National Patient Safety Improvement Programmes

Medicines

East Midlands - Identification of effective Interventions to reduce inappropriate opioid prescribing for non-cancer pain.

Contents

Delivered by:

East Midlands
Patient Safety Collaborative

TheAHSNNetwork

Led by:

NHS England
NHS Improvement

Aim

The purpose of this report is to provide a summary of the local scoping work undertaken by East Midlands Patient Safety Collaborative (EM PSC), as part of the National Medicines Safety Improvement Programme (MedSIP), to provide an insight into those interventions which are in place across the region to reduce inappropriate opioid prescribing for non-cancer pain.

Executive Summary

Reducing inappropriate opioid prescribing for non-cancer pain is a national priority and is included in the National Medicines Safety Improvement Programme. Opioids are high risk medications that have the potential to cause severe patient harm. In some healthcare systems, work has already started in this area. The first part of the programme, and the focus of this report, is the scoping of any effective interventions that would reduce inappropriate opioid prescribing across the East Midlands region.

Interventions were identified through prior knowledge within the EMAHSN Medicines Optimisation Team or from a targeted email to 87 key stakeholders. The 43 email responses achieved were from all 5 STP areas. 13 interventions were identified as suitable to be taken through a semi-structured interview process and be submitted to the national review. 112 interventions were submitted nationally.

The interventions submitted were cross-sector covering primary and secondary care and out of hours services. They were predominantly pharmacist-led with one dispensing doctor practice and one non-pharmacological pain management course being the exceptions. Two university studies were included. The size of the projects was generally small, often limited to a single practice or PCN cluster. Except for the university studies, it was common that evaluation of the project was an area that could be strengthened.

Prescribing data highlights that there is variation in the prescribing rates of high dose opioid preparations across the East Midlands that would warrant further exploring.

The scoping has highlighted that reducing inappropriate opioid prescribing to improve patient safety is a priority area that stakeholders are looking for support with and would be keen to hear about effective interventions. There was also a general agreement that changing opioid prescribing takes time and that the following was essential, but was not always available, to create sustainable change to opioid prescribing:

- Guidelines, resources, and training
- Access to a specialist pain team
- Access to non-pharmacological alternatives for pain management

These areas should be considered when the PSC moves to the next stage of testing or when rolling-out the interventions highlighted as a result of the national opioid review by the PSC.

Introduction

Opioid medication is frequently prescribed to manage pain and includes medicines such as morphine, fentanyl, tramadol, and codeine. Whilst opioids have a place in the management of acute pain e.g., post-surgery, and cancer related pain, there is no evidence to support the routine use of opioids in chronic, non-cancer pain. Opioids are classed as high-risk medicines due to the risk of harm associated with their use. In long-term use these risks include:

- Dependence
- Fractures
- Changes to the endocrine system
- Changes to the immune system
- Increased pain (also known as opioid induced hyperalgesia)
- Overdose and death.

The risks and side-effects with opioids are dose related with doses of 120mg per day of morphine (or equivalent) providing no further benefit but increasing the risk of harm. A review by Public Health England(1) in 2019 shows that from 2017 to 2018, 5.6 million adults in England received opioid pain medicines (13% of the adult population). National guidance from NICE(2), published in March 2021 recommends that opioids should not be initiated to manage chronic primary pain in people aged 16 years and over.

The National Medicines Safety Improvement Programme is one of the five workstreams within the National Patient Safety Improvement Plan and has the overarching aim to:

Reduce medication related harm in Health and Social Care, focusing on high-risk drugs, situations, and vulnerable patients. The programme will contribute to the WHO Challenge target (2017) to reduce severe avoidable medication related harm globally by 50% over five years.

One of the key primary drivers to achieving this goal is to reduce inappropriate high dose opiate prescriptions for non-cancer pain. As part of the diagnostic phase, each Patient Safety Collaborative (PSC) was asked to:

Identify effective interventions that lead to a reduction in opioid prescribing for chronic non-cancer pain.

The national PSC team will use the interventions identified nationally to shape the next steps of the national programme.

Methodology.

Local clinical expertise scoping

In order to obtain a national and local overview of the work being undertaken with opioids a meeting was arranged with Professor Roger Knaggs. Professor Knaggs is a highly respected local and national lead on the management of pain and has agreed to provide on-going support and advice to the East Midlands for the duration of the project. After local recommendation, he has also agreed to support the national team in identification of the interventions that will be taken into the next stage.

