



Community Pharmacy

NSAIDs module

2020-21

Every patient, every time



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Why choose NSAIDs for Safety in Practice?

A key aim of the Safety in Practice programme is to work with Primary Care teams to reduce preventable patient harm from the care they receive. Adverse drug events (ADEs) are major causes of patient morbidity and mortality, and a source of significant costs for both organisations and patients.¹ Non-steroidal anti-inflammatory drugs (NSAIDs) are the most frequently prescribed medicines for analgesia in primary care, after paracetamol.² However, NSAID use can be associated with a range of serious adverse effects including:

- cardiovascular events
- gastrointestinal complications
- renal failure
- hypersensitivity reactions.

Even if the risk of an individual patient experiencing an NSAID-related adverse event is relatively low, the frequency of NSAID use within the community means that the potential for NSAID-related adverse events to occur is a concern. NSAID use therefore requires careful consideration of individual patient risk factors.² Many people also take over the counter NSAIDs from pharmacies and supermarkets, so remember to ask about these.

This clinical module focuses on best practice and safe use of NSAIDs (including COX-2 Inhibitors). Although the focus of this clinical module is on prescribed NSAIDs for data collection purposes, it is expected that equivalent clinical checks and education will also be provided for over-the-counter NSAIDs.

Pharmacist Scope of Practice

According to The Pharmacy Council of New Zealand, “Pharmacists ensure safe and quality use of medicines and optimise health outcomes by contributing to patient assessment and to the selection, prescribing, monitoring and evaluation of medicine therapy”.⁴

Optimal medicines management and patient education are core responsibilities of pharmacy practice. It is best practice to document all interventions and recommendations made to evidence work done. This is one way pharmacists can demonstrate the work that they do, in line with Pharmacy Council of New Zealand Competence Standard O1.4.7. The process measures are evidence that best practice activities have been performed.

Competence Standard O1.4.7: ‘Supports and provides continuity of care with accurate and timely documentation of clinical and professional interventions and recommendations, using agreed handover protocols.’

Equity

We all have a role to play in reducing inequity in health in New Zealand. Particular groups are consistently disadvantaged in regard to health, and these inequities affect us all.⁵ Health inequities are avoidable, unnecessary and unjust differences in the health of groups of people.⁵ This may be between socioeconomic groups, ethnic groups, different geographical regions, levels of ability or disability, and between males and females. Research indicates the poorer you are, the worse your health will be.⁶ Inequalities experienced in early life influence people in later life, and inequalities take a cumulative toll on an individual’s health over their lifetime.⁵

To promote equity in health, we need to understand the inequity, design interventions to reduce them, review and refine the intervention and evaluate their impact. It is important to minimise the

impact of disability and illness on socioeconomic position and access to the determinants of health.⁶

In particular as health providers, we need to emphasise the power of joint decision making and trust with patients, it is important to prioritise time to listen to their health issues in their words, ideally with protected time in consultation room, involving their whānau if preferred by them. It is important they have an understanding of the treatment options, the risks involved and where to go for help.

The most effective conversations are based on a mutual trust and understanding, giving patients confidence they are in control and empowered to make informed decisions. There are significantly increased risks of avoidable medicine related harm in Māori and Pasifika, it is important we understand this and take special care to ensure optimal health outcomes for all.

Previous teams' experiences

Benefits	Challenges
<ul style="list-style-type: none"> • Confidence within the team that patient education is taking place • Good conversations with patients by all staff members • Improved concordance and understanding of medication • Have a better relationship with the GPs and practice nurses in the area 	<ul style="list-style-type: none"> • Time commitment required • Frequent reinforcement needed to effect change • Took time to effect change • It is difficult to talk to everyone in detail during busy times • Contacting patients afterwards and thinking about how to best approach the conversation.

