safety IN PRACTICE

General Practice Opioids Clinical Module 2018-19

Every patient, every time

AUCKLAND DISTRICT HEALTH BOARD Te Toka Tumai

Waitemata District Health Board
Best Care for Everyone

ALLIANCE HEALTH+ Inspiring Health Transformation
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comprehensive care
EAST HEALTH TRUST primary health organisation
TOTAL HEALTHCARE Improving Community Health
National Hauora Coalition
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Contents

Section 1: Introduction

1.1 Background

A key aim of the Safety in Practice programme is to reduce the harm experienced by patients from medication use. Adverse events related to medications are a significant cause of patient morbidity and mortality, and a source of substantial costs for both organisations and patients.[1] [2]

The Institute for Healthcare Improvement (IHI) classes opioids as one of four groups of medicines (along with anticoagulants, insulin and sedatives) that cause harm to patients even when used as intended. Harms associated with opioid therapy include tolerance, hyper-algesia [3], iatrogenic addiction, drug diversion and aberrant drug-related behaviours[4]. A 2013 review noted increases in opioid use for back pain and other chronic musculoskeletal conditions, prescription opioid addiction and fatal overdose[5].

Nearly half of referrals to Auckland Opioid Treatment Services for opioid addiction originate from pain relief started in the acute setting with oral medication.[6] Advice outlined in a Goodfellow 'Gem' July 2018 indicates that, "*long term use often starts with acute pain so prescribe the lowest effective dose of short acting – 3 days or less will often be sufficient and more than 7 days is rarely needed*".[7] A 2017 study of medication-related harm in New Zealand hospitals indicated that of the top 10 medicines implicated in harm, opioid medications featured five times. Of the individual medicines, morphine caused 16% of harm, and other opioids (fentanyl, oxycodone, codeine and tramadol) account for 14%. Togetherm, opioids account for 30% of harm and are implicated in three of the most commonly reported harms; constipation, nausea/vomiting and delirium/confusion/over-sedation.[8]

This module helps practices review the rigor of their processes for prescribing and reviewing patients who have been prescribed an opioid for acute pain management, as opposed to that prescribed in a palliative care setting.

1.2 Aim

100% of prescribing for opioids derived analgesia* will follow a safe, standardised process.

*Includes any medication containing: Codeine, tramadol, fentanyl, pethidine, oxycodone, morphine

1.3 Equity

Reducing inequalities in outcomes between Maori and other high needs groups compared to the general population is a priority at all levels of the health system, including Auckland and Waitemata DHBs[9]. While Safety in Practice is not a programme specifically focused on equity issues, it is well recognised that for those groups who area already experiencing poorer health outcomes, the very

reasons that contribute to this could make them more at risk of errors, oversights, miscommunications and receiving care that is less able to meet their needs. Working on processes to improve patient safety overall would be expected to have particular benefit for reducing risk for these groups, which would contribute to reducing inequity.

Practices can focus their work to look at specific higher risk groups using an equity lens. Some examples might be:

- Selecting eligible patients only for particular groups and then selecting the sample of 10 patients randomly from these. Dr Info and Mohio both allow either selection by Maori, or by high needs, or ordering them according to ethnicity.
- Specifically seeking input from patients from these groups on their experience of the practice's opioid management processes, and how they might be improved from the patient interaction point of view.

