

An evaluation and Quality Improvement cycle to optimise the prescribing of opioid medications on discharge from a hospital ward or clinical unit

Introduction

The place of opioids in the management of acute pain is well established, however there are growing concerns with how these medications are being prescribed and used. A trend in both increased prescribing and increased opioid related harm has been observed in the United States, Canada(1) and Australia (2-5). Leong et al reported a threefold increase of PBS opioid prescriptions in Australia between 1992 to 2007(6).

Effective pain management following acute injury or surgery is essential, but care needs to be taken to reduce the likelihood of causing unintended harm through long-term use, abuse, or diversion. Evidence shows that the risk of long-term opioid use increases with each additional day of initial supply, particularly if prescribed more than five days of therapy (7, 8). This makes it vital to optimise the use of simple analgesics such as paracetamol and non-steroidal anti-inflammatory drugs (NSAIDs) which have a dose-sparing effect on opioids (9-11) and non-pharmacological strategies to provide multimodal pain management.

Dispensing records show oxycodone, a potent opioid, is the most commonly prescribed opioid across Queensland both on discharge from hospital and in the community. What is largely unknown is how this prescribing looks at the front-line of each clinical setting within in each Queensland Hospital.

Using the Opioid Prescribing Toolkit, each clinical setting can take the lead in establishing and understanding local prescribing trends and how (or if) analgesia plans are communicated primary care provided in discharge summaries. Front-line clinicians can then spearhead interventions to improve opioid prescribing in their area.



Aims & Objectives

Project aim:

To optimise the safe and effective prescribing of oxycodone (or other opioids) within the clinical unit or ward to provide good pain management and minimise unintended risk or harm to patients.

Objectives:

1. To assess the current utilisation of oxycodone (or other opioids) in a clinical unit or ward and to establish the level and quality of clinical handover on discharge
2. To provide a quality improvement intervention, including resource development and education
3. To re-assess practice to measure impact and opportunities for further improvement



Project Scope and Overview

This project will be undertaken in

- Individual Units or Wards within Queensland Health Hospital Sites

Project Team

Medical Officer (Project Lead) ideally SMO

Acute Pain Management Services/Representative

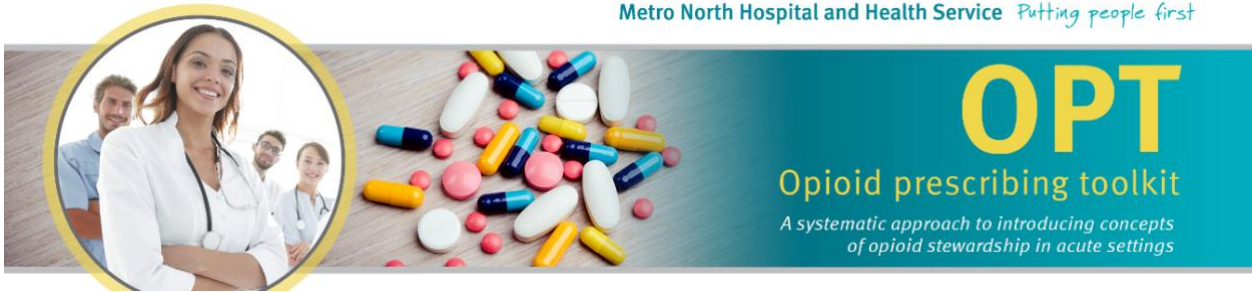
RMO within the rotation

Clinical Pharmacist

Nursing Rep

Summary of the Intervention





Method

Timeline

In keeping with timing of Medical Intern/JHO rotations

Week 1 & 2

Baseline Audit: Data collection period

Week 3

Education 1: General pain management and oxycodone prescribing principles

Presented by: Acute Pain Clinician

Attended by Junior Doctors and Pharmacists

Week 6

Education 2: Feedback of local practice identified in baseline audit, Would practice change recommendations and resources be introduced here too? EG oxycodone leaflet, discharge template

Presented by: Project Lead (RMO or Registrar)

Attended by: All prescribers within the unit

Week 9 & 10

Follow-up Audit: Data collection period

Baseline Audit

Patient Identification

Patient identification methods can include review of electronic prescribing, dispensing records or manual collection of the red (medical records) copies of triplicate discharge prescriptions.



