Improving patient safety: Pharmacy Audit of patients prescribed opioids > 120mg morphine equivalent and/or pregabalin > 600mg per day

Introduction

- Evidence suggests that continuous use of opioids is not effective for treating long term pain. Opioids are very good for acute pain and pain at end of life and a small number of people may obtain good pain control longer term if the dose is intermittent. (Faculty of pain management, 2016)

- Side effects are very common (50 – 80% of patients) and up to a quarter of patients taking opioids long term have developed a dependence on them.

- Of all deaths related to drug poisoning in 2015, 54% involved an opioid drug. (ONS, 2016).

- 'The risk of harm increases substantially at doses above an oral morphine equivalent of 120mg/day, but there is no increased benefit'. (Faculty of pain management, 2016)

Thus current thinking about the balance of risk vs. benefit of opioid use is changing. The safety of patients is paramount, pharmacists and GPs need to question if the drugs prescribed are inadvertently creating addiction rather than controlling pain.

This combined profession audit aims to identify and review those patients at the top of the dose range.

Rationale for a combined GP and community pharmacy approach

GP practices are conducting audits using their clinical IT system to identify schedule 2 CD's and pregabalin above the agreed criteria but their search mechanism will not pick out patients taking combinations of opioids that may result in a total combined dose above 120mg morphine equivalent per day or when patients may be obtaining their prescriptions early to self-escalate their dose.

Pharmacy teams do not rely on computer searches to find this information; they become aware of it during the clinical check in the dispensing process.

Pharmacies are requested to notify the practice of this additional cohort of patients. To assist template letters are available.

The GP audit will include, determining if there is a clear indication for prescribing, if the patient has been reviewed in the last 3 months, evidence of a discussion of harms & benefits of the treatment plan and evidence of assessment of continued clinical need for the drugs.

Impact of polypharmacy - local data
Analysis of local coroners' reports suggests links between premature death and combinations of different drug classes. (Opioids, gabapentinoids, benzodiazepines or hypnotics, tricyclics, SSRIs, some antipsychotics). The pharmacy audit aims to gather data about the prevalence of prescribed opioids plus three or more drugs in the classes mentioned above.

Pharmacy Audit Quality Criteria:	**Audit Target**
1. Pharmacy to contact the GP in all instances where: a) Patient is taking >120mg oral morphine equivalent as a result multiple opioids b) Patient is regularly ordering/collecting prescriptions early that suggests they are taking more than the prescribed dose of opioids or pregabalin c) Patient is prescribed more than one immediate release 'top up' opioid	100% (unless exception reason recorded)
2. Advice to patients taking CD's Is there a record on the PMR made in the last 15 months that at the point of supply: a) Patient is advised about safe storage of controlled drugs in their home with respect to risk of accidental overdose of family members. b) Patient is advised about impaired driving ability	100%

Pharmacy audit process
Step 1 - List of patients:
• Identify patients regularly taking multiple drugs containing opioids (more than 2 months) • Exclude end of life or palliative care • Exclude patients on a substance misuse programme using methadone or buprenorphine or patients already on an active reduction schedule managed by the GP.
Step 2 – For the patients selected:
• Calculate combined total daily dose (oral morphine equivalence) of all opioids at the dose stated on the prescription. (List drugs, dose) • Does the interval of collection/supply confirm the meds are taken at this dose: (less/as prescribed/more) • Is more than one immediate release 'top up' opioid prescribed? (Yes/no) • Is the patient also taking pregabalin, if so what is the daily dose? (No/daily dose) • Evidence that patient has been advised about risk of harm/safe storage of CDs • Evidence that advice has been given re: impaired driving ability • Other concomitant drugs: (tick all that apply - benzo or hypnotic/SSRI/tricyclic/quetiapine)
Step 3 Action:
• For combined daily dose > 120mg daily ⇒ conversation with patient & template letter to GP practice • Evidence of over use or misuse (early repeats, quantity ordered over specified dose) leading to more than 120mg opioid or 600mg pregabalin, or more than one immediate release top up opioid ⇒ template letter to GP practice • If the pharmacy has no recorded evidence of advice re safe storage and impaired driving ability ⇒ do this at next prescription supply • Other concomitant drugs ⇒ conversation with patient re: risk/benefit, consider MUR • Share results with your team and reflect on the role of the pharmacy in helping patients and prescribers ensure safety with controlled drugs.
Step 4: Submit data
Submit data to NHSE. 1. Headline data: on Pharmoutcomes enter your summary of results on the "opioid Usage Audit" form 2. To contribute to the polypharmacy survey then email the summary page of the spreadsheet to england.ea-cdao@nhs.net
Step 5: Repeat the audit (this is outside the scope of this 2017/18 audit).