1.4 Measures and Rationale

Measure 1 Is there a clear indication within the problem list for an opiate to be used?
Rationale • It is sound clinical practice that the indication for the stronger pain relief is clearly recorded and apparent for other clinicians such as locums who might need to follow the patient up. This facilitates dose adjustment or appropriate targeted questioning at review, with clearer expectations about likely patient progress. • For any medication with risk of harm, it is important to have clear documentation from a medico-legal point of view, around clinical reasoning and justification for management.
Sources • BPAC Analgesic Update March 2018 https://bpac.org.nz/report/snippet/analgesic-update.aspx • BPAC Feb 2018: When to consider strong opioids for patients with acute pain https://bpac.org.nz/2018/opioids.aspx
Measure 2 Is there evidence that a pain score has been used prior to the prescription of an opioid?
Rationale • Using a pain score (ideally that includes a functional assessment component) provides a baseline that allows comparison at review, as well as providing evidence supporting the clinical reasoning to use an opioid in the first place, which is indicated for severe pain of a type that is likely to be responsive to an opioid.
Sources As above
Measure 3 Is there evidence that paracetamol and/or NSAID have been prescribed concurrently with the opioid?
Rationale • Multi-modal analgesia (concurrent use of analgesics with different modes of action) utilising the analgesic ladder can improve analgesic effectiveness, reduce the dose of opioids if these are prescribed, reduce adverse effects and minimise the length of time that patients require opioids.
Sources • BPAC Analgesic Update March 2018 https://bpac.org.nz/report/snippet/analgesic-update.aspx • BPAC Feb 2018: When to consider strong opioids for patients with acute pain https://bpac.org.nz/2018/opioids.aspx • BPAC Issue 18: WHO Analgesic Ladder: which weak opioid to use at step two? https://bpac.org.nz/BPJ/2008/December/docs/bpj18_who_ladder_pages_20-23.pdf
Measure 4 Is the duration of treatment with the opioid 10 days OR LESS at maximum dose?
Rationale • Long term use often starts with acute pain. Prescribe the lowest effective dose of short

acting – 3 days or less will often be sufficient and more than 7 days rarely needed.
- Up to 10 days allows some discretion that different clinicians can use depending on the situation – this would be an expected MAXIMUM without review.

Sources
- Goodfellow Gems https://www.goodfellowunit.org/gems/guidelines-prescribing-opioids-chronic-non-malignant-pain

Measure 5 Has the patient been given written advice on the opioid?

Rationale
- A written analgesia plan assists patients to understand their medicine regimen, and helps minimise medicine errors and optimise pain management with appropriately regular and adequate dosing.
- Patient understanding and awareness off the common potential side effects and how to mitigate against them is important for therapeutic effectiveness and compliance.

Sources
- BPAC Feb 2018: The principles of managing acute pain in primary care https://bpac.org.nz/2018/acute-pain.aspx

IF the patient has been issued a second prescription:

Measure 6 Is there documented evidence that the patient has been seen prior to a second prescription?

Rationale
- Regular assessment of pain improves management and outcomes. As pain is resolving medication requirements should be diminishing, and pain that is unable to be managed or is increasing warrants consideration of other causes.
- Common side effects can be better mitigated against with regular review and assessment.

Sources
- BPAC Feb 2018: The principles of managing acute pain in primary care https://bpac.org.nz/2018/acute-pain.aspx

Measure 7 Is there evidence that pain control was assessed using a pain score at the review?

Rationale
- Using a pain score (ideally that includes a functional assessment component) at review provides a better assessment of pain and allows for a comparison to baseline, as well as providing evidence supporting the clinical reasoning for an ongoing management plan.

Sources
As above

Measure 8 Is there documented evidence that the patient was asked about side effects of the opioid at review?

Rationale
- Patients should be reviewed for common side effects to allow for medication adjustment, mitigation of side effects and the prevention of other more serious complications such as

severe constipation and over-sedation. • Discussing side effects as part of an analgesia plan improves compliance. • Different people metabolise opioids at different rates which influences the effectiveness and risk of side effects for different people. Monitoring therefore needs to be individualised.
Sources • BPAC Feb 2018: The principles of managing acute pain in primary care https://bpac.org.nz/2018/acute-pain.aspx • BPAC Feb 2018: Prescribing tramadol appropriately https://bpac.org.nz/2018/tramadol.aspx
Measure 9 If the drug strength was maintained or increase has the patient been followed up (or arranged to be followed up) within 4 weeks of the second prescription?
Rationale • Regular assessment of pain improvement management and outcomes.
Sources • BPAC Feb 2018: The principles of managing acute pain in primary care https://bpac.org.nz/2018/acute-pain.aspx

Section 2: Instructions

2.1 Collect your baseline data

2.1.1 Identify patients

On the day of the data collection each month, run the query related to your module, available to download from http://www.safetyinpractice.co.nz in the Resources section.

