GUIDANCE FOR OPIOID PRESCRIBING FOR ACUTE NON-CANCER PAIN, POST-OPERATIVE PAIN AND POST-PROCEDURE PAIN

Purpose: The purpose of the guidance is to provide best evidence and expert opinion to help improve quality and safety of opioid prescribing in the acute hospital setting and reduce harm from their use.

CDI002/2021

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Recommendations:

1. **Slow release opioids are not routinely recommended for most patients with acute non-cancer pain, post-operative pain and post-procedure pain.**
2. **Immediate release opioids should be prescribed for a maximum of 4 days for acute pain management and only if clinically indicated.**
3. **Careful consideration should be given to the requirement for opioid analgesia, including short-acting, on discharge for acute non-cancer pain, post-operative pain and post-procedure pain.**
4. **A Patient Information Leaflet (PIL) should be supplied on discharge.**
5. **Patients should be informed, as part of the discharge process, of the risks associated with opioid analgesia, including addiction.**
6. **Patients should be informed, as part of the discharge process, of the requirements to safely dispose of unused opiate medication and how they can do this, both verbally and in writing.**

Implementation of recommendations:

1. **This is a patient safety initiative and falls under the remit of the hospital drug and therapeutics committee for implementation with input from patient quality and safety committee by agreement.**
2. **These recommendations should be communicated to all new prescribing staff at their induction, or upon completion of training as a competent prescribing staff member.**
3. **These recommendations should be subject to periodic audit and review to support compliance.**
4. **These recommendations do not pertain to patients with cancer pain or complex pain syndromes. Where opioid analgesia is prescribed for these purposes it should be clearly documented in the patients notes, discharge letter and/or drug kardex.**
5. **For patients, with acute (not cancer, not complex pain syndrome) pain where a longer, but nonetheless clearly defined, period of opioid analgesia is anticipated, this can only be prescribed by a senior decision maker i.e. Consultant, Registrar or Advanced Nurse Practitioner.**
6. **Patients with pre-existing cancer pain and/or complex pain syndromes may require acute pain specialist input to support addressing acute on chronic pain requirements.**
7. **Feedback from compliance/ implementation audits should be presented to clinicians at educational fora and by email and include further recommendations or changes to recommendations based on the audit findings.**
8. **Changes to recommendations need to be authorised by the drugs and therapeutics committee and be such to enhance compliance with the principles of this safety initiative and not to suit prescribers.**
9. **Communication to relevant local stakeholders e.g. the GP and Pharmacy communities should occur in advance of rollout of this guidance.**

Introduction

Opioids are effective and integral medicines in balanced multi-modal analgesic techniques for the management of acute non-cancer pain. The international economic and social repercussions of the opioid crisis are well documented[1]. In Ireland, numbers of prescribed opioids are increasing yearly, out of proportion to population increase[2]. Acute hospitals are a major source of initial opioid prescriptions into communities[3]. Recently, a number of International consensus statements on prevention of opioid related harm in the setting of acute pain have been published[4,5].

This HSE (Health Service Executive of Ireland) guidance provides the prescriber and patient with simple, standard, evidence and expert-opinion based strategies to balance prescribing for adequate analgesia for acute pain to facilitate functional recovery while at the same time reducing the risk of opioid related harm.

****It is recognised that for certain procedures and for certain patients it may be necessary to write prescriptions not in keeping with this guidance.**

All prescriptions for opioids should be individualised based on patient and procedure specific factors.

Background

Opioids are essential anti-nociceptive medicines for the management of acute pain. Acute pain is that relating to tissue damage and usually resolves with healing, for example post-operative pain.

The numbers of opioid prescriptions for all indications have increased over the past number of years. There is a paucity of data to specify the main sources. However, combining data deduced from PCRS[6] (Primary Care Reimbursement Service) with the knowledge that Ireland is above the OECD[7] (Organisation for Economic Cooperation and Development) average for opioid related deaths, and surveys commissioned by NACDA[8] (National Advisory Committee on Drugs and Alcohol) which demonstrate increasing prevalence in opioid use (across lifetime, last year and last month) strategies are required to improve knowledge and ensure safety with regard to use of these medications.

It is conceivable that without protective measures and strategies such as this guidance, that Ireland could see itself in situations like those in the USA where the opioid crisis has reached epidemic proportions and was declared a public health emergency in late 2017[9].

It is recognised that it is often the most junior members of medical and surgical teams that are responsible for writing discharge prescriptions.

With over 20 National clinical programmes reporting to the Acute Hospitals Division of the HSE, along with the knowledge that the majority of doctors pass through the acute hospital system at some stage of their career, acute hospitals are an appropriate initial target for improvement in the practice of opioid prescribing. Since 2014, the Annual report by NCPA (National Clinical Programme for Anaesthesia) and the hospital pricing office on the number of anaesthetics administered in Ireland has consistently reported a figure of approximately 233,000 per year[10]. The most recent figure being 233,087 for 2018. The majority of these patients will likely have been considered for an opioid medication in their treatment. This is one specific area of practice in acute pain for which opioids are often prescribed and represents a significant proportion of people every year.

