Health Quality & Safety Commission New Zealand
Kupu Taurangi Hauora o Aotearoa

People with identified gout dispensed funded non-steroidal anti-inflammatory drugs (NSAIDs), by DHB, percent

Technical information	
Indicator name (short)	NSAID use in people with gout, percent.
Description	This measure details the percentage of people aged 20 years and over identified with gout and dispensed publicly funded NSAIDs.
Rationale	NSAIDs are often the first line of treatment for acute gout flares, and some can be purchased from a pharmacy without a prescription. This indicator does not capture over the counter NSAID use and does not assess the indication for NSAID use. This indicator may reflect people experiencing acute gout flares who are not on long-term preventive therapy for gout. Gout management guidelines state that people experiencing frequent (two or more) acute gout flares per year should be offered long-term urate-lowering therapy. Although NSAIDs are effective at treating acute gout flares, these medicines have important side effects including kidney injury and peptic ulcer disease.
Numerator	People with identified gout, aged 20 years and over dispensed publicly funded NSAIDs.
Denominator	Those aged 20 years and over with identified gout using the HealthTracker method.
Inclusions	• Medicines (NSAIDs): diclofenac sodium, ibuprofen, ketoprofen, mefenamic acid, meloxicam, naproxen, naproxen sodium, tenoxicam, celecoxib and sulindac. • Only those enrolled with a PHO in each year were included. • This indicator only includes NSAIDs dispensed at community pharmacies, ie, not medicines given in hospital or purchased over the counter.
Exclusions	• The year of dispensing is the same as or after the year of death. • The patient category is either J or Y (juvenile or youth).
Note for calculation	Unit of measure: Percentage Adjustment applied: None District health board assignment: DHB of domicile
Data sources	National Minimum Dataset (NMDS); Pharmaceutical Collection; primary health organisation (PHO) enrolments; Mortality Collection; New Zealand Cancer Registry, Ministry of Health.
Suppression rule	Data is not presented where the denominator was less than 10.

Notes	Note that the NSAID dispensing may not necessarily be related to gout symptoms. *See appendix for more details.*

Appendix 1. Interpretation notes

Standard deviation

Data is presented as standard deviation from the mean.

Standard deviation is a statistical measure of variation from a mean. Assuming that recorded instances are normally distributed (ie, they are in the usual 'bell-shaped curve'), 68 percent of all recorded instances would be expected to be within one standard deviation either side of the mean and 95 percent within two standard deviations. The two 'middle' shades will be within one standard deviation of the mean.

Confidence intervals

Upper and lower confidence intervals were calculated to 95 percent level of confidence. All changes in indicator values listed in the landing page are statistically significant changes.

HealthTracker definition

This definition aligns with the definition used by Winnard et al (2012) with two exceptions:

1. The cancer exclusion codes used in this indicator were C81–C96 (not C80–C96).
2. Benzbromarone and febuxostat were added to allopurinol in the definition to become urate-lowering therapy. Febuxostat, but not benzbromarone, was excluded alongside allopurinol as an indicator of gout when the relevant cancer(s) were diagnosed in the 24 months before the period end date.

Values of the main indicator variable

1 = Yes, the person showed an indication of having gout, as recorded in national health information systems.

A person is counted as having showed an indication of gout if they have one of the codes specified below (from any data collection) within the period searched (eg, 12-month or lifetime).

National Minimum Dataset codes:

ICD10 diagnosis codes: M10

ICD 9 CM diagnosis codes: 274.

Pharmaceutical Collection:

1341 – colchicine

1026 – allopurinol*

4026 – febuxostat*

3754 – benzbromarone

4003 – benzbromarone.

* Dispensings of allopurinol or febuxostat are excluded as indications of gout if there is a diagnosis of malignant neoplams of lymphoid, haematopoietic, and related tissues (ICD-10- AM C81-C96) recorded in either the New Zealand Cancer Registry or in the publicly funded hospitalisations in the National Minimum Dataset in the 24 months before the period end date.

References

Jackson G, Wright C, Thornley S, et al. 2012. Potential unmet need for gout diagnosis and treatment: capture-recapture analysis of a national administrative dataset. *Rheumatology* 51(10): 1820–4.

Winnard D, Wright C, Taylor W, et al. 2012. National prevalence of gout derived from administrative health data in Aotearoa New Zealand. *Rheumatology* 51(5): 901–9.

Te Kāwanatanga o Aotearoa
New Zealand Government