2.1.2 Randomise

From the list generated in step 2.1.1 it is important to select a **random sample of 10 patients to audit**.

For sample sizes up to 10

1. Audit all 10 patients.

For sample sizes of 11 - 28

1. Select a random number between 1 and 10 by picking pieces of paper out of a hat.
2. If you select an odd number audit every other patient starting at 1 e.g. 1st, 3rd, 5th, 7th etc. If you select and even number audit every other patient starting with the second patient e.g. 2nd, 4th, 6th, 8th etc.

For sample sizes 29+

1. Select a random number between 1 and 10 by picking pieces of paper out of a hat.
2. Audit every other patient starting at this number e.g. if 6 is drawn audit the 6th, 8th, 10th patient etc.

2.1.3 Audit

Review each of your 10 selected records against the following criteria. You can use the Paper Form provided on our website to keep track or simply enter records directly onto the audit spread sheet.

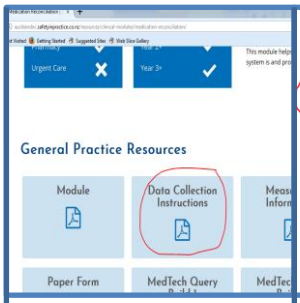
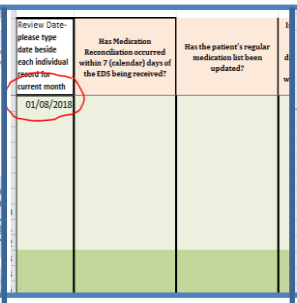
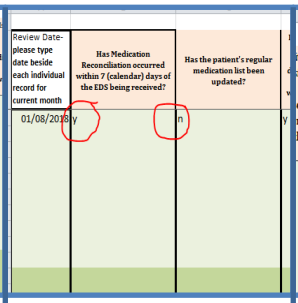
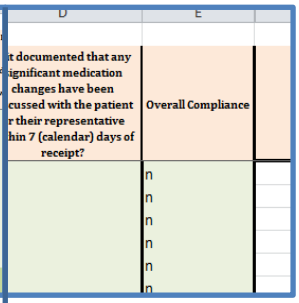
2.1.3.1 Measures & guidance

Measure 1 Is there a clear indication within the problem list for an opiate to be used?
Guidance There needs to be clear indication within the clinical record that would be apparent to a non-attendant clinician, of the underlying clinical problem for which the opiate is being prescribed. Record YES if this is apparent. Record NO if this is not clearly recorded.
Measure 2 Is there evidence that a pain score has been used prior to the prescription of an opioid?
Guidance Record YES if this is clearly recorded. Record NO if this is not clearly recorded.
Measure 3 Is there evidence that paracetamol and/or NSAID have been prescribed concurrently with the opioid?
Guidance This could be evidenced by co-prescription, or documentation of concurrent medications in the record.
Measure 4 Is the duration of treatment with the opioid 10 days or less at maximum dose?
Guidance Check against prescriptions issued.
Measure 5 Has the patient been given written advice on the opioid?
Guidance The written advice around how to take the medication as part of an analgesia plan should be recorded along with what written advice about the medication itself.
IF the patient has been issued a second prescription:
Measure 6 Is there documented evidence that the patient has been seen prior to a second prescription?
Guidance If the patient was reviewed in a face to face consultation then record YES. If the were not then record NO.
Measure 7 Is there evidence that pain control was assessed using a pain score at the review?
Guidance Record YES if this is clearly recorded. Record NO if this is not clearly recorded.
Measure 8 Is there documented evidence that the patient was asked about side effects of the opioid at review?
Guidance Record YES if this is clearly documented. Record NO if this is not clearly recorded.

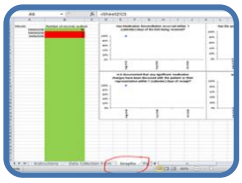
Measure 9 If the drug strength was maintained or increase has the patient been followed up (or arranged to be followed up) within 4 weeks of the second prescription?
Guidance Record YES if this is clearly documented. Record NO if this is not clearly recorded.