The views and experiences of the Controlled Drug Accountable Officers (CDAOs) working in the East Midlands were also obtained. The opioid programme has been presented and shared at their Local Improvement Networks through which the request for interventions was shared. The CDAOs and their networks have also offered on-going support to the next stages of the programme.

Identification

A dual approach was taken with interventions identified via a targeted email (87 stakeholders) and by direct contact if opioid related projects were already known through medicine optimisation networks.

As directed by the national team, the only criteria for an intervention to be suitable for follow-up and interview was that that the intervention was likely to be effective in reducing opioid prescribing. The intervention was not required to achieve any minimum criteria regarding evidence or impact.

Due to the challenges of the timeline (March 31st 2021) for submission of the interventions, the diagnostic phase overlapped with a peak in the Covid-19 pandemic. To minimise any additional pressure in the system:

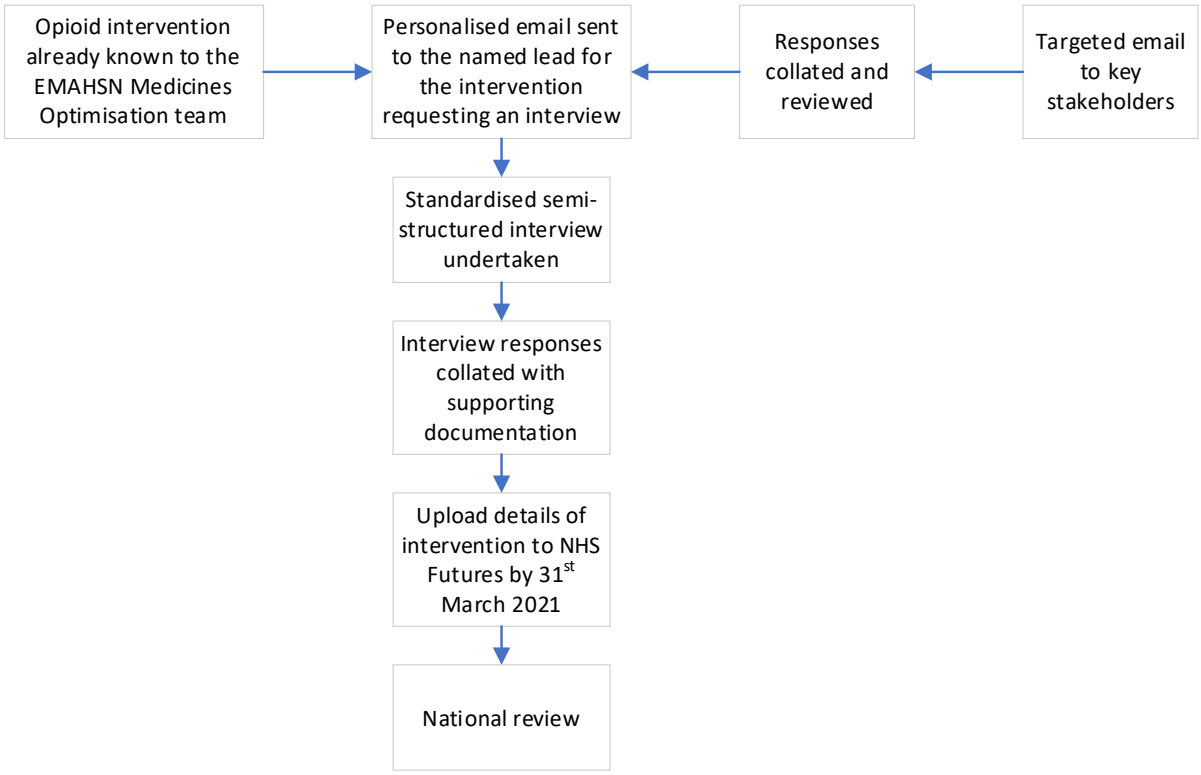
- The email communication was delayed as much as possible (email sent 8th February 2021)
- The email was targeted to key stakeholders that had been identified as being highly likely to be aware of or involved with opioid related projects
- The email acknowledged the current pressures
- The team offered flexible availability for interviews.

The competing priorities within healthcare during this scoping phase makes it possible that some interventions have not been captured as part of the process. Therefore, interventions identified as part of the next phase of work will continue to be scoped and assessed.

