NORTHERN IRELAND
MEDICINES MANAGEMENT

Pharmaceutical Clinical Effectiveness (PCE)

July 2025

Pharmaceutical Clinical Effectiveness (PCE) 2025 / 2026 — New Projects

The HSC Pharmaceutical Clinical Effectiveness (PCE) plan is comprised of initiatives which are based upon the principle that improvement in the quality and safety of medicines will lead to health gains and associated efficiencies.

Making efficiencies is especially important in this current financial climate where funding and resources are limited, in order to make the best use of our Health Service resources.

Delivery of improvements and efficiencies across the HSC requires collaborative support across the entire HSC. Hence it is vital that community pharmacists, GP practices and Trusts consider the implementation of actions as outlined in this bulletin, by focusing on medicines review and deprescribing.

This bulletin highlights new projects that have been added to the PCE plan for 2025/2026.

A copy of the full PCE plan and support materials are available on the Primary care intranet.

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Initiatives

* Proton pump inhibitors in paediatrics
* Melatonin liquid
* Cost-effective prescribing of Gliclazide
* Cost-effective Oral Ondansetron Formulations
* Cost-effective Tamsulosin Formulations
* Cost-effective prescribing of doxazosin
* Emollient creams
* Dose optimisation of Levothyroxine 75 microgram tablets
* Low dose antipsychotics in people with dementia

Actions for all initiatives:

- Ensure all prescribers and staff involved in prescription requests are made aware of information in this bulletin
- GP practices should communicate planned changes with local community pharmacies in advance, to allow consistent management of patient queries and to assist with stock management
- All healthcare professionals should provide direction and reassurance to patients whose medication and prescription has been changed
- Pharmacies may wish to consider amending stock levels in line with planned changes or deprescribing initiatives
- To register as new member of PrescQIPP, select ‘Department of Health Northern Ireland’ as your organisation, this will allow access to all specified resources.

Proton pump inhibitors in paediatrics

Over £2 million is spent each year in primary care in Northern Ireland on PPI suspensions / solutions. While a liquid preparation may be needed in some patients, it is often not the best option.

Licensed oral suspensions of omeprazole are only licensed up to a dose of 1mg/kg once daily and due to the mint flavouring these preparations they have been poorly tolerated in neonatal and paediatric patients; licensed oral suspensions of lansoprazole are not available and, as there is no Drug Tariff price for unlicensed specials, costs can vary and can be high.

Within Paediatrics, dispersible / orodispersible tablet and capsule formulations of PPIs have been used successfully with little need for alternatives.

A new regional HSC Guideline on the use of proton pump inhibitors in paediatrics has been developed. The aim of this guideline is to standardise prescribing practice of PPIs in neonates and paediatrics, across primary and secondary care, whilst ensuring patients are given appropriate and effective treatments.

Actions:

- For new patients, prescribe omeprazole dispersible tablets or lansoprazole orodispersible tablets in doses rounded to the nearest whole / half tablet where possible (quarter tablets are possible for lansoprazole)
- Review existing paediatric patients in line with this guidance
- Provide parent or carers with information on how to administer omeprazole dispersible tablets or lansoprazole orodispersible tablets (refer to guidance)
- Review all patients on PPIs regularly, to consider continued need, dose optimisation or reduction and suitability of formulation
- Review the need for ongoing treatment with PPIs regularly. This is particularly important for infant reflux, given the potential long-term risks of PPI use in children.

Melatonin liquid

In June 2025, SPPG issued correspondence to all GP practices and community pharmacies in Northern Ireland about review of melatonin liquid prescribing in primary care.

Over recent years, several melatonin preparations (tablet and liquid formulations) with varying licenses have come to market.

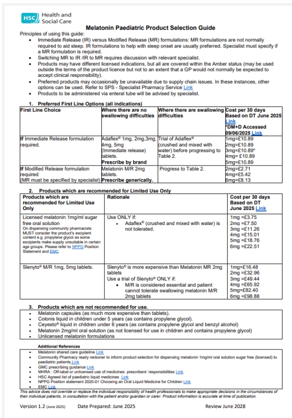
MHRA guidance states an unlicensed medicinal product should not be supplied where an equivalent licensed medicinal product can meet the special needs of the patient.

Tablets are the product of choice.

A Ready reckoner is available for community pharmacies to support the dispensing process for paediatric patients.

Actions for GP practices:

Review prescribing of ***all*** liquid melatonin formulations in primary care. Give reasonable notice to local community pharmacists of any prescribing changes. This will allow them to reassure patients about any changes to their prescribed medicine and to adjust their stock levels.