1.1 Getting your team ready for Safety in Practice

- Identify responsible leads to drive the programme in your pharmacy
- Organise a staff meeting to introduce the programme; it is critical to have the whole team engaged. Safety in Practice works when all team members take part and make their processes safer for all of your patients.
- Develop a Standard Operating Procedure (SOP) document for locums and new staff. Think about how you can all ensure new team members are up to speed on what you do and why. This way your results continue to show improvement when regular staff are not there.
- Decide on preferred patient resources with your team; make them readily available.
- Decide how to document interventions, discussions and education; agree on this as a team.
- Decide who will be responsible for completing the data collection sheet and submitting data. Share this task so skills are developed across team members.
- Engage with your GPs, discuss the programme and the resources you will be using. If they have any questions you can refer them to the Safety in Practice website.
- Display posters in the pharmacy so patients are aware that you are a 'Safety in Practice' pharmacy. Posters will be available at the learning sessions, or you can request one from info@safetyinpractice.co.nz

1.2 Aim

All patients receiving a prescribed NSAID will have clinical checks performed and receive education at time of medicine collection by June 2021.

1.3 Measures & rationale

This module includes process and outcome measures. The **process measures** are evidence the activity has taken place. This needs to be recorded in the patient file (Toniq or RxOne).

The **outcome measures** assess whether the patient has understood and can correctly recall information provided.

To assess your processes, we require data from a *random* sample of 10 patients each month. Please ensure it is anonymous without NHI or patient-identifiable information.

- Please see Table 1 for further guidance regarding these measures
- The questions relate to the patient or carer as appropriate
- The target population for data collection is patients aged 18 years and over
- For prescriptions with repeats, data collection will focus on initial dispensing encounter
- Medicine refers to the NSAID

For this module to be successful, it is best to start by getting to know your GPs and informing them that you are part of the Safety in Practice programme. Let them know the measures you are working on with this module, and ask them how they would prefer to be contacted if you have any queries.

Table 1: Measures and rationale

Is there documented evidence that the patient has received the following care when they had their NSAID dispensed (original dispensing).

Process measure	Rationale
<p>1. If the patient is prescribed a Triple Whammy, is there documented evidence the prescriber was notified?</p> <p>Yes <input type="checkbox"/></p> <p>No <input type="checkbox"/></p> <p>N/A (not on Triple Whammy) <input type="checkbox"/></p>	<p>A Triple Whammy is the concurrent use of ACE (Angiotensin-converting enzyme) inhibitor or ARB (Angiotensin-2 receptor blocker), a diuretic and an NSAID. This combination is associated with an increased rate of acute kidney injury compared to double therapy (diuretic plus ACE inhibitor or ARB). The greatest risk is observed in the first 30 days of use.³</p> <p>The Triple Whammy is best avoided to prevent acute kidney injury. Contact the prescriber, ask them to reconsider and check the patient's renal function.</p> <p>Offer the following information if appropriate:</p> <ul style="list-style-type: none"> • www.saferx.co.nz/triplewhammy.pdf • https://bpac.org.nz/2018/triple-whammy.aspx <p>Use patient information leaflets as appropriate:</p> <ul style="list-style-type: none"> • www.saferx.co.nz/Patient_info_Triple_Whammy.pdf
<p>2. If the patient is considered in a high-risk group and not on gastro-protection, is there documented evidence the prescriber was notified?</p> <p>Yes <input type="checkbox"/></p> <p>No <input type="checkbox"/></p> <p>N/A (not a high risk patient) <input type="checkbox"/></p>	<p>People at increased risk of gastrointestinal adverse events from NSAIDs include:</p> <ul style="list-style-type: none"> • Aged over 65 years • Concomitant use of medicines known to increase risk of GI bleeds (i.e. anticoagulants, antiplatelets, aspirin, corticosteroids, SSRIs, venlafaxine, duloxetine) • History of GI ulcer or bleeding excessive alcohol or smoking. <p>If the patient presents with a risk factor and is prescribed an NSAID, contact the prescriber to discuss other options including:</p> <ul style="list-style-type: none"> • The use of alternative analgesia or • Gastro-protection with a proton pump inhibitor (PPI). <p>*Note: the PPI requirement will depend on the patient, duration of treatment and clinical judgement including likelihood of further NSAID use. If it is a short course of NSAID treatment, use your clinical judgement as to whether gastro-protection should be advised. Unnecessary PPI treatment also has risks, for example increased risk of <i>C. difficile</i> infections, which can cause chronic diarrhoea.</p>