In 2019, the Acute Hospitals division of the HSE set up a multidisciplinary working group with the intention of providing recommendations to the HSE to identify key areas for improvement in practice based on best available evidence and expert opinion.

This guidance is the first step in what is envisaged to be an incremental multidisciplinary and multifaceted approach to improved quality and safety of patient care and prescriber knowledge regarding opioid medications in the acute hospital setting. It is an introduction to opioid stewardship, which involves co-ordinated interventions or a healthcare-system wide approach to promote and monitor safe and appropriate use of opioid medications.

Contents and Scope

There are three parts to the guidance**:

1. Slow release opioids are not routinely recommended in this setting
2. Duration of prescription of 4 days maximum prior to review
3. Appropriate disposal of opioid medications to prevent diversion and misuse

Part 1: Slow release opioids are not routinely recommended in this setting

Slow release (Long-acting/sustained release/modified release) opioids are not recommended in this setting.

Rationale: These formulations have been associated with an increased risk of persistent post-operative opioid use as well as increased risk of opioid related ventilatory impairment[11,12]. This guidance is in keeping with most recent international guidance on this topic[13,14,15].

Part 2: Duration of prescription of 4 days maximum prior to review

A duration of 4 days for opioids for acute pain is routinely recommended as part of balanced multimodal analgesia. Not all patients will require four full days of opioid medications. However, other non-opioid medication analgesic medication may be continued for longer than 4 days if required

Rationale:

The recommendation of 4 days prescription of opioid medication has both a practical and evidence basis. Four days will adequately provide analgesia for a bank holiday weekend, when access to pharmacy or further prescription may be difficult.

It has been shown that the quantity of opioids that patients are provided with at discharge impacts their consumption after surgery[16]. As patients recover, their requirements for opioid analgesics reduce. As such, after four days, it is expected that for the majority of patients this will be an adequate amount. This is in keeping with international recommendations which suggest that the duration of the prescription should be 3-5 days[13,17]. Over-prescription creates a source for diversion of medications. A higher proportion of opioids prescribed after surgery increases risks of persistent post-operative opioid use[18]. It is acknowledged that there will be certain patient and procedure specific circumstances where a longer prescription is required. This may include certain orthopaedic operations, operations on the abdominal or thoracic cavity (e.g., Open Reduction Internal Fixation of orthopaedic fractures or joint replacement, open Aortic Aneurysm Repair, Lung Lobectomy).

Part 3: Appropriate disposal of opioid medications to prevent diversion and misuse

Patients should return any unused or expired medicines to a registered community or hospital pharmacy premises for safe disposal.

Rationale: Addiction surveys suggest that over half of adults who misuse opioids obtain them from their households and friends[19]. If one considers that between 40-94% of discharge prescriptions for opioid medications are unused[20,21], this has great potential for diversion and therefore harm. By promoting appropriate and safe disposal of these medications, it is hoped that there will be a reduction in supply in the community of unused medications. Unintentional overdose in paediatric population is also a concern, and a cause of preventable deaths.

Future Directions

Further recommendations were provided by the working group. The HSE recognises that advances in eHealth will in time lead to improved ability to track and audit the prescription of opioids. This knowledge will contribute to enhanced safety in the prescription of opioid medications in the acute hospital setting.

Appendix 1: Members of the HSE working group for prescribing opioids for acute pain

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Appendix 2: Working group recommendations for opioid prescribing for acute non-cancer pain

1. Education & Training	Mandatory NCHD training/education. Prescriber training to be 'signed off' prior to commencement of prescribing opioids. Recommendations included in prescriber induction Pre-recorded lecture/E-learning module by expert for National use with nominated local expert to answer questions and advise on local variance. Access to regularly updated webpage on analgesia – https://pubmed.ncbi.nim.gov/postoperative
2. Patient Information	To promote opioid stewardship by educating patients on benefits and risks. Printable document & online information. Collaboration with UK multidisciplinary group in progress Discharge Patient Information Leaflet
3. Duration of Prescription	4-day rule for prescription of opioids is recommended. Exceptions for complex patients/those in need of tapering dose, certain surgical procedures. This may include certain orthopaedic operations, operations on the abdominal or thoracic cavity (e.g., Open Reduction Internal Fixation of orthopaedic fractures or joint replacement, open Aortic Aneurysm Repair, Lung Lobectomy). Copy of the discharge prescription should be sent to patient's GP.
4. Slow Release Opioids not indicated routinely	Should not be used routinely for pain relief in the setting of acute non-cancer pain. Unless in strictly monitored and specific setting/complex patients.
5. Collection of Excess Drugs	The existing safe disposal of medications in community pharmacies processes needs to be communicated to patients as part of their discharge information.
6. Electronic Prescribing	We would recommend electronic prescribing as a safer option. This would facilitate audit and tracking. It is noted that this has Resource implications and would require legislation change as there is a current requirement for a handwritten script
7. Central Reference/Contact Point	To review patient experience & respond if uncontrolled pain. As part of discharge information, patients need to be informed who to contact if their pain is not controlled satisfactorily with over the counter medication (OTC) after their prescription has concluded. This cannot be simply the GP unless by prior agreement. Resource implications Acute pain service. Longer-term need for transitional pain service.
8. Complex Patients*	Mandatory opioid discharge plan with clear line of responsibility for follow-up if required.

