce opioid use and manage pain better.

AHSN Supported Strategies to Manage Opioid Reduction

Opioids NHS Insights Prioritisation Programme (NIPP)

The NIHR Applied Research Collaborative (ARC) NENC and AHSN NENC were awarded funding by the NHS Insights Prioritisation Programme (NIPP) for a project to evaluate the impact of an evidence informed, digitally deployed, GP remote consultation video intervention that aims to reduce opioid prescribing in primary care. The project is running until June 2023. More information can be found here.

Opioids Use Change (OUCh)

OUCh video educational tool was developed by Newcastle upon Tyne NHS Hospitals Foundation Trust and is used in training to support safe opioid prescribing for hospital prescribers. The resource is currently being rolled out in some Acute Trust Hospitals in the region and has been shared with community pharmacies in the ICS.

Campaign to Reduce Opioid Prescribing (CROP)

CROP campaign aimed at assisting general practices to review opioid prescribing in primary care. Practices received bi-monthly updates on the prescribing of opioids for chronic non-cancer pain within their practice. The reports were based on searches, designed to understand how many prescriptions of both strong and weak opioids are dispensed. The objective was to encourage a reduction in inappropriate prescribing of high dose opiate prescribing for non-cancer pain. The programme replicated a successful campaign undertaken in the Yorkshire and Humber Region and ran from June 2019 to August 2021. Results showed no significant reduction in opioid prescribing although qualitative and semi-quantitative

feedback on the programme suggested the scheme was positively received but may have had little impact due to COVID and pre or co-occurring similar schemes.

Mark's Story, a patient lived experience video was developed to support the campaign.

First Contact Practitioner (FCP) Evaluation

Engagement with musculoskeletal (MSK) colleagues and First Contact Physiotherapists to evaluate confidence levels within FCPs in relation to management of opioid reduction conversations with patients.

First-Contact-Practitioners.pdf (ahsn-nenc.org.uk)

Arthroplasty Pain Protocol Pilot

The AHSN NENC are supporting a quality improvement arthroplasty pain protocol pilot in a regional Acute Trust which has the aim of reducing the amount of opioids supplied to hip and knee replacement surgery patients as in-patients and on discharge. Review of in-patient prescribing protocols for patients receiving surgery are being amended in some hospital trusts to remove modified release opioid preparations. Supporting information can be found here.

Opioid and Pain Management Resources

Development of a web based resource page to collate information to support opioid reduction and pain management. Pain and Opioid Management Resources - AHSN NENC (ahsn-nenc.org.uk)

NHS Business Services Authority Opioid Dashboard

Work is ongoing to promote the NHS Business Services Authority (NHS BSA) opioid prescribing dashboard to enable primary care practitioners to identify patients suitable for a structured medication review (SMR) before use of opioids moves into chronic use (> 3 months consecutive prescription).

Clinical Digital Resource Collaborative (CDRC) - Opioid Calculator

CDRC is a collective resource utilising clinical and digital expertise from a range of organisations across the NENC to develop search templates using both EMIS Web and TTP SystmOne. The AHSN are working in collaboration with CDRC to develop a morphine equivalent dose calculator to enable prescribers to calculate overall daily prescribed dose of opioids to support review and a possible reduction plan for the patient.

Feeling the Pain AHSN North East North Cumbria Event

With the success and level of engagement with various stakeholders across the NENC region we have delivered a system-wide pain and opioid face-to-face event which was held on 18th November 2022.

The event attracted 85 delegates, from various disciplines, who came together to share their practices and experiences of chronic pain management.

A summary of the event can be viewed below. Or presentations, workshop and poster details can be found on this link: 'Feeling the Pain: Reducing Harm Caused by Opioids for Non-Cancer Pain'

The agenda included:

- Setting the Scene Opioids: A symptoms of a wider problem - Ewan Maule, Director of Medicines and Pharmacy North East and North Cumbria ICB
- The Power of the Collective – Launch of the Pain Clinical Network - Dr Graham Syers, Clinical Chair North East and North Cumbria ICS
- Opioids and the Impact on Population Health - Professor Edward Kunonga, Consultant in Public Health North of England Commissioning Support Unit
- Patient Experience - Ger Fowler, Founder and CEO Veterans in Crisis
- Trauma Informed Pain Care: A Holistic Systems Approach - Dr Deepak Ravindran, Pain Management Consultant
- Best MSK Health Programme - Mr Diarmaid Ferguson, Joint Chair NENC MSK Alliance, Chair of National Spinal Network, NHSE / GIRFT Best MSK Spinal workstreams
- Introduction to Clinical Networks - Dr Robin Mitchell, Clinical Director Clinical Networks North East and North Cumbria

Workshop sessions.

The first two one-hour long sessions were used to showcase seven paired interventions or management strategies that complimented pain or opioid management. Delegates were invited to choose two of these seven sessions to attend.

The final workshop session was used to launch the Pain Clinical Network.

Pain Clinical Network

North East and North Cumbria Integrated Care System (ICS) has emphasised the value of clinical networks in providing a clinically-driven and authoritative basis for development of clinical strategy and to encourage adoption of best practice over a large and diverse geographic area.

Several clinical networks are long-established, especially those that were supported by national initiatives (maternity, mental health, diabetes). Others have been developed or continued through regional initiatives and are now supported at a national level (cardiac, respiratory).

No formal network currently exists for chronic pain management. Early discussion between the Clinical Director and the designated executive director of medicines management has

concluded that such a network would be a valuable resource for the ICS. This has the support of the Executive Medical Director and the designated Director of Public Health.

Next Steps

Ongoing mapping of the services across the region.

Continued Stakeholder engagement.

Supporting the development and integration of the Pain Clinical Network.

Share good practice strategies and resources.

Facilitate integrated and joint working practices.