Semi-structured interviews:

The interviews followed a standard format that was set nationally and required approximately one-hour to complete. The interview was undertaken informally on MS Teams and no preparation was required from the interviewee. The PSC team then collated and transcribed the responses and any supporting information regarding the intervention before submission using the NHS Futures platform. The process undertaken in the scoping exercise is outlined in the figure below.

Diagram to show the process used to collate the effective interventions for submission to the national team.



Summary of findings

A total of 13 interventions were submitted as part of the national scoping exercise out of the 112 interventions submitted nationally. From the targeted email to 87 stakeholders, 43 responses were received. Of the interventions submitted, eight were identified through the target email approach and five from the team's contacts and connections.

Email responses

Email responses were received from all 5 STP areas in the East Midlands with a minimum of 6 responses from an STP area and a maximum of 12 (Nottingham and Nottinghamshire STP). There were also responses from other relevant stakeholders. However, many of the email responses confirmed that there were no current opioid related projects or that there were plans that had been delayed.

Table showing the breakdown of email responses.

Area email response received from	Number of responses
Community pharmacy	2
Nottingham and Nottinghamshire STP	12
Derby and Derbyshire STP	7
Leicester, Leicestershire, and Rutland STP	6
Northamptonshire STP	6
Lincolnshire STP	6
Centre for Pharmacy Postgraduate Education (CPPE)	1
NHS England (NHSE)	2
Out of hours service	1
Total	**43**

Submitted interventions.

Of the 13 interventions submitted:

- 8 of the interventions were from two STP areas specifically (Nottingham and Nottinghamshire=5, Derby and Derbyshire = 3)
- One pain service was included (Primary Integrated Community Services (PICS))
- One non-pharmacological intervention was included (Smart Wellbeing)
- 4 of the interventions were happing in either a single GP practice or a localised PCN
- One large NIHR funded study was identified.

A summary of the interventions is included in the table below. More complete information on the interventions can be found in appendix 1.

Nearly all the interventions identified include the skills of a pharmacist as part of the intervention. Many PCN teams have identified that patients taking long-term opioids can be included in the high-risk patient group that should be identified for a structured medication review as part of the PCN Directed Enhanced Service contract. But pharmacists are not always available, as highlighted by intervention number 8, who as a rural GP dispensing practice are delivering an intervention without access to a clinical pharmacist.

The out of hours service (number 10) provides a service across several CCGs and highlights the need for a 24-hour approach to opioid prescribing.

All the interviews highlighted the complexity involved in pain management, that change takes a long-time and education and support to the patient and the clinician is fundamental to success.

The interventions highlighted and being delivered were thought through in their aims, process, and desired outcomes but, with the exception of the University studies, tended to be less focussed on ensuring there was an evidence of impact, evaluation or return of investment. Discussions with the PSC team as part of the process has led some of the interventions review and strengthen this area of their plans.

Table summary of the interventions from the East Midlands submitted as part of the diagnostic phase (further details in Appendix 1)

No	STP/area	Organisation	Title	Summary
1	Nottingham and Nottinghamshire	PICS	Opioid deprescribing pathway in a community pain service for chronic non-cancer pain.	Proactive review of patients taking high dose opioids by working collaboratively with primary care colleagues (mainly PCN pharmacists and pharmacy technicians).
2	Nottingham and Nottinghamshire	CCG	Audit based on opioids aware to identify and highlight patients on high dose opioids in GP practice and support change in practice.	In addition to the audit and feedback to practices the work created specific clinical system searches, embedded an ICS wide opioid calculator and supported ICS wide guidance and patient information.
3	Northamptonshire	Smart Wellbeing	Focus on your life whilst noticing pain	Six-week on-line acceptance and commitment course teaching a range of mindful acceptance-based skills to enable people manage their symptoms and consider opioid reduction.
4	University of Nottingham	University	Community pharmacy and prescribed opioids PHD in progress	A mixed methods study investigating the experiences, and information and support needs, of people prescribed opioids, and the role of community pharmacy.
5	Nottingham and Nottinghamshire	GP practice	Pharmacist led review of acute opioid medication prescribing in a GP practice	Patients that are requesting further supplies of acute pain medication are highlighted to the PCN pharmacist.
6	University of Nottingham	NIHR	PROMPPT study	A 5-year research programme to develop and test a clinical pharmacist–led intervention to support patients with persistent pain to safely reduce opioids, without increasing pain/pain-related interference.
7	Nottingham and Nottinghamshire	Hospital	Improving the safety and quality of strong opioid prescribing in the management of acute pain	Development and implementation of a trust wide clinical guideline for the management of acute pain in adults plus an ICS wide opioid patient information leaflet.