Required Data

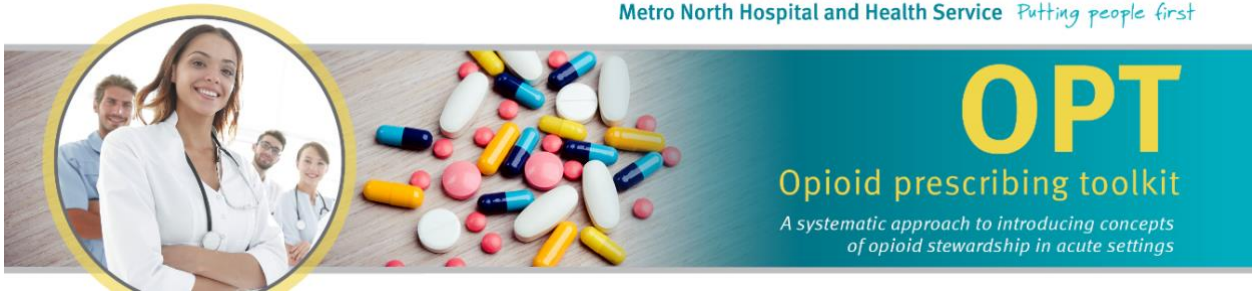
The following data will be collected on patients identified as having received an oxycodone (and other opioids) prescription on discharge. Sources used may include prescriptions or the patient’s medical record, as well as electronic filing systems EDIS (Emergency Department Information System), iEMR (integrated Electronic Medication Record), The Viewer, and eLMS (Enterprise-wide Liaison Medication System).

From Prescription

- Patient demographics
 - Age, Gender
- Oxycodone (and other opioids) prescription details
 - Date of Prescription
 - Drug, dose, form, frequency, duration, number of tablets
 - If legal requirements of S8 prescription are met
 - Other analgesia prescribed or recommended

From EDIS, iEMR, The Viewer, eLMS or patient’s medical record

- Indication for Opioid Analgesia
 - For example, presenting complaint or diagnosis, surgery or procedure
- Analgesia while Inpatient
 - If simple analgesia administered (paracetamol, NSAID)
 - Opioid therapy, use within last 24 and 48 hours
- Communication in Discharge Summary/Letter
 - A ‘low bar’ could be used for baseline audit, such as ‘was the opioid prescribed mentioned by name?’



Intervention Materials

This improvement cycle will include local development (from example OPT resources if desired) any number of the following interventions depending on audit findings and departmental preference.

- Education 1 and 2 as described in 'Timeline'
- Analgesia/Pain Management Prescribing for clinical unit
- Additional education for staff groups, including pain assessments
- Standardised oxycodone (and other opioids) discharge prescribing protocol
- Discharge patient information brochure for oxycodone (and other opioids)

Example template for completing analgesia plan in discharge summary:

"Mr XX was discharged on [opioid, dose, freq, duration] for management of acute post-operative pain. In addition to his opiates, we have advised him to take simple analgesics (paracetamol/ibuprofen) regularly for 5 days.

*We **anticipate** that the current pain management is sufficient for his [procedure], however should he have ongoing issues with pain, **please review** the ongoing need of all agents at your next opportunity"*

Follow-up Audit

The follow-up audit will begin after interventions have been introduced, ideally for weeks 9 and 10 of the rotation. Methodology and data collected will be consistent with that described for the baseline audit.

Additional measures may also be relevant to interventions deployed, such as:

- Proportion of Discharge Summaries/Letters with analgesia plan in keeping with template
- An estimate of the number of patient brochures given during follow-up period



Analysis

A data collection tool will be used to collate the data which will then be entered and analysed electronically using Microsoft Excel.

Project exclusions

Inclusion criteria

All patients identified as having received a discharge prescription for oxycodone (and other opioids) from the ward or clinical unit undertaking the intervention.

Exclusion criteria

All other patients

Ethics approval

Sought from RBWH HREC on the basis of a Quality Improvement evaluation

References:

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