HSC Health and Social Care

Melatonin Paediatric Product Selection Guide

Principles of using this guide:

- Immediate Release (IR) versus Modified Release (MR) formulations: MR formulations are not normally required to aid sleep. IR formulations to help with sleep onset are usually preferred. Specialist must specify if a MR formulation is required.
- Switching MR to IR /IR to MR requires discussion with relevant specialist.
- Products may have different licensed indications, but all are covered within the Amber status (may be used outside the terms of the product licence but not to an extent that a GP would not normally be expected to accept clinical responsibility).
- Preferred products may occasionally be unavailable due to supply chain issues. In these instances, other options can be used. Refer to SPS - Specialist Pharmacy Service Link
- Products to be administered via enteral tube will be advised by specialist.

1. Preferred First Line Options (all indications)

First Line Choice	Where there are no swallowing difficulties	Where there are swallowing difficulties	Cost per 30 days Based on DT June 2025 Link *DM+D Accessed 09/06/2025 Link
If Immediate Release formulation required.	Adaflex® 1mg, 2mg,3mg, 4mg, 5mg (Immediate release) tablets. **Prescribe by brand**	Trial of Adaflex® (crushed and mixed with water) before progressing to Table 2.	1mg=£10.89 2mg=£10.89 3mg=£10.89* 4mg= £10.89 5mg=£10.89
If Modified Release formulation required (MR must be specified by specialist)	Melatonin M/R 2mg tablets. **Prescribe generically.**	Progress to Table 2.	2mg=£2.71 4mg=£5.42 6mg=£8.13

2. Products which are recommended for Limited Use Only

Products which are recommended for Limited Use Only	Rationale	Cost per 30 days Based on DT June 2025 Link
Licensed melatonin 1mg/ml sugar free oral solution On dispensing community pharmacists MUST consider the product's excipient content e.g. propylene glycol as some excipients make supply unsuitable in certain age groups. Please refer to NPPG Position Statement and EMC	Use ONLY if: • Adaflex® (crushed and mixed with water) is not tolerated.	1mg =£3.75 2mg =£7.50 3mg =£11.26 4mg =£15.01 5mg =£18.76 6mg =£22.51
Slenyto® M/R 1mg, 5mg tablets.	Slenyto® is more expensive than Melatonin MR 2mg tablets Use a trial of Slenyto® ONLY if: • M/R is considered essential and patient cannot tolerate swallowing melatonin M/R 2mg tablets	1mg=£16.48 2mg =£32.96 3mg =£49.44 4mg =£65.92 5mg=£82.40 6mg =£98.88

3. Products which are not recommended for use.

- Melatonin capsules (as much more expensive than tablets).
- Colonis liquid in children under 5 years (as contains propylene glycol).
- Ceyesto® liquid in children under 6 years (as contains propylene glycol and benzyl alcohol)
- Melatonin 2mg/ml oral solution (as not licensed for use in children and contains propylene glycol)
- Unlicensed melatonin formulations

Additional References

- Melatonin shared care guideline Link
- Community Pharmacy ready reckoner to inform product selection for dispensing melatonin 1mg/ml oral solution sugar free (licensed) to paediatric patients Link
- GMC prescribing guidance Link
- MHRA : Off-label or unlicensed use of medicines: prescribers' responsibilities Link
- HSC Agreed list of paediatric liquid medicines Link
- NPPG Position statement 2020-01 Choosing an Oral Liquid Medicine for Children Link
- EMC Link

This advice does not override or replace the individual responsibility of health professionals to make appropriate decisions in the circumstances of their individual patients, in consultation with the patient and/or guardian or carer. Product information is accurate at time of publication.

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Paediatric patients:

- Refer to recently updated HSC Melatonin Paediatric Product Selection guide.

Adult patients:

- Review the ongoing appropriateness of melatonin liquid; a deprescribing algorithm to support patient review is available from PrescQIPP**. If the patient is under specialist review (e.g. Psychiatry, learning disability, Memory team, Neurology) seek further advice**
- If melatonin remains appropriate, consider prescribing as Adaflex® tablets (which can be crushed and mixed with water). **Prescribe by brand**
- If crushing is not an option, prescribe the licensed product **melatonin 1mg/ml sugar free oral solution**.

Actions for community pharmacies:

- Consider the excipient content of ***all*** liquid melatonin preparations. Utilise the Ready reckoner, in addition to other relevant references, to ensure the product selected for dispensing is suitable for that particular paediatric patient
- Discuss any concerns about the appropriateness of a product with the prescriber.

Cost-effective prescribing of Gliclazide

1) Dose optimisation of gliclazide MR 60mg

Gliclazide modified release (MR) 60mg is more expensive to prescribe than gliclazide MR 30mg. Last year in NI, spend on gliclazide MR 60mg tablets was £340,000.