8	Derby and Derbyshire	GP practice	Review of opioids and gabapentinoid use in a rural dispensing doctor practice	Supporting the clinical identification and review of patients, plus practice wide review of results, to allow key learnings to be highlighted and an action plan developed.
9	Derby and Derbyshire	PCN	PCN led deprescribing of high dose opioids for non-cancer pain	PCN wide identification of patients followed by initial PCN pharmacist screening to direct next steps.
10	Out of hours service	CCG	Review and feedback of opioid prescribing in an out of hours service	Monthly audit and prescriber feedback of opioid prescribing undertaken by the service. The service collaborates with GPs, to ensure alerts are added to patient's records when drug seeking behaviour has been identified.
11	Nottingham and Nottinghamshire	PCN	Targeted approach to help support patients taking opioids and other high-risk medicines for long term non-cancer pain	The use of patient letters to increase knowledge regarding opioids and offer support. Patients can then highlight themselves for review or will be followed up by the PCN pharmacists.
12	NHSE/I	CCG	STP wide opioid work supported by CD Accountable Officer (CDAO) for the East Midlands	Covered three aspects: 1. Epidemiological review 2. CCG wide audit 3. Pain summit
13	Derby and Derbyshire	GP practice	Chronic pain management in a GP practice led by a pharmacist with a special interest in chronic pain	Pharmacist prescriber led chronic pain management clinic for adults using a holistic approach including non-pharmacological support.

Local prescribing data for high-dose opioids

Prescribing of opioids varies across the East Midlands and the table below shows one of the frequently referred to prescribing data sets in relation to opioids(3). However, this data is based on all dispensed prescriptions and therefore includes prescribing for all indications including pain related to cancer and end of life where higher doses are likely to be appropriate. Graphs showing the prescribing data for each CCG can be found in appendix 2.

Table to show breakdown of prescribing by CCG for the prescribing of opioids with a likely daily dose of ≥120mg morphine equivalence per 1000 patients (based on Open Prescribing data Feb 2021)(3)

Clinical Commissioning Group	**Prescribing compared to the national median (red=higher, amber=equal to, green lower)**
Leicester City	Significantly lower
Leicestershire and Rutland	
West Leicestershire	
Derby and Derbyshire CCG	Slightly lower
Nottingham and Nottinghamshire CCG	
Northamptonshire CCG	
Lincolnshire CCG	Significantly higher

Recommendations

The East Midlands submitted 13 interventions out of the 112 submitted nationally. This response highlights that there is significant engagement across the East Midlands to ensure opioids are prescribed appropriately and that this is seen as a priority area that stakeholders are looking for support with to improve patient safety.

There is also a significant amount of well thought out, innovative work already underway with innovations having an effect from a single practice to across an ICS footprint. There has been a noticeable willingness to share the interventions, resources created, and the learning with the PSC. Evaluating the interventions is an area of the intervention that many stakeholders could improve and an area in which the PSC could provide advice and support.

There is a clear message that changing prescribing of opioids is going to take time and a significant amount of clinical input and patient education. There are some areas that were identified through discussions as being crucial to achieving a sustainable change to opioid prescribing:

- Guidelines, resources, and training
    - Easy to access training and guidance for clinicians to support the management of pain, the review of patients taking opioids, and the tapering of opioid doses.
    - Locally approved resources to educate patients regarding acute and chronic pain management.
- Access to a specialist pain team

    - This includes support for patients who feel that they are now dependent on prescribed pain medication.
- Access to non-pharmacological alternatives for pain management

These areas should be considered when the PSC moves to the next stage of testing or when rolling-out the interventions highlighted as a result of the national opioid review by the PSC.

References

1. Public Health England. Dependence and withdrawal associated with some prescribed medicines - An evidence review. Public Health England; 2019 10/09/2019.
2. National Institute for Health and Care Excellence. NG193: Chronic pain (primary and secondary) in over 16s: assessment of all chronic pain and management of chronic primary pain. 2021 [Available from: https://www.nice.org.uk/guidance/ng193.
3. EBM DataLab. OpenPrescribing [Available from: https://openprescribing.net/.

