NHS
Northamptonshire
Clinical Commissioning Group

The Rationale and Evidence Base behind the 'Prescribing Achievement Framework' (PAF) 2022-23

For 2022-23 the Prescribing Indicators are:

1. **Antibiotic items per STARPU**
2. **Cephalosporin, quinolone & co-amoxiclav items per STARPU**
3. **Antibiotics items for patients 14 years and under/denominator**
4. **High dose proton pump inhibitors (PPIs) patients per STARPU**
5. **Blood glucose testing strips over £8.75 NIC/QOF registered**
6. **Branded glaucoma eye drops as a % of cost-effective alternatives**
7. **Infant Feeds NIC in children less than 4 years**
8. **Dermol cost/denominator**
9. **ICS/LABA DPI 1st line formulary choice as % ICS/LABA**
10. **pMDI (excluding SAMA and SABA) cost/denominator**
11. **Tiotropium formulary choice as a % of all tiotropium (excl. respimat)**
12. **% of Eclipse Red Radar Alerts actioned**
13. **'Double Red' drugs NIC per patients**
14. **Housekeeping NIC per patients**
15. **Over-the-counter (OTC) medications NIC per STANDARD PUs**

The indicators will be measured quarterly using the previous three months ePACT data, except for the three antibiotic indicators and the OTC indicator which will be based on the previous 12 months data to avoid seasonal variations.

Abbreviations:
STARPU = Specific Therapeutic group Age-sex weightings Related Prescribing Units
NIC = Net Ingredient Cost
DPI = Dry Powder Inhaler
ICS = Inhaled Corticosteroids
LABA = Long-acting Beta Agonist
PU = Prescribing Unit (patients aged ≥ 65 count as 3 PUs and < 65 count as 1 PU)

➢ Antibiotics items per STARPU

- This indicator is intended to reduce inappropriate antibiotic prescribing and is taken from the NHSE/I National Medicines Management Quality Improvement indicators.
- Antibiotic resistance poses a significant threat to public health as antibiotics underpin much of routine medical practice. The current Covid -19 pandemic has highlighted the dangers of untreatable infectious diseases The Department of Health and Social Care Five Year Plan to control antimicrobial resistance includes reducing the use of antibiotics in humans by 15% link. The Chief Medical Officer's (CMO's) report for 2019 includes seven recommendations on antimicrobial resistance. The CMO has previously highlighted the threat of antimicrobial resistance and infectious diseases and pointed out that while a new infectious disease has been discovered nearly every year for the past 30 years, there have been very few new antibiotics developed. This is leaving the armoury nearly empty as diseases evolve and become resistant to existing drugs.
- NICE has issued a clinical guideline on Antimicrobial Stewardship link which covers the effective use of antimicrobials in children, young people and adults. It aims to change

prescribing practice to help slow the emergence of antimicrobial resistance and ensure that antimicrobials remain an effective treatment for infection.

- Detailed guidance on antibiotic prescribing for common conditions in primary care is available from NICE/PHE link
- There are useful resources for discussing antibiotics with patients and managing consultations when patients are expecting antibiotics at link
- The TARGET patient information leaflets are included in templates in Systm1, EMISWeb and ARDENS templates and can be sent to patients via AccuRx.
- After many years of focus and notable reductions in prescribing in some practices, Northamptonshire CCG remains above the NHS England target for overall antibiotic prescribing. There is still considerable variation between practices with some practices prescribing at more than twice the rate of others.
- NHS England has issued a Patient Safety Alert which highlights the challenge of antimicrobial resistance and signposts to toolkits to support the NHS in improving antimicrobial stewardship in both primary (RCGP TARGET toolkit - see below) and secondary care link.
- During 2021-22, Northamptonshire GP prescribing has increased towards pre-pandemic levels.
- Antibiotic resistance is an inevitable consequence of the use of antibiotics and inappropriate prescribing must be minimised to delay its development and spread link.
- Delayed antibiotic prescriptions work well, are straightforward to implement, reduce unnecessary prescribing and are supported by NICE link and the RCGP.
- The Department of Health website link has more information on antibiotic resistance and also has resources to help reduce inappropriate antibiotic prescribing. See also the TARGET antibiotics toolkit link which has been developed by the Antimicrobial Stewardship in Primary Care Collaboration (from several organisations including the Royal College of General Practitioners and PHE) to help clinicians and commissioners use antibiotics responsibly.
- Specialist diabetic podiatrists should *usually* prescribe or supply via a PGD any antibiotics required by patients with diabetes on their caseload who have infected foot ulcers. However, at this point in time, not all podiatrists are qualified to prescribe so there may still be some requests for GPs to prescribe.
- Antibiotic guidelines, patient leaflets and supporting information can be found on the Primary Care Portal link.