2.1.4 Complete the spread sheet

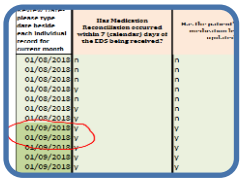
Tip: Your first set of data is relating to the month of August so this is due on September 10th. For this data set record "August" in the first column.

			
Download the spread sheet for your module in the Resources section of www.safetyinpractice.co.nz	Record the month **the data relates** to in a DD/MM/YY format left column. For your first data set collected in September this is 1/8/18,	Mark y, n or n/a against for each measure and each patient according to your findings in the previous section.	The final measure "Overall compliance" will auto-populate.

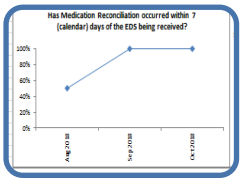
Tip: Please don't audit more than 10 patient for a given month or add or remove rows from the spread sheet as this will disrupt the formulas and cause the graphs to break.



Graphs will be automatically generated in the next tab in the spread sheet.



Next month add your data to the same spread sheet.



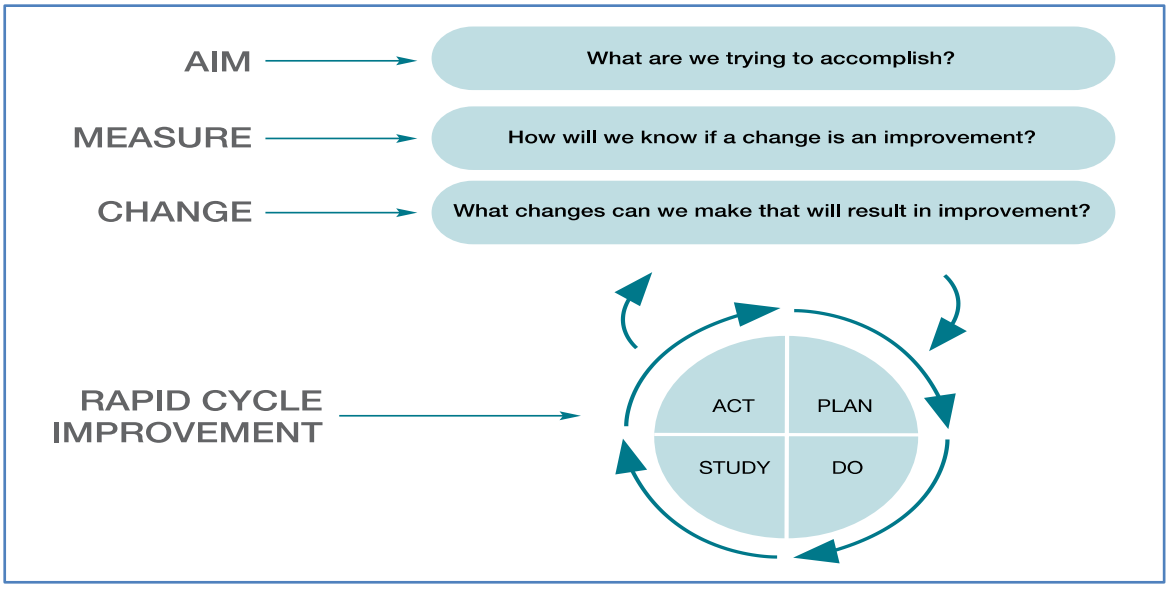
This means you can track your progress over time.

