

*A group of pharmacists from across the profession worked to identify Choosing Wisely pharmacy recommendations would impact across all the areas pharmacists worked. These have now been consulted widely.*

**Do not recommend complementary medicines or therapies without reviewing the patient's medicine regime to assess for safety and to ensure the benefit of use outweighs the risk**

Complementary and alternative medicines (CAM) are healthcare services that typically lie outside mainstream medical practice.<sup>1</sup> Although not exactly defined, CAM typically includes herbal and vitamin therapy and homeopathy. It is estimated that nearly 25% of New Zealand people use complementary healthcare services, including complementary medicines usually without informing their healthcare team.<sup>1,2,3</sup>

Rongoā Māori† contributes to Māori wellbeing and development. The Waitangi Tribunal notes that the use of rongoā Māori could be a significant step in improving Māori health and that further governmental support for Rongoā Māori is a necessity both to correct Treaty of Waitangi breaches and improve the health of Māori.<sup>12</sup> The medicinal properties and the spiritual dimension of rongoā are important for Māori well-being.<sup>12</sup>

Many people believe that herbal and complementary medicines are natural and safe, and are unaware that alternative medicines may have adverse effects or react with prescribed medication.<sup>4,5</sup>

Although some herbal medicines have promising potential and are widely used, many remain untested and have limited evidence for their efficacy.<sup>6,7,8</sup> The potential to interact with prescribed medicines could lead to adverse health outcomes for the patient.<sup>5,9</sup> Documented interactions between medicines and herbal medicines indicate that some are significant, with severe clinical consequences.<sup>2,10</sup>

The 2018 NZ Pharmacy Council Code of Ethics require that the health and wellbeing of the patient or consumer is the primary consideration.<sup>11</sup>

Pharmacists should consider available evidence and must only recommend, supply or promote a product when they are satisfied that it is appropriate, that the person understands its safe and correct use, and that the benefit of use outweighs the risk.<sup>11</sup>

Before recommending or supplying complementary medicines, obtain a medical history that collects information regarding the patient's current symptoms, medical conditions, previous and current therapies, particularly conventional prescription and non-prescription medicines, and other CAMs. Explain the options available, including the risks and benefits, potential interactions with other medications, and assist patients in making informed decisions by providing relevant and independent information.

Patients should be encouraged to continue taking their prescribed medicines, and to inform the prescriber of their use of other health products or therapies.

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† Rongoā Māori encompasses karakia and ritenga (rituals and incantations), as well as physical forms of treatment such as mirimiri (massage) and rongoā, traditional medicines based on plants (including trees, leaves, berries, fruits, bark and moss).<sup>12</sup>

## Supporting Evidence

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### **Question repeated prescription or over the counter (OTC) supply of a NSAID, colchicine and/or prednisone for the acute treatment of gout. Rather ensure patients who suffer from gout are managed appropriately with a urate lowering agent (eg, allopurinol or febuxostat).**

Gout is recognised as the most common form of inflammatory arthritis, with particularly high rates for Māori and Pacific males in New Zealand.<sup>1-4</sup> Gout is estimated to affect around 5 percent of the total population aged 20 and over. People aged 65 and over, men, Māori and Pacific peoples are most affected. For those aged 20-44, the prevalence of identified gout for Māori and Pacific peoples is four and eight times that of non-Māori, non-Pacific populations.<sup>10</sup>

Gout is caused by prolonged hyperuricaemia, leading to the deposition of monosodium urate crystals in joints and other tissues.<sup>5</sup> It results in severe joint pain, work disability and social consequences.<sup>2</sup> Joint damage may occur as a result of tophi development when gout is undertreated, or not treated. In addition, gout is independently associated with cardiovascular disease, diabetes, kidney disease and overall mortality.<sup>6,7</sup>

Despite effective treatments, the management of gout in New Zealand is suboptimal and inequitable.<sup>2,8</sup> Serum urate levels of <0.36 mmol/L are associated with improved clinical outcomes and can be achieved with long term urate lowering therapy (such as allopurinol).<sup>4,9</sup>

Use of colchicine, prednisone and nonsteroidal anti-inflammatory drugs (NSAIDs) may treat acute episodes of gout, but they do not reduce urate levels and the potential damage associated with crystal deposition. Repeated courses of these agents without urate-lowering therapy represent poor care, with an increased risk of kidney disease and other complications.<sup>2</sup> Pharmacists should question repeated prescriptions of the agents above without concomitant urate-lowering therapy and consult with patients on the benefits of using regular urate lowering therapy to enable them to self-manage their gout. There should be no repeat OTC sales of NSAIDs without pharmacist input.

## Supporting Evidence

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## **Identify and ensure at-risk patients are not exposed to the triple whammy (a diuretic + ACE-I or ARB + a NSAID or COXIB)**

The combined use of ACE inhibitors (ACE-I), diuretics and non-steroidal anti-inflammatory drugs (NSAIDs) are associated with a 31% increased rate of acute kidney injury.<sup>1,4</sup> This combination is known as the triple whammy. The risk of acute kidney injury also increases with the use of angiotensin receptor blockers (ARBs) and COX-2 inhibitors (COXIBs).