➢ **Cephalosporin, quinolone and co-amoxiclav items per denominator STARPU**

➢ This indicator is intended to reduce inappropriate broad-spectrum antibiotics (cephalosporin, quinolone and co-amoxiclav) prescribing and is taken from the National Medicines Management Quality Improvement indicators.

- NICE/PHE guidance link recommends that simple generic antibiotics should be used if possible when antibiotics are necessary. Broad-spectrum antibiotics should be reserved for resistant disease and only used when narrow-spectrum antibiotics are ineffective because they increase the risk of methicillin-resistant *Staphylococcus aureus* (MRSA), *Clostridium difficile (*C. diff*)* and resistant urinary tract infections.
- Broad spectrum antibiotic prescribing has increased in the past year; both the total quantities and broad spectrum antibiotics as a percentage of total antibiotics. This increase is driven by increased co-amoxiclav prescribing. There is significant variability from practice to practice.
- Co-amoxiclav is a first-line choice only for facial (but not dental) cellulitis, human and animal bites and second-line for persistent sinusitis and otitis media or COPD exacerbations if there is a higher risk of treatment failure. It should only be used for UTI or pyelonephritis if sensitivities are available. Locally, approximately 10% of E. coli isolates taken for UTIs show resistance to co-amoxiclav rising to approximately 18% with resistance in over 70s.

- Cefalexin is a first-line choice only for acute pyelonephritis or catheter associated UTI with upper UTI symptoms in men and non-pregnant women and second line choice for lower UTI in pregnant women.
- Quinolone antibiotics are a first-line choice only for acute prostatitis and a second line choice for pelvic inflammatory disease (in combination with metronidazole). Prescribers should also bear in mind the recent restrictions on these antibiotics link and the MHRA Drug Safety Alert link
- *C. diff* infection can occur following treatment with antibiotics that disrupt the normal microflora of the colon, allowing colonisation of the pathogen. C. diff is a leading cause of iatrogenic outbreaks of diarrhoea and increases mortality and healthcare costs. This remains a significant public health issue. The elderly, immunosuppressed and debilitated are most at risk.
- Broad-spectrum antibiotics are most strongly implicated in C. diff acquired diarrhoea. Where possible, the use of these antibiotics should be avoided, especially in patients with risk factors for C. diff infection. Acute Trust sensitivity testing has been amended to reflect this.
- The incidence of community acquired C. diff has fallen in Northamptonshire in tandem with the reduction in broad-spectrum antibiotic prescribing. Most community acquired cases are now associated with co-amoxiclav.
- Co-amoxiclav prescribing has reduced significantly (>30% from baseline) within primary care in Northamptonshire since its first inclusion in the National Medicines Management QIPP indicators in 2015-16. There is however, considerable variation between practices and scope to reduce further.