2.1.5 Submit

Submit your data on the 10th of each month to audit@safetyinpractice.co.nz

Tip: Please ensure all data sent to Safety in Practice in anonymized

Creating Change – Getting started



Before you start your plan phase:

- Bring together your team – these people will work with you to plan and carry out the test of change
- Select the process you wish to change

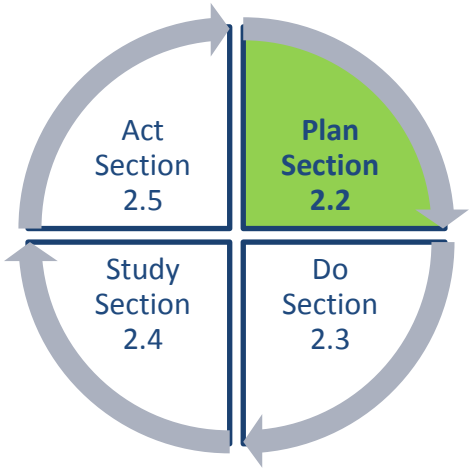
As a team answer the 3 questions above:

1. What are we trying to accomplish? (write an objective for this PDSA cycle)
2. How will we know if a change is an improvement?
3. What changes can we make that will result in improvement?

2.2 Plan

Plan how the changes will happen – ask yourselves and write down the following:

- What will we do?
- Who will carry out the plan?
- When will it take place?
- Where will it happen
- What data and information will we collect – i.e. what will help us determine if the change is an improvement?
- Do we need training or materials?



Make predictions –what do you think will happen when you test the change and why?
Ask yourself:

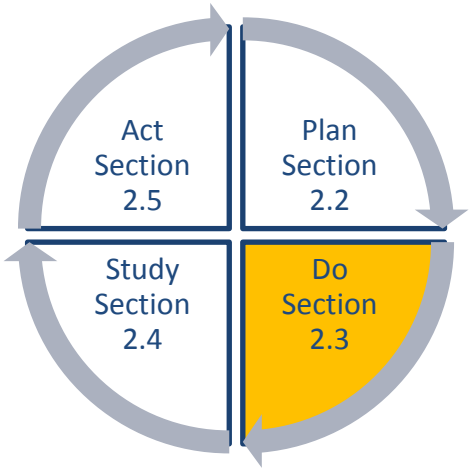
- What do we hope to learn by testing the change?
- What will happen when we test the change?
- How will the change be carried out?

2.1.2 Change ideas

Clinical processes	• Update of locum / registrar orientation document • Updating & circulating opioid prescribing policy amongst clinicians at the practice • Ensure whole practice team are familiarwith CD handling and Rx processes. • Controlled drug Rx's to be scanned into patient notes to ensure audit trail • New CD Rx pads received, continue to be documented in numerical sequence in CD register. • Explore possibility of coding for opioid prescribing
Team and clinician engagement	• Agreement together for max of 10 days on script if at full dose • Education through Goodfellow Webinar on acute pain management viewed by all clinicians • Clinical champion address 'outliers' individually
Pain scores	• Explore and agree on pain score system to be used
Recording of side effects	• Keywork prompt for side effects to document
Patient advice	• Standardised handouts for patients – use of SaferRx • Keywords to record patient information

2.3 Do

- Prepare to test; gather resources
- Try out your change idea – it's usually best to try it out on a small sample or area of your practice. Starting on a small scale might mean 1 or 2 patients – that way if it doesn't work its easier to remove the step or process
- While you are testing keep track of what happens in real time – don't wait to write it up

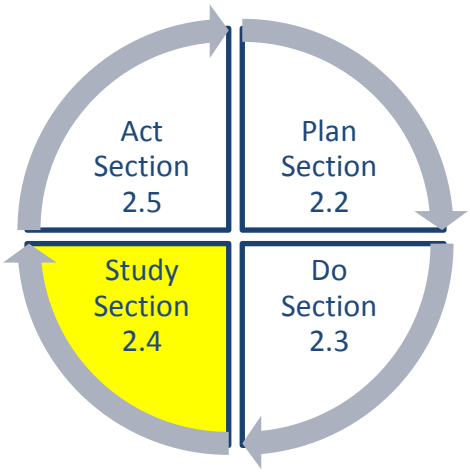


2.4 Study

Complete the analysis of the data.
Ask yourself:

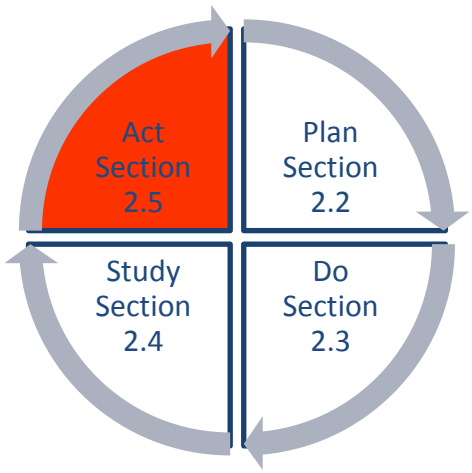
- What has changed
- Who was affected
- Are the effects positive or negative
- Are they worth keeping or removing., adapting or developing

Compare the data to your predictions.



2.5 Act

- Summarise and reflect on what was learned.
- Refine the change based on what was learned.
- Are you going to adopt the change, adapt and retest, or abandon?
- Prepare a plan for your next PDSA cycle – back to step 2.2 Plan for your next cycle!



Previous teams' experiences

Benefits	Challenges
•Reassurance that staff are following the process. •Clearer team roles. •Involving reception admin in an area not thought to concern them has benefits for the whole practice. •Reduction in opioid induced side effects •Process helps towards Cornerstone accreditation. •Reduction in amount of opioids prescribed	•Time consuming •Getting agreement from all team members •Buy-in from doctors •Patients not keen on other adjuvant treatments •Adjusting measures to what is relevant to that clinic

Section 3: Resources

3.1 MOPs & Cornerstone

The Opioid Management Audit is not specifically endorsed by the RNZCGP for Maintenance of Professional Standards but individuals can write this up as an audit for quality improvement for MOPS outlining what they have done, their findings and what they have done to further improve processes.

The audits and PDSA cycles can be used for Cornerstone / Foundation standards as a Quality Improvement activity.

3.2 Additional Resource

Resources – general

- 'Acute lower back pain in adults'
https://aucklandregion.healthpathways.org.nz/index.htm

- Analgesia in adults with acute pain
https://aucklandregion.healthpathways.org.nz/71935.htm

- BPAC Feb 2018: The principles of managing acute pain in primary care
https://bpac.org.nz/2018/acute-pain.aspx

- BPAC Feb 2018: Prescribing tramadol appropriately
https://bpac.org.nz/2018/tramadol.aspx

- BPAC Feb 2018: When to consider strong opioids for patients with acute pain
https://bpac.org.nz/2018/opioids.aspx

- BPAC Feb 2018: When to consider strong opioids for patients with acute pain
https://bpac.org.nz/2018/opioids.aspx

Pain score (incorporating functional component)

Rating	Pain level
0	**No pain**
1 to 3	**Mild pain** (nagging, annoying, interferes little with *ADLs)
4 to 6	**Moderate pain** (interferes slightly with ADLs)
7 to 10	**Severe pain** (disabling, unable to perform ADLs)

	*ADLs is the abbreviation for activities of daily living

***Source – Auckland Regional Health Pathways* - Analgesia in Adults with Acute Pain**

Example of specific patient information given out along with guide:

MORPHINE
PATIENT INFORMATION GUIDE

Never give your medicines to others even if their symptoms are the same as yours.

WHY HAVE WE GIVEN YOU THIS GUIDE?
This information is for you to use when taking morphine
Morphine is used for the relief of severe pain
Morphine can cause serious side effects, so it is important you know how to take it safely
Talk to your doctor, pharmacist (chemist) or nurse if you have any questions

