Consultation on Valuing Medicines - A Strategy for the Sustainable Use of Medicines in Northern Ireland

4 December 2024

Department of Health
An Roinn Sláinte
Männystrie O Poustie
www.health-ni.gov.uk

Valuing Medicines Strategy Consultation

Topic: This consultation seeks views on '**Valuing Medicines - A Strategy for the Sustainable Use of Medicines in Northern Ireland'**.

Scope: We are keen to hear the views of all stakeholders, and particularly those who may be directly impacted by the recommendations included within the Valuing Medicines Strategy such as:

- Community Pharmacy
- General Practice
- Community and voluntary sector organisations
- HSC sector
- Health professionals
- Health and social care providers
- General public
- Environmental representatives

Enquiries: For any enquires in relation to this consultation please:

- email the Department at: VMSconsultation@health-ni.gov.uk
- or write to the Department at: **Valuing Medicines Consultation, Room D4.10, Castle Buildings, Belfast, BT4 3SQ**

How to respond: You can respond online by accessing the consultation on the Department's website at www.health-ni.gov.uk/consultations and completing the Citizen Space online survey. Please note that it is advised that respondents should first read this consultation document before attempting to respond to the consultation questions. If you should require the consultation response questionnaire in an alternative format, please contact the Department using the enquiries details above.

Timing: This consultation will run for 12 weeks, starting 4 December 2024 and closing 26 February 2025.

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Valuing Medicines Strategy Consultation

- The Valuing Medicines Strategy has been subject to an interim Equality Impact Screening in line with Section 75 of the Northern Ireland Act 1998. The screening exercise has not identified any adverse impacts on any of the Section 75 categories, nor has it identified any human rights impacts in relation to the overall strategy.
- In developing these proposals, careful consideration has also been given to the needs of individuals living in rural communities. The Department has concluded that the strategy is not likely to impact on people in rural areas differently from people in urban areas and that a full Rural Needs Impact Assessment is not required at this stage.
- These interim screening documents are available alongside this consultation on the Department's website. These documents will be kept under review and updated to reflect any views or evidence received during the public consultation process. Additionally, any requirement for a Regulatory Impact Assessment will be considered as an outcome of this consultation exercise.

Department of Health Consultations: https://www.health-ni.gov.uk/consultations

Have your say: Complete the Citizen Space Survey

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Foreword

“Medicines have a vital role in helping to prevent, treat, and cure disease. They are our most common medical intervention and are relied upon to support health and wellbeing throughout life. However, medicines costs in Northern Ireland (NI) are increasing annually and have reached an all-time high of £875 million per year. We need to take action to protect access to medicines for the future.”

Despite efforts to improve the efficient use of medicines in NI, our prescribing rates and costs per person remain consistently higher than in other countries within the United Kingdom. Without change, the Health and Social Care (HSC) service will struggle to continue funding expensive new medicines and technologies and keep up with the demand of an increasing and ageing population. Furthermore, the environmental impact of medications is significant, accounting for approximately 25% of carbon emissions within the National Health Service. Prescription medicines cannot be re-used by the HSC after supply to patients, levels of waste are too high, and there is a pressing need to reduce the carbon footprint of medicines and mitigate environmental risks.

This strategy sets out what we intend to do to help ensure the sustainable use of medicines and embed a culture of valuing medicines within our population and the HSC.

Professor Cathy Harrison,
Chief Pharmaceutical Officer

Our aim is to embed sustainable practice into all health and social care settings, promoting a culture that:

- Allows equitable access to appropriate, safe and cost-effective medicines.
- Involves patients in decisions about their medicines, promotes preventive care, and offers options alongside prescribed medicines.
- Reduces waste and the environmental impact of medicines.
- Drives improvement through data, technology, research and innovation.

We don’t need a pill for every ill!

The Case For Change

1 **Optimising the benefits of medicines**

Cost-effective practice is well established in the HSC, but further change is needed to sustain improvement.

2 **Social and demographic**

Demand for medicines is rising with an increasing and ageing population, and health inequalities persist.

3 **Economic**

Medicines costs in NI are rising annually and are now estimated at £875 million per year.

4 **Access to medicines**

Advances in medical practice are leading to highly effective and costly medicines becoming available.

5 **Medicines safety**

High medicines use is associated with an increased risk of avoidable harm and adverse outcomes for patients.

6 **Environment and climate**

Medicines make up 25% of the carbon footprint of the HSC and medicines waste has significant negative effects on the environment.

1. Optimising the Benefits of Medicines

Medicines optimisation is an approach that supports better health for our population by focusing on achieving the best possible outcome from medicines every time they are prescribed, dispensed or administered[1]. In NI we support this through access to safe and effective medicines and the implementation of cost-effective policies that have saved the HSC over £200 million (£m) in the past 8 years[2]. However, our high reliance and need for medicines means that change is required to sustain further improvements.