➢ **Antibiotics items for patients 14 years and under/denominator**

- The long-term implications of antibiotic use are becoming more apparent. These include increased antimicrobial resistance but also effects on the gut microbiome which may influence the risks of obesity, allergy and inflammatory bowel disease in later life.
- During the Covid pandemic prescribing for Upper Respiratory Tract Infections (URTI) in children fell markedly with no increase in admissions or A&E visits for non-Covid URTI.
- The fall was particularly dramatic in children aged 0-4 years and in amoxicillin prescribing
- Pre-Covid studies in the UK had shown that antibiotic prescribing in children could be safely reduced by up to 20% even in practices which already had low rates.
- The NICE sepsis risk stratification tool provides a simple tool that can be used for to identify children at risk and to provide reassurance to parents/carers link
- The Healthier Together website provides information and advice to pregnant women and parents/carers of children aged 0-18 years link .It is easy to use and provides advice in both written and video formats. It also provides safety-netting advice which mirrors the sepsis guidance in a parent/carer friendly format. The website link can be sent to patients/carers via AccuRx.
- If antibiotics are essential, use narrow-spectrum where possible and use the shortest recommended course. See NICE guidance link.
- Advice parents/carers on over the counter symptom relief for URTI.

➢ **High dose proton pump inhibitors (PPIs) patients per STARPU**

- This indicator aims to reduce the use of high dose PPIs due to increasing concerns relating to their long-term safety link. Safety concerns include:
- *Clostridium difficile* infection
- Increased risk of bone fractures
- Low levels of sodium, magnesium and B12
- Community acquired pneumonia
- The NICE guidance on gastro-oesophageal disease and dyspepsia link states the doses in the table below as ‘high dose’ and as such will be included in the indicator.

- Patients receiving high dose for more than eight weeks should be considered for a dose reduction as detailed below:

High dose PPI	1st line Reduce to	2nd line Reduce to (if previously failed on omeprazole or lansoprazole)
Lansoprazole 30mg bd	Lansoprazole 30mg od	
Omeprazole 40mg od	Omeprazole 20mg od	
Pantoprazole 40mg bd	Omeprazole 20mg od	Pantoprazole 40mg od
Rabeprazole 20mg bd	Omeprazole 20mg od	Rabeprazole 20mg od
Esomeprazole 40mg od	Omeprazole 20mg od	Esomeprazole 20mg od

➢ **Blood glucose testing strips (BGTS) over £8.75 NIC/QOF registered**

- Formulary BGTS are cost effective choices for blood glucose testing in type 1 and type 2 diabetes. All formulary products are below the cost of £8.75 per pot of 50 (with the exception of insulin pump requirements).
- App based technology is now used much more widely to assist patients in the management of their diabetes, with carbohydrate counting and insulin dose calculation functions. This reduces the need for more expensive testing meters that were previously used.
- The aim is to review current BGTS usage and switch to suitable formulary choices.
- An additional aim is to review the quantities of BGTS prescribed.
- **Northamptonshire Blood Glucose Testing guidelines**

➢ **Branded glaucoma eye drops as a % of cost-effective alternatives**

- Generic preparations are generally cheaper than the branded equivalents. The purpose is to switch the more expensive branded preparations to the cheaper equivalent whether it is the true generic or a branded generic.
- A list of cost-effective alternatives are documented within the Standard Operating Procedure**.**

➢ **Infant (Baby milks)**

- The majority of patients with Cow's Milk Protein Allergy (CMPA) are mild to moderate and should be managed effectively with an extensively hydrolysed formula (EHF).
- Northamptonshire CCG has a high percentage of patients prescribed amino acid (AA) formula in comparison to other CCGs. AA formula should be reserved for patients who cannot tolerate EHF formula.
- A significant number of children continue to have Infant formulas prescribed beyond 12 months of age and the introduction of solids.
- Local audits have identified that children are not consistently referred to the paediatric dietitian when CMPA is suspected. It is important these children are referred so that parents can be advised on the appropriate introduction of solids and the milk ladder.