3.6 Glossary

ACE-inhibitor	Angiotensin converting enzyme inhbitior such as lisinopril. An anti-hypertensive medication.
ADE	Adverse Drug Event
ADHB	Auckland District Health Board
ALT	Alanine aminotransferase, a marker of liver function.
AST	Aspartate aminotransferase, a marker of liver function.
ARB	Angiotensin receptor blocker such as candesartan. An anti-hypertensive.
Bundle	Each of the areas identified as presenting the highest risk to patients within the community have been developed into modules. Each module is structured to include a change package and a bundle.
CARM	Centre for Adverse Reaction Monitoring New Zealand
CoX-2 inhibitors	A form of NSAID that, unlike e.g. ibuprofen, only works on the CoX-2 enzyme.
CPAMS	Community Pharmacy Anticoagulation Monitoring Service
CKD	Chronic kidney disease
Change package	A a c A collection of change ideas known to produce a desired outcome in a process or system.
Cytotoxic	A drug that is toxic to living cells.
Dr Info	A clinical information platform used by general practices. Data is extracted and analysed from practices PMS'.
DMARDs	Disease modifying anti-rheumatic drugs. These medications are used in auto-immune diseases such as rheumatoid arthritis.
EDS	Electronic Discharge Summary
eGFR	Estimated glomerular filtration rate, renal function test
FBC	Full blood count
GI	Gastro-intestinal
IHI	Institute of Health Improvement
INR	International Normalised Ratio. This is a marker of coagulability in the blood used to guide warfarin dosage.
H2 antagonists	Gastro-intestinal protective medication
HQSC	Health Quality & Safety Commission of New Zealand
LFTs	Liver function tests
Medication Reconciliation	The process of collecting, comparing, and communicating the 'most accurate' list of medicines that a patient is taking, together with details of any allergies and/or adverse drug reactions (ADRs), with the outcome of providing correct medicines for a given time period
Module	A structured way of improving the processes around patient care: a small, straightforward set of evidence-based practices, generally three to five, that, when performed collectively and reliably, have been proven to improve outcomes.
Mohio	A clinical information platform used by general practices. Data is extracted and

	analysed from practices PMS'.
NSAIDs	Non-steroidal anti-inflammatory drugs used for pain and inflammation. Examples include ibuprofen, naproxen and diclofenac.
Opioids	Strong pain medications such as codeine, morphine and fentanyl.
OTC	Over the counter
PPI	Proton pump inhibitor such as omeprazole. These medicines reduce stomach acid.
PMS	Patient management system e.g. MedTech, MyPractice, ToniQ
PHO	Primary health Organisation e.g Auckland, Alliance Health Plus, Comprehensive Care, East Health Trust, Total Healthcare, National Hauora Coalition, Procare
TFTs	Thyroid function tests
RNZCGP	Royal New Zealand College of General Practitioners
WBC	White blood cells. Used as a marker of infection and immune system functioning.
WDHB	Waitemata District Health Board
SIP	Safety in Practice

3.7 References

[1] Stausberg J. International prevalence of adverse drug events in hospitals: an analysis of routine data from England, Germany and the USA. BMC Health Services Research. 2014; 14:125.

[2] Bouvy JC, De Bruin ML, Koopmanschap MA. Epidemiology of adverse drug reactions in Europe: a review of recent observational studies Drug Safety. 2015; 38:437–453.

[3] Chen L, Vo T, Seefield L et al. Lack of correlation between opioid dose adjustment and pain score change in group of chronic pain patients. 2013 *J Pain*Apr;14(4):384-92

[4] Sullivan MD, Von Korff M, Banta-Green C et al. 2010. Problems and concerns of patients receiving chronic opioid therapy for chronic non-cancer pain. *J Pain.*May;149(2):345-53

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[6] Correspondence and presentation from Dr V McFarlane AOTS 2018.

[7] Goodfellow Gems, July 2018. Available at: https://www.goodfellowunit.org/gems/guidelines-prescribing-opioids-chronic-non-malignant-pain

[8] Robb, G, Loe E, Maharaj A et al. Medication-related patient harm in New Zealand hospitals. New Zealand Medical Journal 2017;130(1460):21-32. Available at: www.nzma.org.nz/journal/read-the-journal/all-issues/2010-2019/2017/vol-130-no-1460-11-august-2017/7328

[9] Waitemata and Auckland DHBs, 2017. 2017/18 Annual Plan. Available at: http://www.waitematadhb.govt.nz/dhb-planning/organisation-wide-planning/annual-plan/