Cost-effective policies

The following policies underpin cost-effective prescribing in the HSC:

- Generic prescribing and dispensing.
- Compliance with the Northern Ireland Formulary[3].
- Switching patients to cost-effective choices including biosimilars where appropriate.
- Supply of up to 28 days of medication on discharge from hospital.
- Supply of 28 days of medication for repeat prescriptions from GP practices.
- Patients on regular medicines should have a medication review at least annually.

NI has an efficient and cost-effective approach to the procurement of hospital medicines with around 80% of annual spend managed by HSC contracts. There is 70% compliance with the Northern Ireland Formulary and a generic prescribing rate of 83% in primary care[4].

The Medicines Optimisation Regional Efficiency Programme (MORE)

The MORE programme was established by the Department of Health (DoH) in 2016 to deliver efficiencies from the prescribing budget through initiatives to improve compliance with cost-effective policies in primary and secondary care.

The MORE Programme currently delivers annual savings in the region of £20m[5].

High reliance on medicines

Waiting lists

One in four people in NI is currently on a waiting list for treatment in the HSC, including elective surgery and cancer[6]. Taking action to reduce waiting lists is a priority for the DoH because NI has consistently had the poorest UK performance in meeting waiting list targets for healthcare, with none of the draft waiting time targets currently being met[7]. Patients on waiting lists often rely heavily on prescription medication to manage their conditions.

Prevalence of long-term conditions

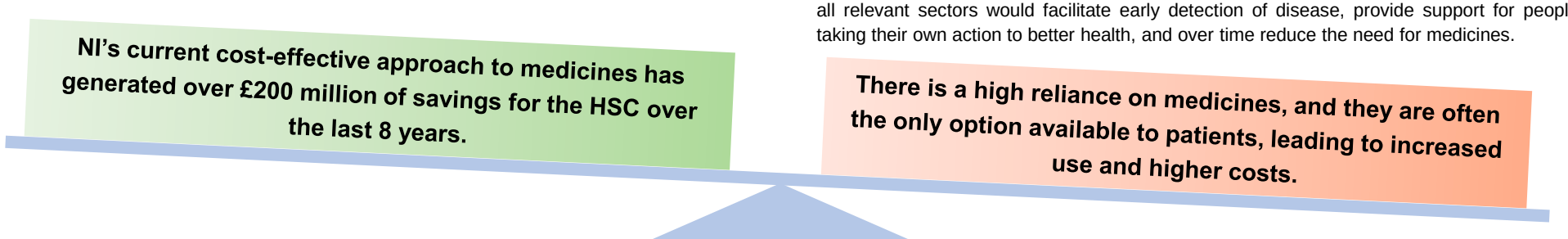
As long-term conditions become more prevalent, so does the demand for medicines. NI census data shows that between 2011 and 2021, the percentage of the population living with one or more long-term health conditions increased from 31.4% to 34.7%, an additional 90,700 people[8]. Many of these conditions require ongoing medications to manage symptoms, prevent complications or slow disease progression.

Alternatives to medicines are not routinely available

Prescribers in NI do not always have access to non-pharmacological interventions that offer patients alternatives to prescribed medicines or can be used alongside them. For example, community based social prescribing, talking therapies and input from primary care multi-disciplinary teams offer a range of options for patient care that can be beneficial to health and well being, but are neither universally available nor accessible to all.

Preventive healthcare

At 4%, the proportion of the NI health budget allocated to preventive healthcare[9] is far below the recommended European levels of 10%. A reorientation of the HSC towards prevention in all relevant sectors would facilitate early detection of disease, provide support for people taking their own action to better health, and over time reduce the need for medicines.



Case for Change:

Cost-effective practice is well established in the HSC, but further change is needed to sustain improvement.

The MORE Programme is well placed to lead further improvements and support a sustainable approach to medicines for the future.

2. Social and Demographic Issues

Population trends, the number of people living with illnesses, deprivation levels, cultural and societal issues and lifestyle factors all contribute to the increasing demand for medicines and medical resources in NI.

Health Inequalities

There is a well-established link between social deprivation and mental and physical ill-health[10]. In NI, people from the most disadvantaged communities suffer a heavier burden of illness and have higher mortality rates than people from the least deprived[11].

In primary care, the number of prescription items dispensed is 45.9% higher, and the total ingredient cost is 21.4% higher in the most deprived areas of NI compared with the least deprived. Those living in the most deprived areas in NI were dispensed more diabetes, anti-depressants, opioid analgesics, statins, and antihypertensive medicines than those living in the least deprived[12].

Ethnic minority groups, refugees and asylum seekers, people with English as a second language, carers, low-income women, families with three or more children and the homeless are more likely to experience hardship, leading to poor access to health[13].