Appendix

Appendix 1: Full details of the interventions submitted for national review.

No	STP/area	Organisation	Title	Summary
1	Nottingham and Nottinghamshire	PICS	Opioid deprescribing pathway in a community pain service for chronic non-cancer pain.	Provides a proactive review of patients taking high dose opioids by working collaboratively with primary care colleagues (mainly PCN pharmacists and pharmacy technicians). The service aims to: • Upskill PCN pharmacy teams to review patient taking opioids • Answer ad hoc queries • Provide an accessible specialist pain service MDT approach for local deprescribing. The MDT approach consists of a specialist pharmacist, clinical psychologist, and advanced nurse practitioner.
2	Nottingham and Nottinghamshire	CCG	Audit based on opioids aware to identify and highlight patients on high dose opioids in GP practice and support change in practice.	In addition to the audit and feedback to practices the following were created • Specific clinical searches were created for SystmOne and EMIS web clinical systems. The SystmOne search was embedded into the clinical tree across the CCG to ensure ease of access and standardisation. • Identification of an electronic opioid equivalence and conversion calculator (also available as an app) that was embedded into the SystmOne clinical system and referred to in all opioid related guidance across the ICS. The results supported other local initiatives: • The creation of acute pain guidelines at the Trust to reduce acute to chronic opioid use post-surgery and an ICS wide patient information sheet (see separate case study) • Creation of a deprescribing section on the APC site that includes

				opioid resources and a deprescribing guideline.
3	Northamptonshire	Smart Wellbeing	Focus on your life whilst noticing pain	Six-week acceptance and commitment course delivering one-hour live, on-line interactive sessions with recordings available to access later. Attendees learn a range of mindful acceptance-based skills that enable them to live well, begin to safely reduce pain medication and to benefit from learning from each as well. The aim is to help people struggling with enduring pain to better manage their symptoms and to live happier more meaningful lives.
4	University of Nottingham	University	Community pharmacy and prescribed opioids PHD in progress	PhD sponsored by Boots A mixed methods study investigating the experiences, and information and support needs, of people prescribed opioids, and the role of community pharmacy.
5	Nottingham and Nottinghamshire	GP practice	Pharmacist led review of acute opioid medication prescribing in a GP practice	Patients that are requesting further supplies of acute pain medication are highlighted to the PCN pharmacist for further review and assessment to prevent inappropriate long-term opioid usage.
6	University of Nottingham	NIHR	PROMPPT study (NIHR funded research study)	PROMPPT is a 5-year research programme which launched in March 2019 to develop and test a clinical pharmacist–led intervention (PROMPPT) to support patients with persistent pain to safely reduce opioids, without increasing pain/pain-related interference. Primary outcomes: (1) Reduction in opioid use (≥25% reduction daily morphine-equivalent dose), (2) Non- inferiority on Brief Pain Inventory score (at 12 months).

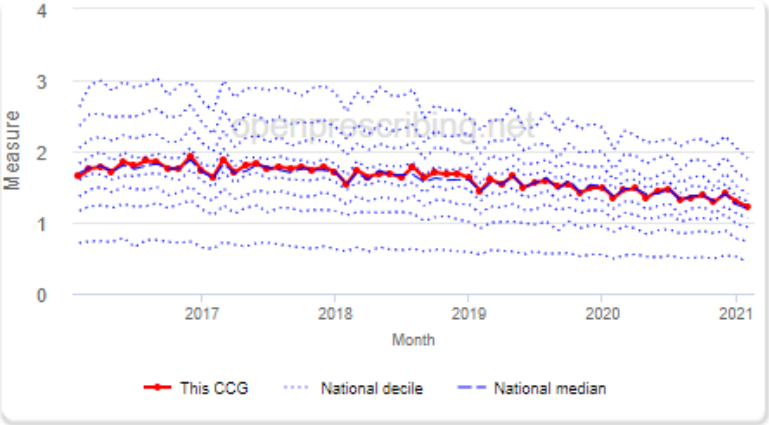
7	Nottingham and Nottinghamshire	Hospital	Improving the safety and quality of strong opioid prescribing in the management of acute pain in adults at Nottingham University Hospitals NHS Trust.	• Development and implementation of a trust wide clinical guideline for the management of acute pain in adults. The guideline includes choice of opioid, guidance on de-escalating dosage, transfer from modified release to immediate release opioid prior to discharge, maximum quantity of seven days' supply at discharge, a weaning plan, and communication to GP in place if needed. • A local opioid patient information leaflet agreed across the ICS to provide consistency of information.
8	Derby and Derbyshire	GP practice	Review of opioids and gabapentinoid use in a rural dispensing doctor practice	Identification of all patients taking strong opioids and gabapentinoids regularly. Results reviewed and patients stratified by risk. Results shared at a clinical meeting and a plan implemented to clinically review the patients identified. Key learnings highlighted and action plan in place.
9	Derby and Derbyshire	PCN	PCN led deprescribing of high dose opioids for non-cancer pain (Derbyshire)	Clinical searches were created and run across the PCN (13 practices) to identify patients taking 120mg or more morphine equivalent per day. Initial patient screening by the PCN pharmacists identified the most appropriate clinician to support the next steps in the review.
10	Out of hours service	CCG	Review and feedback of opioid prescribing in an out of hours service	Monthly audit and prescriber feedback of opioid prescribing undertaken by the service. Clinical notes are reviewed and assessed against the RCGP toolkit for out of hours prescribing. The service also ensures, in collaboration with the GP, that alerts are added to patients records when drug seeking behaviour has been identified by the out of hours services which acts as a flag for future service contacts.

