

April 2017 ♦ Produced by the Prescribing Team

## National Therapeutic Indicators 2017-18

### Background

National therapeutic indicators (NTIs) and additional prescribing measures (APMs) use prescription data to provide a measure of prescribing activity in specified therapeutic areas and a comparison across the GP practices in Scotland, Health Boards within Scotland and GP practices within these Health Boards. These are then used by Health Boards/Health and Social Care Partnerships to direct prescribing actions within GP practices and the work of managed service pharmacists and pharmacy technicians working within these practices.

### Development

Nationally prescribing indicators have been developed for 5 years initially as part of the Scottish Government Quality and Efficiency Programme from the Directorate for Health and Social Care and more recently as part of the Therapeutics Branch. These indicators cover core therapeutic areas including proton pump inhibitors, inhalers, hypnotics/anxiolytics, analgesics, antibiotics, antidiabetic drugs, non-steroidal anti-inflammatory drugs and antimicrobial wound management products.

The availability of patient-level data from the Prescription Information System provides an opportunity to develop measures that directly address patient safety issues, particularly the prescribing of drug combinations that are known to increase the risk of adverse drug reactions. As the capture of data required for this patient-level analysis (the CHI number) is not consistently high across all GP Practices in Scotland these are designated prescribing measures; they complement the indicators.

Other areas of analysis are designated prescribing measures where patient-level analysis encourages review (e.g. long-term antidepressants) or where the measure complements an indicator (e.g. encouraging the prescribing of 2mg diazepam tablets to support patient-centred management plans to reduce anxiolytic prescribing).

These NTIs and APMs for 2017-18 were developed at the end of 2016 by a reference group of representatives from Health Boards across Scotland. They reviewed prescribing trends including the changes in prescribing patterns that could be attributed to specific NTIs and APMs. They also considered national prescribing strategy documents and prescribing indicators used in other UK countries, most notably Wales.

The NTI for total antibiotic prescribing is used by Scottish Governments Directorates of Health and Social Care (SGDHSC) as a HEAT target in collaboration with the Scottish Antimicrobial Prescribing Group (SAPG). Many of the prescribing safety measures support the medication reviews recommended in the national polypharmacy strategy and other measures support the national diabetes, respiratory and chronic pain prescribing strategies.

### Sean MacBride-Stewart

Prescribing Adviser  
Therapeutics Branch

NTIs 2017-18		Desired change in indicator / measure	APMs 2017-18	Desired change in indicator / measure
Gastrointestinal	Proton Pump Inhibitors: DDDs per 1,000 LS per day*	↓		
Cardiovascular			Oral anticoagulant: number of patients prescribed an antiplatelet also prescribed an oral anticoagulant but without gastroprotection as percentage of all patients prescribed an oral anticoagulant	↓
Respiratory	High Strength Corticosteroid Inhalers: high dose corticosteroid inhalers as a percentage of all corticosteroid inhalers (items) (2016 SIGN/BTS classification)† <b>UPDATED</b>	↓	Short Acting Beta-Agonist (SABA) Inhalers: number of patients prescribed more than 12 SABA inhalers in a year as a percentage of all patients prescribed SABAs	↓
CNS - psychotropic	Hypnotics and Anxiolytics: DDDs per 1,000 LS per day*	↓	Hypnotics and Anxiolytics: diazepam 2mg tablets as a percentage of all diazepam tablets (items)	↑
			Antipsychotics: antipsychotic prescribing to patients aged ≥75 years as a percentage of all people aged ≥75 years	↓
CNS - analgesic	Opioid analgesics: strong opioids (including tramadol preparations) DDDs per 1,000 LS per day††*	↓↑	Opioid analgesics: morphine as a percentage of all morphine, oxycodone, fentanyl, tapentadol, and hydromorphone prescribed (DDD)	↑
	Opioid analgesics: step 2 opioids (other than strong opioids) DDDs per 1,000 LS per day*	↓↑	Opioid analgesics: number of patients prescribed average daily dose of opioid equivalent to ≥ 120mg per day of morphine as a % of all patients prescribed step 2 and strong opioids†††	↓↑
			Opioid analgesics: number of patients prescribed strong opioids (including tramadol preparations) long term (>2 years) as a percentage of all patients prescribed strong opioids	↓