➢ **Dermol cost/denominator**

- Dermol products contain antiseptic agent(s) and should only be used for washing when infection is present or recurrent. Regular use should be avoided Northamptonshire Emollient Guidelines. Review use >3 months and stop where appropriate.

➢ **Inhaled Corticosteroid (ICS)/Long Acting Beta Agonist (LABA) Dry Powder Inhaler (DPI) 1st line formulary choice as % ICS/LABA items**

Switching to **Fobumix Easyhaler** aligns prescribing with first line formulary choice for ICS/LABA in asthma and COPD guidelines, reduces carbon footprint, and reduces costs.

Fobumix Easyhaler contains budesonide plus formoterol in a dry powder inhaler, at three strengths, and is equivalent to Symbicort Turbohaler
    - Licensed for adults, with asthma or COPD
    - MART licence
    - **Use for low and moderate dose** ICS/LABA combinations.
        - **N.B. For high dose** ICS/LABA DPI, Fostair 200/6 NEXThaler is more cost effective

- Prescribe by brand
- Consider switching patients from other ICS/LABAs e.g. Fostair 100/6 (pMDI and NEXThaler), Symbicort Turbohaler, Symbicort pMDI, DuoResp Spiromax, AirFluSal pMDI, Flutiform pMDI and K-haler, Seretide, Sereflo, Combisal.
- Use the "Guide to inhaler dose equivalents when switching patients to formulary choice dry powder inhalers."
https://gp.northamptonshireccg.nhs.uk/downloads/Med-Ops/guidelines/Respiratory/Guide_to_inhaler_dose_equivalents_when_switching_patients_to_formulary_choice_dry_powder_inhalers.pdf
- Follow the CCG asthma guidelines:
https://gp.northamptonshireccg.nhs.uk/downloads/Med-Ops/guidelines/Respiratory/Adult_asthma_guidelines.pdf
- Follow the CCG COPD guidelines:
https://gp.northamptonshireccg.nhs.uk/downloads/Med-Ops/guidelines/Respiratory/COPD-Guidance.pdf

➢ **pMDI (excluding SAMA and SABA) cost/denominator**

- This indicator measures expenditure on pMDI prescribing and encourages a move away from pMDIs to inhalers with a lower environmental impact ie Dry Powder Inhalers (DPIs) such as Easyhalers. If this is not possible, then use of the most cost-effective pMDI is encouraged. To get "green":
    - Change to dry powder inhalers (DPIs) eg Easyhalers. DPIs "drop out" of the indicator.
    - Patients who need to stay on a pMDI - change to most cost-effective option eg Luforbec 100/6 pMDI instead of Fostair 100/6 pMDI; Soprobec pMDI instead of Clenil/Qvar pMDI etc.

➢ **Tiotropium formulary choice DPI as % of all tiotropium (excluding Respimat)**

- Acopair Neumohaler or Tiogiva are branded generic tiotropium DPIs based on Spiriva Handihaler (£34.87) and equivalent to Braltus Zonda (£25.80)
- £19.99 for 30 capsules with device (Acopair or Tiogiva)
- Tiogiva has the additional option of using the device for 6 months (device to be cleaned every month) and prescribing capsules only refills (£19.20 for 30) which reduces plastic waste.
- Acopair Neumohaler and Tiogiva devices use the same operating principles as Braltus Zonda and Spiriva Handihaler i.e. a capsule is loaded into the device, which is then closed, and the capsule is pierced by squeezing a button, so that the patient can inhale the capsule contents via the mouthpiece.
- All the named products are licensed for use in COPD.
- If a patient cannot breathe in deeply enough to inhale via a DPI, an alternative is to use Spiriva Respimat.
- NB Spiriva Respimat is the only inhaled tiotropium product licensed for use as add on therapy in severe asthma – specialist recommendation only in Northamptonshire. Tiotropium DPI products are not licensed for use in asthma.