11	Nottingham and Nottinghamshire	PCN	Targeted approach to help support patients taking opioids and other high-risk medicines for long term non-cancer pain	The use of letters to patients taking opioids for non-cancer pain which outline the legal category, and the issues around taking them long-term, and offering support to patients. Patients can then highlight themselves for review or will be followed up by the PCN pharmacists to assess current requirements and discuss de-escalation.
12	NHSE/I	CCG	STP wide opioid work supported by CD Accountable Officer (CDAO) for the East Midlands	The work covered a series of aspects including: 1. Epidemiological review of opioid prescribing 2. GPs in Leicester Leicestershire and Rutland (LLR), Lincolnshire and Northamptonshire were asked to participate in an audit on the use of high dose opioids for the treatment of chronic pain. 3. Pain summit in May 2019, 47 doctors, pharmacists, nurses, and managers from across primary and secondary care came together to: 1. Understand the present landscape locally within LLR compared to the country and internationally around opioid prescribing for chronic, non-malignant pain 2. Appreciate the current issues faced by clinicians regarding chronic pain management and patients already on high dose opioids 3. Identify, agree, and develop solutions
13	Derby and Derbyshire	GP practice	Chronic pain management in a GP practice led by a pharmacist with a special interest in chronic pain	Pharmacist prescriber led chronic pain management clinic in a GP practice for adults using a holistic approach. The clinic aims to optimise medication by getting the most benefit with the least side-effects and includes pharmacist-led provision of non-pharmacological support.

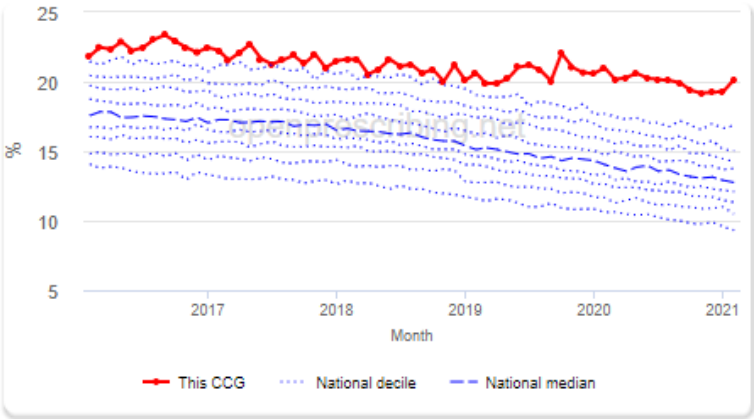
Appendix 2 - Prescribing of opioids with a likely daily dose of ≥120mg morphine equivalence per 1000 patients by CCG

The following graphs from Open Prescribing(3) show, by CCG the prescribing of opioids with a likely daily dose of ≥120mg morphine equivalence per 1000 patients. This information is accurate up to February 2021.