Acute kidney injury is a major health concern, which has been associated with a mortality rate exceeding 50%.<sup>1,2</sup> The renal arterioles and glomerular capillaries are especially vulnerable to the effects of drugs.<sup>2,3</sup> All NSAIDs have been associated with the development of acute kidney injury.<sup>3</sup>

NSAIDs and diuretics affect renal blood flow. When a patient takes the triple whammy, ACE-I/ARB blockade of the renin-angiotensin system prevents the kidney from compensating for this decrease in blood flow, increasing the risk of acute kidney injury.

The triple whammy should be avoided in people with risk factors for renal failure. Risk factors include older age, renal impairment, people with co-morbidities such as heart failure or severe liver disease, and dehydration from vomiting, diarrhoea or sepsis.<sup>4</sup>

In addition to kidney injury, NSAIDs antagonise the beneficial effects of ACE inhibitors in heart failure and hypertension. The concurrent use of diuretics and NSAIDs is associated with an increase in hospitalisation for heart failure.<sup>5</sup>

Pharmacists should ensure input into the OTC supply of NSAIDs so that patients' medication can be safely assessed, and patients are informed to avoid exposure to the triple whammy combination. When the combination is prescribed, pharmacists should work with the prescriber to ensure the patient is aware of the risks and knows how to minimise these.

### **Supporting Evidence**

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## **Do not dispense regular opioids<sup>§</sup> without checking the requirement for laxatives**

Opioids are effective in the treatment of pain, but their use is associated with constipation and other gastrointestinal effects that are often difficult to manage. Opioid-induced constipation (OIC) is a common side effect occurring in up to 13% of patients receiving an opioid without prophylactic laxative treatment.<sup>1,2</sup> In patients with pain, OIC can add to their discomfort and may result in patients decreasing or stopping their opioid therapy to relieve or avoid constipation.<sup>3</sup> When a balance between pain relief and constipation cannot be achieved, it impairs quality of life and compromises effective pain management.<sup>4</sup>

Chronic pain management and treatment side effects, including OIC, present complex challenges for patients and their health professionals.<sup>4</sup> Constipation and problems with defecation can be difficult to broach for both patients and health care providers.<sup>5</sup> Patient-focused interventions that

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<sup>§</sup> Opioids: codeine, dihydrocodeine, fentanyl, methadone, morphine, oxycodone, pethidine and tramadol.

engage patients actively in their care can have a beneficial effect on patient experience and health status. For example, using written materials to improve health literacy.<sup>6</sup>

Assessing OIC early and using prophylactic treatment with laxatives may decrease the burden of constipation in patients on opioid treatment.<sup>7</sup>

Best practice is for laxatives to be co-prescribed (and dispensed) at the same time as the opioid (unless contraindicated). For example, bisacodyl 5 mg tablets 1-2 each night, or docusate and senna (sennoside B) 1-2 tablets twice daily.<sup>8,9</sup> Ensure patients have adequate fluid intake and eat fibre-rich foods, like prunes, or high fibre plant extract products (eg, kiwifruit extracts). Encourage an increase in physical activity within the patient's capabilities.

## Supporting Evidence

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## **Don't offer in-pharmacy opportunistic diagnostic testing without engaging the patient in a full discussion about the potential benefits and harms of the test**

In-pharmacy opportunistic diagnostic testing\*\* is a form of case finding used to detect potential disease indicators.

Opportunistic screening is uncoordinated testing offered to individuals. There is no organised system of call and recall, no agreed protocol for testing and follow up, and no programme quality control.<sup>1</sup> Case finding risks exposing participating individuals to screening-related harms that may exceed benefits, and may exacerbate health inequalities by directing resources away from those with greatest need.<sup>2</sup> Testing should be undertaken in collaboration with general practice and only if there is a clear pathway for follow up and if results are valid and lead to better patient outcomes.

In contrast, population-based screening programmes involve screening entire populations or a large and easily identifiable group within the population, for example the national cervical screening programme. For population-based screening to be effective, all activities are planned, coordinated, monitored and evaluated.<sup>1</sup> These programmes have a clearly defined pathway for management of individuals with a positive result.

Screening aims to identify and treat individuals who have already developed risk factors or pre-clinical disease but who don't have a clinically apparent condition.<sup>3</sup> The potential benefits of screening should clearly outweigh any potential risks or harmful effects.<sup>1</sup> Patients should be informed of the evidence to support any screening undertaken.

## **Do understand the harms of testing including the limitations of the tests being offered – sensitivity, specificity and false positives/negatives.**

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\*\* Examples of in-pharmacy opportunistic diagnostic testing: bone density scanning, bowel health screening, hyperlipidaemia testing, capillary ferritin level, sore throat (streptococcus A) antigen screening, liver enzymes, human immunodeficiency virus (HIV) screening, HbA1c Testing.

Screening (population based or opportunistic) will harm some individuals.<sup>4</sup> False negative results may provide a false sense of reassurance, while false positive results may lead to anxiety and unnecessary investigations.

Pharmacies choosing to offer diagnostic testing should ensure they protect patients from possible harms by having a clear understanding of the limitations of the test being provided, including sensitivity and specificity, and a pathway for patient follow up regardless of the test result. This should include a formal and mandatory process for providing test results back to the patient's general practitioner or other provider to ensure continuity of care and patient safety.

### Supporting Evidence

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