➢ **% of Eclipse Red Radar Alerts**

- Eclipse is a medicine related risk stratification system which pulls data from GP practice systems on a weekly basis
- The Red Radar alerts utilise established national best practice guidance, UKMI Primary Care Drug Monitoring Guidelines and relevant NICE recommendations to identify high risk patients leading to significant improvements in clinical outcomes and a reduction in secondary care utilisation
- Practices will be required to review the Red Radar alerts ideally on a weekly basis and to annotate any changes identified to patients treatment both in the GP clinical system and in Eclipse
- This is a 12 months marker and practices will be expected to have review 50% or more of the Red Radar Alerts throughout the year

➢ **'Double Red' drugs NIC per patient**

- 'Double Red' drugs are those drugs, categorised by the Northamptonshire Prescribing Advisory Group (NPAG) as being not recommended for prescribing in either primary or secondary care. They are often new medicines where the evidence is lacking, or older medicines that have been removed from National guidelines due to side-effects. Particular examples might include stereoisomers or modified-release versions of existing drugs that are nearing their patent expiry date.
- For further details see Traffic Light Drugs on the Primary Care Portal link.
- There is a prompt on Optimise Rx® to advise prescribers of 'Double Red' drugs.
- Under this indicator, practices will be monitored on adherence with this guidance as there should be minimal prescribing of double red drugs.
- 'Double Red' drugs are subdivided into those where there are defined 'Prior Approval' criteria and those which are not routinely commissioned and therefore require an Individual Funding Request (IFR).
- See the 'Prior Approval' information on the Primary Care Portal link .

➢ **Housekeeping NIC per patients**

- The housekeeping marker is a list of medicines where more cost effective alternatives or formulations are available
- The list contains alternatives that are roughly split into the following categories:
    - Brand to generic – e.g. Efexor XL to Venlafaxine MR
    - Generic to brand – e.g. Metformin MR to Sukkarto
    - Brand to brand – e.g. Vagifem to Vagirux
    - Formulation – e.g. Ramipril tablets to capsules
    - Reverse strength optimisations e.g. amisulpride 400mg to Amisulpiride 2x 200mg
- The majority of the recommendations do not alter either the strength of the medication or the frequency of administration. Optimise RX contains a number of prompts to assist with this marker

➢ **Over-the-counter (OTC) medications NIC per STANDARD PUs**

- NHS England has listed two items of limited clinical effectiveness and 35 minor or self-limiting conditions for which over-the-counter (OTC) medicines should not be *routinely* prescribed in primary care link.

    - Probiotics
    - Vitamins and minerals
    - Acute sore throat
    - Infrequent cold sores of the lip
    - Conjunctivitis
    - Coughs, colds and nasal congestion
    - Cradle cap (seborrheic dermatitis - infants)
    - Hay fever
    - Haemorrhoids

  - Infant colic
  - Mild cystitis
  - Mild irritant dermatitis
  - Minor conditions associated with pain, discomfort and fever (e.g. aches and sprains, headache, period pain, back pain)
  - Dandruff
  - Diarrhoea (adults)
  - Earwax
  - Excessive sweating (hyperhidrosis)
  - Head lice
  - Indigestion and heartburn
  - Infrequent constipation
  - Infrequent migraine
  - Insect bites and stings
  - Mild acne
  - Sunburn/sun protection
  - Minor burns and scalds
  - Mouth ulcers
  - Nappy rash
  - Oral thrush
  - Prevention of dental caries
  - Ringworm/athletes foot
  - Teething/mild toothache
  - Threadworms
  - Travel sickness
  - Warts and verrucae

- There are some circumstances where it is not legally allowed for certain medicines to be sold OTC. The most common of these scenarios are covered in the document entitled 'Get Wise about Medicines - When should you Prescribe?' on the Primary Care Portal link.
- For other exceptions, please refer to the NHS England document 'OTC guidance for CCGs' link.
- Local resources such as patient leaflets, posters other supporting information can be found on the 'Self-care Practice Resources' section of the Primary Care Portal link.