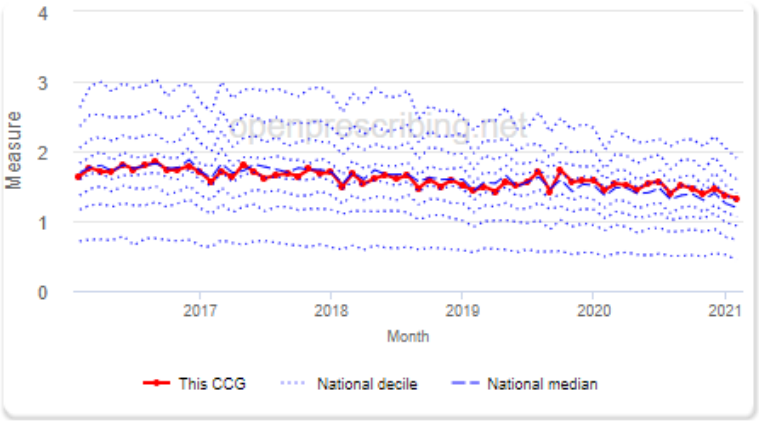
Nottingham and Nottinghamshire CCG



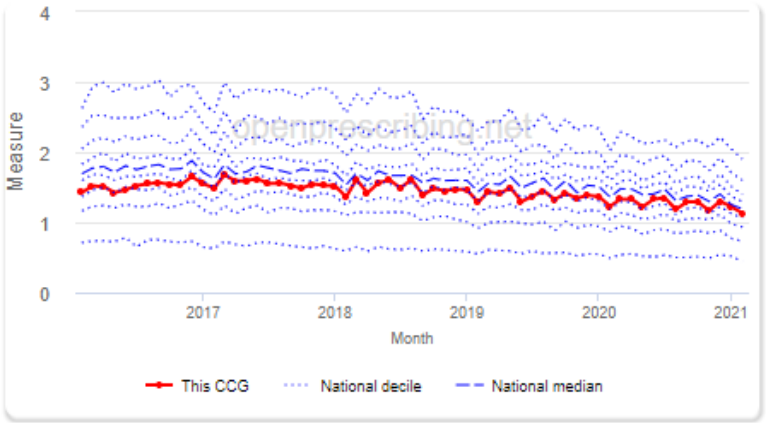
Lincolnshire CCG



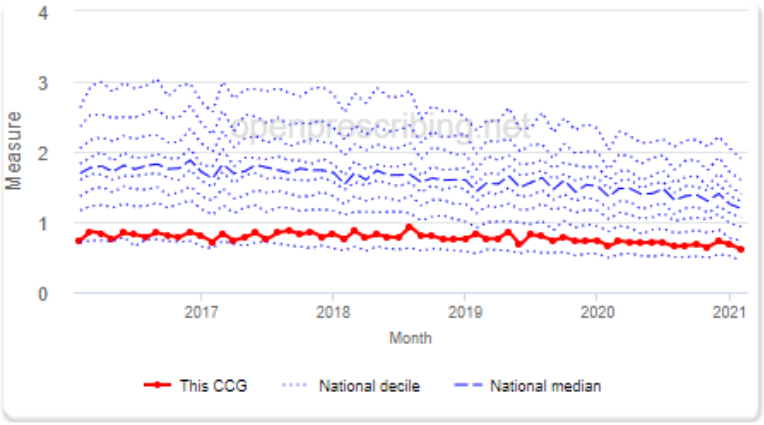
Northamptonshire CCG



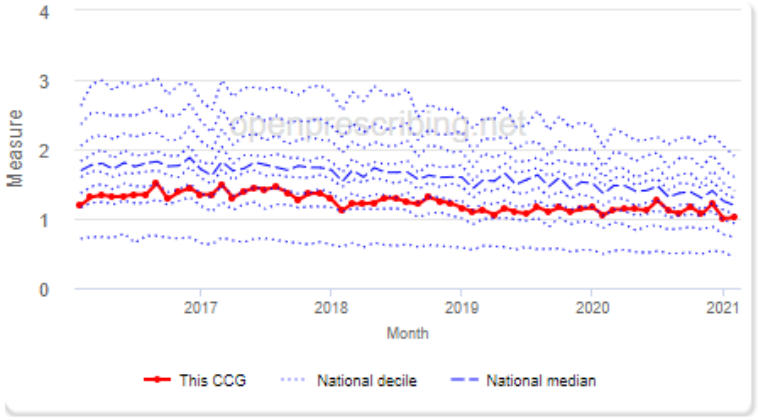
Derby and Derbyshire



Leicester City CCG



West Leicestershire CCG



East Leicestershire and Rutland CCG