NTIs 2017-18		Desired change in indicator / measure	APMs 2017-18	Desired change in indicator / measure
	<b>Gabapentanoids:</b> pregabalin and gabapentin DDDs per 1,000 LS per day*	↓	<b>Gabapentanoids:</b> number of people prescribed more than the maximal recommended dose (>2 DDDs) per day of gabapentanoid as a percentage of all people prescribed a gabapentanoids (6 months) <b>UPDATED</b>	↓↑
<b>CNS - adverse effects</b>	<b>Antimuscarinics:</b> drugs for urinary frequency, enuresis, and incontinence (BNF 4.7.2 excluding duloxetine and mirabegron) DDDs per 1,000 LS per day*		<b>Anticholinergics:</b> number of patients aged ≥75 dispensed >10 items of strong or very strong anticholinergics (mARS 3&2) in 12 months as a percentage of all people aged ≥75 years	↓
<b>Antibiotics</b>	<b>Antibiotics:</b> total antibiotic script items per 1,000 LS per day	↓	<b>Antibiotics:</b> number of people > 4 antibiotics per 1,000 LS per 100 days	↓
	<b>Antibiotics:</b> 4C antibiotics script items per 1,000 LS per 100 days	↓	<b>Antibiotics:</b> number of adult women prescribed a 3-day course of acute UTI antibiotics as a percentage of all adult women prescribed acute UTI antibiotics	↑
	<b>Antibiotics:</b> UTI antibiotics (trimethoprim/nitrofurantoin) script items per 1,000 LS per day <b>NEW</b>	↓		
<b>Antidiabetics</b>	<b>Antidiabetic Drugs:</b> metformin as percentage of all anti-diabetic drugs (DDD)	↑	<b>SMBG:</b> average cost per day of blood glucose test strips per patient prescribed antidiabetic drugs and/or insulins	↓
			<b>SMBG:</b> number of patients prescribed blood glucose test strips who are not prescribed treatments for diabetes (insulins and/or antidiabetic drugs) or are only prescribed metformin as a percentage of all patients prescribed blood glucose test strips	↓
			<b>SMBG:</b> number of patients prescribed insulin not prescribed blood glucose test strips as a percentage of patients prescribed insulin	↑
<b>Musculoskeletal</b>	<b>NSAIDs:</b> DDDs per 1,000 LS per day*	↓	<b>NSAIDs:</b> NSAID prescribing to patients aged ≥65 years prescribed an ACE inhibitor/angiotensin receptor blocker and a diuretic as a percentage of all	↓

NTIs 2017-18		Desired change in indicator / measure	APMs 2017-18	Desired change in indicator / measure
			people aged ≥65 years	
			<b>NSAIDs:</b> NSAID prescribing to patients aged ≥65 years prescribed an antiplatelet without gastroprotection as a percentage of all people aged ≥65 years	↓
			<b>NSAIDs:</b> NSAID prescribing to patients aged ≥75 years without gastroprotection as a percentage of all people aged ≥75 years	↓
			<b>NSAIDs:</b> NSAID prescription to patients prescribed an oral anticoagulant without gastroprotection as a percentage of all patients prescribed an oral anticoagulant	↓
<b>Wound Management</b>	<b>Antimicrobial Wound Products:</b> Antimicrobial wound products as percentage of total wound products (items)	↓		

\*these measures will also be made available using the population figures that have been weighted to account for prescribing need and are available within the PRISMS dataset.

LS – List Size

† the following measure will be reported in the analysis for this NTI		change in indicator /
<b>Respiratory</b>	<b>High strength corticosteroid inhalers:</b> medium and high dose corticosteroid inhalers prescribed to children (aged < 12 years) as a percentage of all children prescribed inhaled corticosteroids (2016 SIGN/BTS classification)	↓

†† the following two measures will be reported in the analysis for this NTI		change in indicator /
CNS - analgesic	<b>Opioid analgesics:</b> strong opioids (excluding tramadol preparations) DDDs per 1,000 LS per day *	↓↑
CNS - analgesic	<b>Opioid analgesics:</b> tramadol DDDs per 1,000 LS per day *	↓↑

††† the following measure will be reported in the analysis for this APM		change in indicator /
CNS - analgesic	<b>Opioid analgesics:</b> number of patients prescribed average daily dose of opioid equivalent to ≥ 60mg per day of morphine as a % of all patients prescribed step 2 and strong opioids	↓↑

These NTIs/APMs from 2016-17 have been removed

- **NSAIDs including Cox-2 inhibitors:** Ibuprofen and naproxen as a percentage of all NSAIDs (DDD)
- **Black triangle meds** as a percentage of all medicines from BNF chapters 1-7 & 9-13 (items)