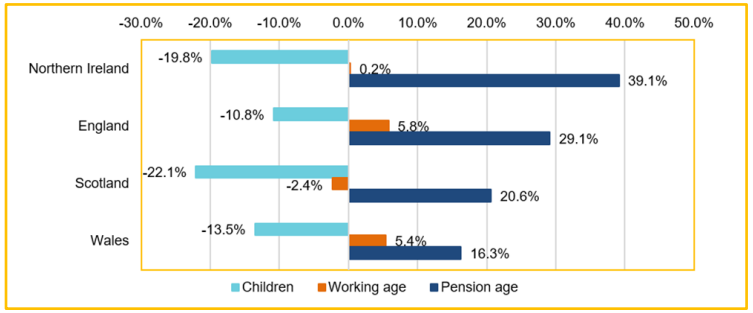
Items dispensed and ingredient cost by deprivation quintile 2023/24[14]

Deprivation Quintile	Total Items (million)	% Items	Total ingredient cost (£millions)	% Cost
1 (most)	9.3	20.6	94.8	18.9
2	9.0	19.8	95.3	19.0
3	8.4	18.6	91.9	18.3
4	7.7	16.9	87.2	17.4
5 (least)	6.4	14.1	78.1	15.6
Unassignable	4.3	10	54.0	10.8
TOTAL	45.4	100	501.3	100

Population Trends

NI's population is increasing and getting older, and by mid-2027 the number of people aged 65 and over in NI is projected to overtake the number of children. By mid-2045 1 in 4 people here will be aged 65 and over, and NI is projected to have the largest increase in the pension age population in the UK[15].

Percentage population change by age group across the UK, mid-2020 to mid-2045[16]



There is a marked age gradient where the standard of general health falls with age. The number of long-term and limiting health conditions or disabilities increases with age[17]. In NI the number of prescription items and ingredient cost per year is increasing and rises steeply with patient age[18].

Society, Culture and Lifestyle

In NI, societal and cultural differences, particularly the legacy of the Troubles, have significantly influenced medicine use. This conflict-related trauma has contributed to poor mental health, with psychiatric morbidity being 25% higher than the UK average[19]. Anxiety and depression rates in children and youth are also 25% higher than in GB[20]. As a result, NI sees significantly higher prescribing rates for anxiety and depression medicines.

Alcohol, smoking and obesity are significant public health challenges, costing NI nearly £2 billion annually[21]. Substance abuse, especially alcohol use as a coping mechanism, remains a major social issue, adding pressure on the health service.

Case for Change:

Demand for medicines is rising with an increasing and ageing population, and health inequalities persist.

With increasing need it is important to take steps to support health parity in access to medicines and their benefits.

3. Economic Issues

The Department's mission is to improve the health and social well-being of the people of NI. However, the cost of delivering these services is rising, including those associated with medicines in primary and secondary care. Medicines spend represents the second largest single investment made in the health service after staff salaries.

Medicine spend in NI*

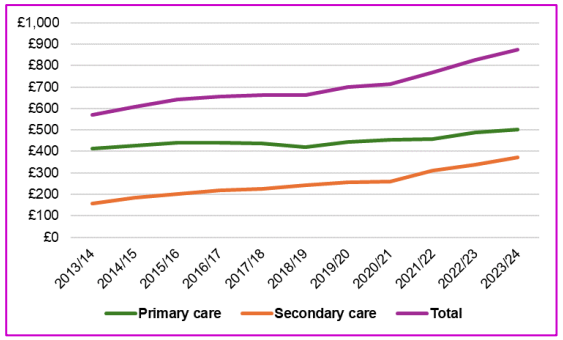
£875m

Total medicine spend in NI in primary and secondary care in 2023/24

53.5%

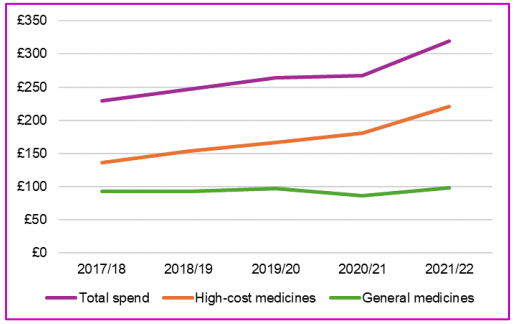
Increase over the last decade

Total medicine spend in NI, 2013/14 to 2023/24 (£m)[22]



In primary care, the costs associated with prescription medicines dispensed in NI reached a record **£501.3m** in 2023/24, an increase of **3.0%** from the previous year, and up **14.9%** since 2017/18.