3.	<p>Is there documented evidence there was a discussion about how to use the medicine?</p> <p>Yes <input type="checkbox"/> No <input type="checkbox"/></p>	<p>Taking NSAID formulations with milk or food, or using enteric-coated formulations may partially reduce symptoms such as dyspepsia.</p>
4.	<p>Is there documented evidence there was a discussion about possible side effects?</p> <p>Yes <input type="checkbox"/> No <input type="checkbox"/></p>	<p>Adverse effects include gastro-intestinal disturbances including pain or discomfort, dyspepsia or indigestion, nausea, diarrhoea, and occasionally bleeding/ulceration.³ Advise to report side effects so they can be managed.</p> <ul style="list-style-type: none"> • Heart burn, indigestion, stomach discomfort – take with food, refer to prescriber if painful • Severe stomach pain, blood in stools, coughing up or vomiting blood or dark vomit – see doctor immediately • Allergic reaction, swelling of lips, face, itching – contact doctor immediately
5.	<p>Is there documented evidence there was a discussion about the risks of a dehydrating illness and to keep hydrated?</p> <p>Yes <input type="checkbox"/> No <input type="checkbox"/></p>	<p>All NSAIDs have been associated with the development of acute kidney injury (AKI). This is more likely to occur in patients with other risk factors including:</p> <ul style="list-style-type: none"> • Hypovolaemic states • Aged over 65 years • Chronic hypertension or atherosclerosis • Pre-existing renal or glomerular disease • Use of the ‘triple whammy’ (ACE inhibitor or ARB, a diuretic and an NSAID)^{2,3} <p>If they are vomiting or have diarrhoea, advise to keep hydrated to help prevent kidney damage. Patients should consider alternative analgesia or withhold the NSAID if not required during the period of acute illness. Advise contact their healthcare professional in the event of severe vomiting or diarrhoea lasting longer than 2 days.</p>
6.	<p>Is there documented evidence the patient was offered written information about the medicine?</p> <p>Yes <input type="checkbox"/> No <input type="checkbox"/></p>	<p>To offer is to specifically ask if they would like to receive some written patient information. This could include:</p> <ul style="list-style-type: none"> • Yellow Card to clarify appropriate dosing and frequency • SafeRx® ibuprofen patient information sheet www.saferx.co.nz/Patient_info_ibuprofen.pdf • Medsafe www.medsafe.govt.nz or NZF http://nzf.org.nz/ consumer medicines information leaflets • Resources available on www.healthnavigator.org.nz • Self-Care cards

Outcome Measures

From the 10 random patients selected, contact them to ask the following questions. This can be via follow up phone call or when they return for a repeat. If you are unable to locate a patient after 2 attempts, document as N/A in the spreadsheet and note this in the comments column.

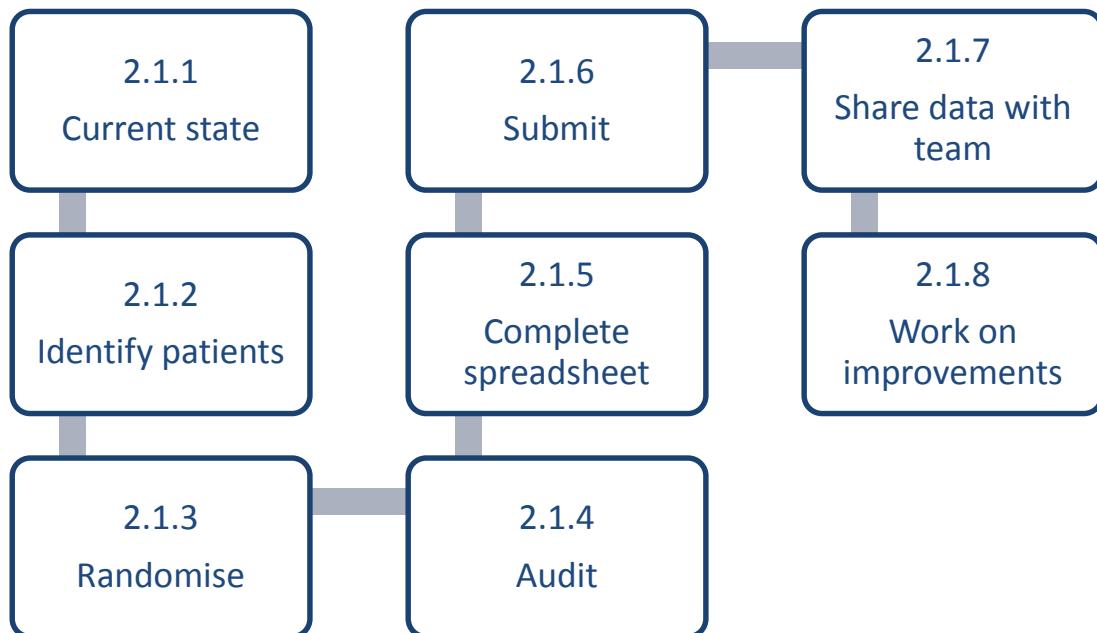
<p>7. Was the patient able to correctly describe (dose/frequency) how to use their medicine?</p> <p>Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/></p>	<p>'Tell me, how do you usually take your medicine? '</p> <p>Answer guidance:</p> <ul style="list-style-type: none"> • Yes - if they could tell you how to correctly take their medicine • No - if they didn't know how correctly to take their medicine • N/A – if you could not get hold of the patient
<p>8. Was the patient able to identify a possible side effect of their medicine?</p> <p>Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/></p>	<p>'Do you know any side effects that might happen?'</p> <p>This question is to assess whether the education provided was effective. Relying on spoken, and non-verbal cues such as the person saying 'yes' or nodding is not accurate.⁷</p> <p>Answer guidance:</p> <ul style="list-style-type: none"> • Yes - if they could identify a possible side effect • No - if they couldn't name any side effects • N/A – if you could not get hold of the patient