Drug	Dose	Cost for 28 day supply (July25 DT)
Gliclazide 30mg MR	Two tablets ONCE daily	£2.90
Gliclazide 60mg MR	One tablet ONCE daily	£10.24

Actions for GP practices:

- Search for patients prescribed **gliclazide MR 60mg**
- If Hba1c < 53mmol/l consider reducing dose or discontinuing gliclazide
- If the patient's diabetes is well controlled and there are no hypoglycaemic events, continue to prescribe gliclazide MR
- If the *prescribed total daily dose of gliclazide MR is 60mg, consider switching the patient to TWO tablets of gliclazide MR 30mg taken ONCE daily
- Assess with the patient any potential impact on adherence with a change to 2 x 30mg MR tablets
- Ensure patients are counselled on change of **strength and dose** of gliclazide MR.

*Patients on doses >60mg MR may be switched to 30mg MR tablets providing the increased pill burden doesn't impact adherence.

2) Switching to immediate release (IR) gliclazide formulation:

IR gliclazide is the 1st line NI Formulary choice of gliclazide.
Care should be taken when switching to ensure that the dose is equivalent: **gliclazide MR 30 mg may be considered to be approximately equivalent to IR gliclazide 80 mg.** Refer to BNF. When switching to IR gliclazide, the dose should be split over the day with meals.

Actions for GP practices:

- Review patients. If the review indicates that gliclazide MR is not the most suitable formulation, patients can be switched to gliclazide IR
- Ensure patients are counselled on the change of **formulation, strength and dose.**

To note:

- Both gliclazide MR and IR are not advisable in severe renal impairment (if GFR< 30ml/min, MR gliclazide should be avoided)
- Frail patients and/or patients aged > 70yrs may not be suitable for longer acting sulfonylureas due to increased risk of nocturnal hypos.

Cost-effective Oral Ondansetron Formulations

Ondansetron is indicated for management of cytotoxic chemo- / radio-therapy nausea / vomiting, and post-operative nausea/vomiting prevention. Last year in NI almost £913k was spent on ondansetron.

Prescribers should use the standard formulation oral tablets wherever possible.

Other oral formulations cost significantly more, and prices have changed rapidly recently. When prescribing ondansetron for the first time to a patient, consider any specific issues relating to that patient, e.g. palliative care, swallowing difficulties, or retaining doses due to vomiting. Prescribers should first assess which formulations best suit their patient's clinical need, and, if there are several, consider which of these is best value to the Health Service at time of prescribing (refer to current Drug Tariff).

Product	Cost for 10 doses (July 25 DT)	
	4mg	**8mg**
Standard tablets	£1.86	£6.18
Orodispersible films S/F	£28.50	£57.00
Orodispersible tablets	£19.27	£71.94
Oral solution S/F	£10.49 (4mg/5ml)	£67.19 (8mg/5ml)

Actions for GP practices:

- Prescribe standard formulation oral tablets where possible

Action for community pharmacists:

- Counsel patients on formulation changes

Action for Trusts:

- Prescribe standard formulation oral tablets where possible.

Cost-effective Tamsulosin Formulations

Cost-effective prescribing of tamsulosin (single agent)

Tamsulosin 400 microgram **CAPSULES** remain the first line NI Formulary treatment option for the management of chronic urinary retention (after lifestyle intervention).
Annual cost saving of **£78,800** could be generated with a switch from tablets to **CAPSULES**.

Formulation	Cost per 30 days treatment NI DT July 2025
Tamsulosin 400 microgram MR **CAPSULES**	£1.11
Tamsulosin 400 microgram MR tablets	£10.47

Cost-effective prescribing of tamsulosin AND dutasteride

Some patients who experience moderate to severe lower urinary tract symptoms may require treatment with ***both*** an alpha blocker and a 5-alpha reductase inhibitor, e.g. tamsulosin and dutasteride.

The most cost effective way of prescribing this is:

- Prescribe the drugs as **separate generic capsules**; tamsulosin 400 microgram CAPSULES and dutasteride 500 microgram CAPSULES.
- A switch from the combination product to the individual generic capsules has the potential to release annual efficiencies of **£192,000.**

Cost-effective prescribing of combination products

For patients who require the combination product, the most cost effective way of prescribing it, is as the **generic combination product**:

- A simple **switch from the Combodart® to GENERIC tamsulosin / dutasteride capsule** has the potential to release efficiencies of **£32,000**.