Recording the data

An Excel spreadsheet is included which has the capability to automatically calculate the morphine equivalents if your computer will run this version of Excel. Please see the 'How to complete the clinical audit' guide which outlines how to use the data entry form embedded in the spreadsheet.

If you cannot use the automatic functionality then entries can be made manually. For yes/no questions please enter the number '1' in the appropriate column.

Data collection

The tab on the Excel spreadsheet called 'report to NHSE' should automatically collate data for return.

To submit data to NHSE.

1. **Headline data:** on Pharmoutcomes enter your summary of results on the "opioid Usage Audit" form
2. To contribute to the **polypharmacy survey** please email the summary page of the spreadsheet to england.ea-cdao@nhs.net. (Pharmoutcomes can only record totals, to be able to analyse your data properly then NHSE will need the spreadsheet).

Did you know?

'If a patient is using opioids but is still in pain, the opioids are not effective and should be discontinued, even if no other treatment is available'. (Faculty of pain management, 2016)

Emerging evidence indicates that gabapentinoids potentiate opioids increasing the risk of harm when taken together (as well as increasing the 'high' for drug abusers). The number of deaths involving gabapentinoids was 137 in 2015, 79% of which also involved opioids. (Lyndon, et al., 2017)

Q&A
1. What should I do apart from notify the prescriber?
As a result of this audit you may also choose to have a conversation or conduct a medicines use review with patients to explain how opioids can be used effectively (and safely) to manage acute episodes of pain and prevent dose escalation/long term use.
2. What about patients who do not reach the 120mg morphine equivalence threshold?
If you have concerns about dose escalation, risk to patient safety or diversion of drugs then contact the prescriber as you would normally to highlight the issues. In addition you may choose to discuss their pain management as in Q&A 1. Above.

CPD resources and useful links
There is no requirement to undertake additional training, this is only provided for information:
Opioids Aware: A resource for patients and healthcare professionals to support prescribing of opioid medicines for pain http://www.rcoa.ac.uk/faculty-of-pain-medicine/opioids-aware CPPE e-learning: Addiction, misuse and dependency: A focus on over-the-counter and prescribed medicines CPPE e-learning: Opioids CPPE e-learning: Pain management

Appendix 1: Equivalent doses of opioid analgesics (approximate guide) quick reference guide for audit calculation only (not for clinical use)			
Analgesic / route	**Dose**	**Calculation to get to oral morphine equivalent in mg**	**Source**
Morphine PO	10mg	N/A	BNF No 74
Morphine IM, IV,SC	5mg	x 2	BNF No 74
Codeine PO	100mg	Divide by 10	BNF No 74
Dihydrocodeine PO	100mg	Divide by 10	BNF No 74
Tramadol PO	100mg	Divide by 10	BNF No 74
Diamorphine IM, IV, SC	3mg	x 3.3	BNF No 74
Hydromorphone PO	2mg	x 5	BNF No 74
Oxycodone PO	6.6mg	x 1.52	BNF No 74
Pethidine mg		Divide by 10	local guidance
Fentanyl lozenge or nasal spray mcg		mcg dose divided by 16 (gives mg dose morphine)	local guidance
Alfentanyl mcg		Divide by 4	local guidance
Tapentadol PO		Divide by 2.5	local guidance
Methadone		Very complicated – do not attempt to calculate	
Equivalent oral morphine daily dose			
Fentanyl 12 patch	30mg		BNF No 74
Fentanyl 25 patch	60mg		BNF No 74
Fentanyl 50 patch	120mg		BNF No 74
Fentanyl 75 patch	180mg		BNF No 74
Fentanyl 100 patch	240mg		BNF No 74
Buprenorphine patch ‘5’ (7 day)	12mg		BNF No 74
Buprenorphine patch ‘10’ (7 day)	24mg		BNF No 74
Buprenorphine patch ‘15’ (7 day)	48mg		BNF No 74
Buprenorphine patch ‘35’ (4 day)	84mg		BNF No 74
Buprenorphine patch ‘52.5’ (4 day)	126mg		BNF No 74
Buprenorphine patch ‘70’ (4 day)	168mg		BNF No 74