2.0 Instructions

When you receive a script for the medicine, go through the Process Measures with “Every patient, every time”.

Document the information in the way your team has agreed. You could choose the patient file e.g. in Toniq as an intervention or in RxOne as an event audit, so it can be found easily. To upload a checklist onto Toniq, there is a guide on the Safety in Practice website [here](#). If you are using RxOne, the checklists have been incorporated into the software.

2.1 Monthly data collection and submission



2.1.1 Current state

To assess your processes you will collect data from 10 *random* patients every month. As a team, you will then reflect on your results, look for opportunities for improvement and use PDSA cycles (Plan, Do, Study, Act)

Your first set of data (baseline data) is relating to the month of August and is due on September 10th.

Note: we expect low scores for the baseline, or ‘Current State’ August data.

2.1.2 Identify patients

Run a report on Toniq or RxOne for all of the relevant medicines dispensed during the month.

(Refer to www.safetyinpractice.co.nz for detailed instructions on how to generate a report)

2.1.3 Randomise

From the report select a **random sample of 10 patients** using an online random number generator.

Note the SiP programme does not endorse any advertising that comes with these online tools.

2.1.4 Audit

For the 10 **randomised** patients, find **documented** evidence that the Process Measures occurred and record responses into the spreadsheet.

Contact the 10 patients and go through the Outcome Measures with them. Record their responses into the spreadsheet. If you are unable to locate a patient after 2 attempts, select NA and note this in the comments column on the spreadsheet.

Advise patients you may contact them to ask two questions because you are taking part in Safety in Practice. Let them know this is to check how you and the team are working; it is not to test them.

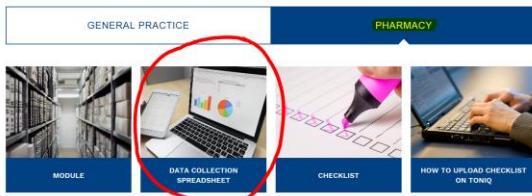
Having this information scripted may help e.g. “*We are now providing a follow-up service for people who use some anti-inflammatory medicines. We select 10 patients each month and give them a quick phone call about their medicine. This is to check how we as a pharmacy team are working; it is not to test you*”

2.1.5 Complete the spreadsheet

Tip: Your first set of data (baseline data) is relating to the month of August so this is due on September 10th.