Formulation	Cost per 30 days treatment NI DT July 2025
Tamsulosin 400 microgram + dutasteride 500 microgram (prescribed as separate generic capsules)	£3.27
Tamsulosin 400 microgram / dutasteride 500 microgram capsules (generic combination product)	£4.86
Combodart® capsules	£19.90

Actions for GP practices:

- Search clinical system for patients prescribed tamsulosin 400 microgram MR tablets (include all branded generic tablets and Flomaxtra®) and switch to **generic tamsulosin 400 microgram MR CAPSULES**
- Search clinical system for patients prescribed any brand of tamsulosin capsules (include Contiflo®, Flomax Relief®, Tabphyn®, Tamfrex®) and switch to **generic tamsulosin 400 microgram MR CAPSULES**
- Search clinical system for patients prescribed Combodart® capsules and consider prescribing **as separate generic components**. If this is not appropriate (e.g. due to compliance issues) switch to the **generic combination product**
- Search clinical system for patients prescribed generic tamsulosin / dutasteride combination capsule and, if appropriate, switch to **separate capsules,** i.e. tamsulosin capsule PLUS dutasteride capsule.

Cost-effective prescribing of doxazosin: 2 x 4mg tablets

Regionally there are on average of 18,000 prescriptions issued every year for doxazosin at a cost of approximately £600,000. Due to the **high cost of 8mg tablets** and, as per the NI Formulary, doxazosin 1mg, 2mg and 4mg immediate release tablets are the first line choices.

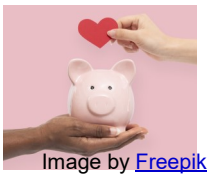

Image by Freepik

Doxazosin dose	Price for 28 days
Take one 8mg tablet daily	£22.99
Take two 4mg tablets daily	£1.48
Prices as per Drug Tariff, July 2025	

Actions for GP practices:

- For new patients, prescribe the most cost-effective dose, taking into account patient capability and tablet burden
- Patients currently prescribed doxazosin should be reviewed to ensure they are on the most cost-effective dose.

Emollient creams

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Last year in NI over **£1.38 million** was spent on emollient creams that are either non-formulary (e.g. E45®, Epaderm®, Oilatum®, Aveeno® (ACBS), Diprobase Advance Eczema®) or should not be prescribed unless the cost-effective alternative is unsuitable (e.g. Cetraben®).

Emollients have a key role in the management of dry, itchy skin conditions such as eczema and psoriasis. There is no evidence that any one emollient is better than another but there is variability in response. The emollients of choice are therefore the least expensive ones that are effective and acceptable. Emollients should not be prescribed for non-clinical cosmetic purposes. Mild dry skin can be managed via self-care.

The NI Formulary (NIF) contains a number of cost-effective emollient cream options from the Epimax® range.

Actions for GP practices:

- Prescribe a cost-effective emollient cream for all new patients with a documented dermatological condition
- Review current prescribing for appropriateness. Where continued use is clinically indicated, switch to a cost-effective option, if possible
- When prescribed, provide advice on the safe use of emollients

Action for community pharmacists:

- Provide advice and reassurance to patients who have been changed to a cost-effective emollient cream

Action for Trusts:

- Ensure recommendations with respect to emollient creams align with the NIF choices, where possible.

BNF section	NIF emollient cream Cost per 500g/500ml	Ingredients	Non-formulary examples Cost per 500g
Colloidal oatmeal-containing	**Epimax® Oatmeal £3.16**	Colloidal oatmeal	*Aveeno® (ACBS)* £6.72 (DM&D)
Paraffin-containing	**Epimax® Excetra £3.15**	White soft paraffin 13.2%, light liquid paraffin 10.5%	*Cetraben®* £6.38
	Epimax® Original £2.72	White soft paraffin 15%, liquid paraffin 6%	*Diprobase® - reformulated as Diprobase® Advance Eczema* £7.70
			Oilatum® (note 6% liquid paraffin light) £8.57
	Consider **Epimax® excetra** or **Epimax® original** as an alternative to E45® or Epaderm® (paraffin -containing emollient creams that are significantly more expensive than the NIF choices)		

Prices from Drug Tariff July 2025 unless otherwise stated

Dose optimisation of Levothyroxine 75 microgram tablets

A more cost effective way of prescribing levothyroxine 75 microgram dose is by prescribing it separately as levothyroxine 50 microgram tablets and levothyroxine 25 microgram tablets.
There is potential to reduce prescribing costs by up to 50% if levothyroxine 75 microgram is prescribed separately as levothyroxine 50 microgram tablets and levothyroxine 25 microgram tablets.