References:

1: Hah JM, Bateman BT, Ratliff J, Curtin C, Sun E. Chronic opioid use after surgery: implications for perioperative management in the face of the opioid epidemic. *Anesthesia and Analgesia* 2017; **125**: 1733– 40.

2: HSE PCRS Data Sources. Annual reports. https://www.sspcrs.ie/portal/annual-reporting. (Accessed 30/12/20)

3: US National Survey on Drug Use and Health. https://www.samhsa.gov/data/sites/default/files/cbhsq-reports/NSDUHMethodsSummDefs2018/NSDUHMethodsSummDefs2018.htm (Accessed 02/01/21)

4:Levy. N, *et al.* An international multidisciplinary consensus statement on the prevention of opioid-related harm in adult surgical patients. *Anaesthesia, 2020. https://doi.org/10.1111/anae.15262 (Accessed 15/12/20)*

5:Consensus statement for the prescription of pain medications at discharge after elective adult surgery. *Canadian Journal of pain. 2020. https://www.tandfonline.com/doi/full/10.1080/24740527.2020.1724775 (accessed 15/12/20)*

6: HSE PCRS Data Sources. Annual reports. https://www.sspcrs.ie/portal/annual-reporting. (Accessed 30/12/20)

7: OECD: Urgent action needed to address growing opioid crisis. https://www.oecd.org/newsroom/urgent-action-needed-to-address-growing-opioid-crisis.htm (Accessed 31/12/20)

8: HRB National Drugs Library (2019) Opiates: the Irish situation. www.drugsandalcohol.ie/17313 (Accessed 01/01/21)

9: US Department of Health and Human Services. https://www.hhs.gov/about/news/2017/10/26/hhs-acting-secretary-declares-public-health-emergency-address-national-opioid-crisis.html (Accessed 01/01/21)

10: NCPA/HPO Annual Report 2018. https://www.hse.ie/eng/about/who/cspd/ncps/anaesthesia/resources/ncpa-hpo-annual-report-2018.pdf Accessed 31/12/20

11: Shah A, Hayes CJ, Martin BC. Characteristics of initial prescription episodes and likelihood of long-term opioid use – United States, 2006–2015. *Morbidity and Mortality Weekly Report* 2017; **66**: 265– 9

12: Levy N, Mills P. Controlled-release opioids cause harm and should be avoided in management of postoperative pain in opioid naive patients. *British Journal of Anaesthesia* 2019; **122**: e86– 90

13: Dowell D, Haegerich TM, Chou R. CDC Guideline for prescribing opioids for chronic pain–United States, 2016. *Journal of the American Medical Association* 2016; **315**: 1624– 45

14: Australian and New Zealand College of Anaesthetists and Faculty of Pain Medicine. Position statement on the use of slow-release opioid preparations in the treatment of acute pain, 2018 https://www.anzca.edu.au/search-results?searchtext=slow-release+opioid+preparations+acute&searchmode=anyword&smartsearchfilter (Accessed15/12/20)

15: US Food & Drug Administration. Extended-release (ER) and long-acting (LA) opioid analgesics risk evaluation and mitigation strategy (REMS), 2012. https://www.accessdata.fda.gov/drugsatfda_docs/label/2012/OpioidREMJuly2012.pdf (Accessed 15/12/20)

16: Howard R, Fry B, Gunaseelan V, et al. Association of opioid prescribing with opioid consumption after surgery in Michigan. *Journal of the American Medical Association Surgery* 2019; **154**: e184234

17: Lowenstein M, Grande D, Delgado MK. Opioid prescribing limits for acute pain – striking the right balance. *New England Journal of Medicine* 2018; 379: 504– 6.

18: Brat GA, Agniel D, Beam A, et al. Postsurgical prescriptions for opioid naive patients and association with overdose and misuse: retrospective cohort study. *British Medical Journal* 2018; **360**: j579

19: Lipari RN, Hughes A. How people obtain the prescription pain relievers they misuse, 2017. https://www.samhsa.gov/data/sites/default/files/report_2686/ShortReport-2686.html (Accessed 15/12/20)

20: Bicket MC, Long JJ, Pronovost PJ, Alexander GC, Wu CL. Prescription opioid analgesics commonly unused after surgery: a systematic review. *Journal of the American Medical Association Surgery* 2017; **152**: 1066– 71

21: Feinberg AE, Chesney TR, Srikandarajah S, Acuna SA, McLeod RS; Best Practice in Surgery Group. Opioid use after discharge in postoperative patients: a systematic review. *Annals of Surgery* 2018; **267**: 1056– 62