Please note: we expect low scores for the baseline August 2020 data, prior to the Safety in Practice programme beginning

DOWNLOADABLE RESOURCES



Download the spread sheet for your module in the Resources section of www.safetyinpractice.co.nz

	Dispensing date	Is there evidence the patient was informed how to use their medicine?	Is there evidence the patient was informed what they miss a dose?
2	01/08/2020		
3			
4			
5			
6			
7			

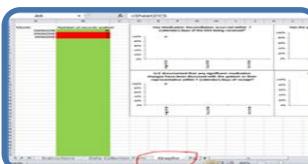
Record the date of dispensing in a DD/MM/YY format in the left column. (Alert boxes in yellow will guide you). For your first data from dispensings in August (reported in September) this is 1/8/20

	Dispensing date	Is there evidence the patient was informed how to use their medicine?	Is there evidence the patient was informed what they miss a dose?
2	01/08/2020		
3	01/08/2020	<input checked="" type="checkbox"/> Y	<input type="checkbox"/>
4			
5			

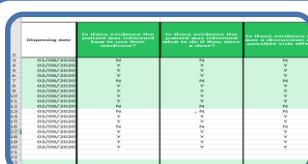
Mark Y, N or N/A by clicking on the dropdown menu, against for each measure and each patient according to your findings in the previous section.

	the patient able to identify a possible side effect of their medicine?	Was the patient able to identify who to ask for help with their medicines?	populate	Overall Compliance
	Y Y N N/A	Y Y N Y		

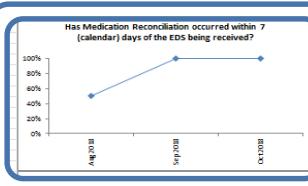
The final measure "Overall compliance" will auto-populate.



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.

2.1.6 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 is anonymised

2.1.7 Share data with your team

Safety in Practice works when all team members take part. Make the data available for everyone to see. Print the graphs and put them up in the tea room so the whole team can see the progress being made and have the opportunity to make suggestions on how to improve.

2.1.8 Work on improvements

As a team, look for opportunities for improvement and use PDSA cycles (Plan, Do, Study, Act). Refer to the [Quality Improvement Workbook](#) for other quality improvement tools.

2.2 Change idea examples

General	<ul style="list-style-type: none"> Arrange education session for pharmacy team about the medicines and how to deliver effective patient education
Problem solving	<ul style="list-style-type: none"> Identify barriers and look for ways of addressing them
Documentation	<ul style="list-style-type: none"> Use templates in Toniq and RxOne
Discussions with patients	<ul style="list-style-type: none"> Create prompt card for education points Optimise use of Self Care Cards Use agreed patient information; see www.healthnavigator.org.nz and www.saferx.co.nz for resources Advise patients about random follow-ups, they may be contacted and asked 2 questions. Let them know this is about checking how you and the team are working; it is not testing them

3.1 Contacts

- Questions, feedback or general enquiries: info@safetyinpractice.co.nz
- Submitting data: audit@safetyinpractice.co.nz
- Website: www.safetyinpractice.co.nz

3.2 Resources

- BPAC information
NSAIDS - www.bpac.org.nz/bpj/2013/october/nsaids.aspx
Triple Whammy - <https://bpac.org.nz/2018/triple-whammy.aspx>
- Medsafe Information
NSAIDs and Acute Kidney Injury and Triple Whammy
www.medsafe.govt.nz/profs/PUArticles/June2013NSAIDS.htm
- SafeRx® leaflets
NSAIDs www.saferx.co.nz/Patient_info_ibuprofen.pdf
Triple Whammy www.saferx.co.nz/Patient_info_Triple_Whammy.pdf
- New Zealand Formulary www.nzf.org.nz
- Health Navigator www.healthnavigator.org.nz

3.3 References

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www.medsafe.govt.nz/profs/PUArticles/June2013NSAIDS.htm (Accessed 06-05-19)
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Appendix 1: NSAIDs Checklist

Process measures

1. If the patient is prescribed a Triple Whammy, is there documented evidence the prescriber was notified?
 Yes No N/A (not on Triple Whammy)
2. If the patient is considered high-risk group and not on gastroprotection, is there documented evidence the prescriber was notified?
 Yes No N/A (not a high-risk patient)
3. Is there documented evidence there was a discussion about how to use the medicine?
 Yes No
4. Is there documented evidence there was a discussion about possible side effects?
 Yes No
5. Is there documented evidence there was a discussion about the risks of a dehydrating illness and to keep hydrated?
 Yes No
6. Is there documented evidence the patient was offered written information about the medicine?
 Yes No

Patient outcome measures

7. Was the patient able to correctly describe (dose and frequency) how to use their medicine?
 Yes No N/A
8. Was the patient able to identify a possible side-effect of their medicine?
 Yes No N/A