July 2025 Drug Tariff prices	
Levothyroxine 75 microgram tablets	**£2.49**
Levothyroxine 25 microgram tablets	£0.67
Levothyroxine 50 microgram tablets	£0.61

Actions for GP practices:

- Search for patients prescribed levothyroxine 75 microgram tablets
- Prioritise those patients prescribed levothyroxine 75 microgram tablets only for switching. If a higher tablet burden is manageable, **stop prescribing levothyroxine 75 microgram; prescribe levothyroxine 50 microgram tablets *and* levothyroxine 25 microgram tablets**
- Ensure patients are appropriately counselled on the change but advise that the overall dose of levothyroxine is the same
- Ask patients to use up their supply of 75 microgram levothyroxine tablets before commencing the 25 microgram and 50 microgram strengths to avoid wastage
- Consider prescribing levothyroxine 50 microgram tablets and levothyroxine 25 microgram tablets for new patients requiring a 75 microgram dose

Actions for community pharmacies:

- Counsel patients who have been switched from levothyroxine 75 microgram tablets to levothyroxine 50 microgram tablets **and** levothyroxine 25 microgram tablets

Actions for Trusts:

- Select the most cost-effective product when prescribing for new patients (see current NI Drug Tariff).

Low dose antipsychotics in people with dementia

A cautious approach is needed when prescribing antipsychotic medication for people with dementia, due to the increased risk of stroke and death. NICE have produced a Patient decision aid to help people living with dementia, their family members and carers and their healthcare professionals discuss the options.

Points to note:

- An antipsychotic should only be prescribed if the person is at risk of harming themselves or others, or if they are severely distressed, and it should be tried alongside other activities to try to help them in their distress
- The antipsychotic should be used at the lowest possible dose for the shortest possible time
- The person should be assessed at least every 6 weeks and treatment stopped if it is not helping or is no longer needed
- Consider keeping these medications on 'acute' to prompt regular review.

Further information can be found in the PrescQIPP bulletin 'Stopping over-medication of psychotropic drugs.'

Primary and secondary care should liaise closely, given their responsibility to work together, to ensure that patient care is optimised and that potentially harmful medication is not continued inappropriately.

The products most commonly prescribed are listed in the table below. These medicines account for a spend in excess of £8.2 million annually across Northern Ireland, although it is recognised that this is across various indications and patient groups (as prescribing data does not specify indication).

In addition to safety considerations, prescribers should be aware of the differences in cost associated with these items and try to minimise unnecessary wastage.

Antipsychotic preparations	Approximate annual spend in NI*	Generic drug cost examples from NI Drug Tariff July 2025*
Amisulpride 50mg	£17,949	50mg x 60 tablets £6.30
Aripiprazole 5mg, 10mg, 15mg, 1mg/ml	£453,017	5mg x 28 tablets £1.44 10mg x 28 tablets £1.48 10mg x 28 orodispersible tablets £18.26 15mg x 28 tablets £1.61 15mg x 28 orodispersible tablets £14.52
Haloperidol 500 microgram, 1.5mg, 5mg, 200 microgram/ml, 5mg/5ml	£2,742,037	**500 micrograms x 28 tablets £307.43** 1.5mg x 28 tablets £4.97 5mg x 28 tablets £5.64 5mg/5ml oral solution x 100ml £19.50
Olanzapine 2.5mg, 5mg, 7.5mg, 10mg (with vials excluded)	£339,960	2.5mg x 28 tablets £1.02 5mg x 28 tablets £1.42 5mg oral lyophilisates x 28 tablets £48.07 5mg orodispersible x 28 tablets £5.26 7.5mg x 28 tablets £1.18 10mg x 28 tablets £1.43
Quetiapine 25mg, 50mg, 100mg, 150mg, 200mg, 300mg, 20mg/ml	£4,070,234	25mg x 60 tablets £1.44 50mg x 60 tablets £12.50 150mg x 60 tablets £7.03 200mg x 60 tablets £8.15 300mg x 60 tablets £7.00
Risperidone 250 microgram, 500 microgram, 1mg, 1mg/ml	£613,539	250microgram x 20 tablets £38.00 500 microgram x 20 tablets £1.78 1mg x 20 tablets £0.85
*Branded variations of these are usually more expensive than the prices listed here.		

Actions for GP practices and Trusts:

- Only prescribe an antipsychotic if the person is at risk of harming themselves or others, or if they are severely distressed
- Prescribe the lowest dose for the shortest possible time
- Assess the patient at least every 6 weeks and stop treatment if it is not helping or is no longer needed
- Consider other activities to manage behavioural and psychological symptoms of dementia (BPSD) alongside medication
- Consider the differences in cost associated with these items and try to minimise unnecessary wastage.