SOUTH AFRICAN PRIMARY HEALTHCARE LEVEL ESSENTIAL MEDICINES LIST
CHAPTER14: MUSCULOSKELETAL CONDITIONS
NEMLC RECOMMENDATIONS FOR MEDICINE MANAGEMENT (2020)

Medicine amendment recommendations, with supporting evidence and rationale are listed below.
Kindly review the medicine amendments in the context of the complete chapter for musculoskeletal conditions.
Note: This primary healthcare chapter has been updated to align to previous NEMLC recommendations as well as the recent NEMLC-approved Adult Hospital Level STGs and EML, 2019 edition.

SECTION	MEDICINE/ MANAGEMENT	ADDED/DELETED/AMENDED
14.2 Arthritis, rheumatoid (RA)	NSAIDs	Caution amended
	Oral corticosteroids (intermediate-acting)	Added as therapeutic class
	Prednisone, oral	Retained as example of class (listed in the STG)
	Prednisolone, oral	Added as a therapeutic alternative (listed in the interchange database)
	PPI, oral	Evidence updated for PPI prophylaxis in patients on concomitant NSAID with corticosteroids
13.4 Gout		
- *Acute gout*	NSAIDs	Caution amended
	Oral corticosteroids (intermediate-acting)	Added as therapeutic class
	Prednisone, oral	Retained as example of class (listed in the STG)
	Prednisolone, oral	Added as a therapeutic alternative (listed in the interchange database)
- *Chronic gout*	Allopurinol, oral	Directions for use amended
13.3 Osteo-arthritis	NSAIDs, oral	Caution amended
	PPI, oral	Evidence updated for PPI prophylaxis in patients on concomitant NSAID with corticosteroids

14.2 ARTHRITIS, RHEUMATOID (RA)

NSAIDs, oral: *caution amended*

The following was editorially amended for correctness and clarity purposes, aligned with the Adult Hospital Level STGs and EML, 2019:

~~Concomitant use of more than one oral NSAID has no additional clinical benefit and only increases toxicity.~~
~~Chronic use of all NSAIDs is associated with increased risks of gastrointestinal bleeding, renal failure, and cardiovascular events (stroke and myocardial infarction).~~

To:

Concomitant use of more than one oral NSAID has no additional clinical benefit and only increases toxicity.
Chronic use of all NSAIDs is associated with increased risks of gastrointestinal bleeding, renal failure, and cardiovascular events (stroke and myocardial infarction). NSAIDs should be used judiciously at the lowest effective dose for the shortest duration. Explore and manage exacerbating factors for pain. See chapter 20: Pain. Do not use NSAID in pregnancy and breastfeeding.

Aligned with SAMF, 2016.
Level of Evidence: III Guidelines[1]

Corticosteroids (intermediate acting): *added as therapeutic class*
Prednisone, oral: *retained as example of class (listed in the STG)*
Prednisolone, oral: *added as a therapeutic alternative (listed in the interchange database)*
Aligned with SAMF 2016 and Adult Hospital Level STGs and EML, 2019.
Level of Evidence: III Guidelines

[1] SAMF, 2016

PPI, oral: *evidence updated for PPI prophylaxis in patients on concomitant NSAID with corticosteroids*
Meta-analysis by Narum et al (2014)[2] showed an associated risk of corticosteroid monotherapy and gastrointestinal events in hospitalised patients only (OR 1.42, 95% CI 1.22 to 1.66); whilst for patients in ambulatory care, the increased risk was not statistically significant. However, subgroup analysis of documented concomitant NSAID use showed an increased risk (OR 1.30, 95% CI 0.81 to 2.07). Of note, is that the definition of gastrointestinal events varied between trials and RCTs were heterogeneous.

Systematic review[3] (that included the meta-analysis above) suggests that gastrointestinal risk of corticosteroid monotherapy is marginal and that PPI co-therapy should not routinely be indicated in patients taking corticosteroids unless they have a history of peptic ulcer disease or are taking NSAIDs.
Level of Evidence: II Systematic review and meta-analysis of RCTs of low to moderate quality

14.3 GOUT

i) Acute gout

Corticosteroids (intermediate acting): *added as therapeutic class*
Prednisone, oral: *retained as example of class (listed in the STG)*
Prednisolone, oral: *added as a therapeutic alternative (listed in the interchange database)*
Aligned with SAMF 2016 and Adult Hospital Level STGs and EML, 2019.
Level of Evidence: III Guidelines

ii) Chronic gout

Allopurinol, oral: *directions for use amended*

The directions for use of allopurinol amended from:

- ~~Allopurinol, oral, 100 mg daily (Doctor initiated).~~
  - ~~Increase monthly by 100 mg according to urate blood levels.~~
  - ~~Titrate dose to reduce serum urate to < 0.35 mmol/L.~~
  - ~~Average dose: 300 mg perday.~~
  - ~~Maximum dose: 400 mg daily.~~
  - ~~The elderly and patients with renal impairment require lower doses.~~

To

- Allopurinol, oral, 100 mg daily (Doctor initiated).
  - Increase monthly by 100 mg according to serum urate levels.
  - Titrate dose to reduce serum urate to <0.35 mmol/L.
  - Allopurinol dosage is dependent on severity of disease and serum urate concentration. Doses in excess of 300 mg should be administered in divided doses.
  - Average dose: 300 mg per day.
  - The elderly and patients with renal impairment require lower doses, start with 50 mg daily, or refer.

Level of Evidence: III Guidelines[4] [5]

Referral

Referral criteria updated in STG text as follows:

» Suspected secondary gout.
» No response to treatment.
» Non-resolving tophaceous gout.
» Renal impairment

[2] Narum S, Westergren T, Klemp M. Corticosteroids and risk of gastrointestinal bleeding: a systematic review and meta-analysis. BMJ Open. 2014 May15;4(5):e004587. https://www.ncbi.nlm.nih.gov/pubmed/24833682
[3] Scarpignato C, Gatta L, Zullo A, Blandizzi C; SIF-AIGO-FIMMG Group; Italian Society of Pharmacology, the Italian Association of Hospital Gastroenterologists, and the Italian Federation of General Practitioners. Effective and safe proton pump inhibitor therapy in acid-related diseases - A position paper addressing benefits and potential harms of acid suppression. BMC Med. 2016 Nov 9;14(1):179. https://www.ncbi.nlm.nih.gov/pubmed/27825371
[4] SAMF 2016
[5] Adult Hospital Level STGs and EML, 2019

14.5 OSTEOARTHRITIS

NSAIDs, oral: *caution added*
PPI, oral: *evidence updated for PPI prophylaxis in patients on concomitant NSAID with corticosteroids* (see above)
See section 14.2: Arthritis, rheumatoid (RA), above.