Secondary care medicines expenditure, 2017-18 – 2023/24 (£m)[23]



In secondary care, expenditure on medicines in 2023/24 was **£373.6m**, including **£247.4m** on high-cost commissioned medicines and **£126.2m** on general medicines. This represented an increase of **10.2%** since 2022/23 and an increase of **65.6%** since 2017/18. Data in the graph to the right shows that high-cost medicines primarily drive this growth.

While caution should be exercised in comparing secondary care medicines costs across UK regions*, available data suggests that in 2022/23, NI spent more per head of population on medicines in secondary care than other UK regions.

Secondary care medicines spend (£m) and cost per head (£) by UK region, 2022/23[24]

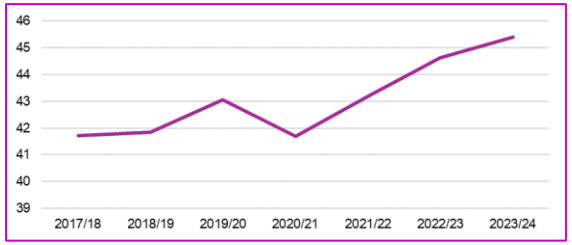
Region	Secondary care spend	Cost per head
NI	£339.1m	£177.46
England	£9,450m	£165.48
Scotland	£905.9m	£166.28

*The data supporting the figures in this section and further explanatory notes can be found in the Annex of this document.

Prescription items dispensed

The use of prescription medicines continues to rise, with a record **45.4 million** items dispensed in primary care in 2023/24. This marks an **8.8% rise** since 2017/18. **99.3%** of these items were dispensed by community pharmacy.

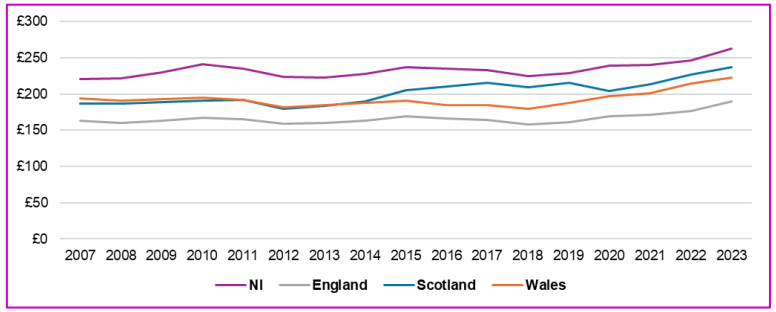
Number of prescription items dispensed in NI within primary care, 2017/18 – 2023/24 (millions) [25]



Primary care costs

The graph below shows that our current approach to efficiencies in NI is controlling the growth of prescription (ingredient) cost per head of population. However, the cost in NI remains the highest in the UK at **£262.51** per head. Research by the Nuffield Trust acknowledges that different patterns of prescribing across UK regions may account for some differences in cost, while others may be due to genuinely different needs in NI, which has a more deprived population affected by the legacy of the Troubles.[26]

Prescription (ingredient) cost per head by UK region, 2007 - 2023 (£)[27]



£47.6m

The projected annual saving for the primary care sector in 2023 if NI had the same ingredient cost per head as in Scotland.

£139.1m

The projected annual saving for the primary care sector in 2023 if NI had the same ingredient cost per head as in England.

Case for Change:

Medicines costs in NI are rising annually and are now estimated at £875m per year.

These escalating costs raise concerns about affordability now and in the future, highlighting the need to consider further cost-efficiency measures for medicines in both primary and secondary care.

4. Access to New Medicines

New medicines recommended by the National Institute for Health and Care Excellence[28] (NICE) are made available within the HSC. The number of these treatments is increasing, and they can be transformative for patients. While many new medicines have traditionally been used in secondary care, there is an increasing need for innovative approaches to system-wide commissioning and delivery to ensure that the HSC can continue to maintain equitable and timely access for patients.

Availability of new medicines

The number of medicines approved by NICE has increased from around 20 each year a decade ago, to over 80 for each of the last three years[29]. Many of these medicines have the potential to be life-changing or life extending, with treatments now becoming available for rare conditions that previously had little or no treatment options.

Evolving evidence base for medicines

Advances in medical practice, driven by updated guidelines and an evolving evidence base, can increase the volume of prescribed medicines. New recommendations may expand the patient populations eligible for treatment, while emerging evidence for established medicines can support their wider use. Together these factors contribute to rising prescription volumes and associated costs for these products.

Development cost for new medicines

Research and development for new medicines is high-risk with a low success rate. Globally, manufacturers aim to recoup development costs during the patent period, resulting in high prices for new medicines.

Increased spend on new medicines

Driven by demographic change and the increased availability of new and expensive medicines, HSC spend on commissioned high-cost medicines has increased by 85.6% since 2017/18 and was almost £250 million in 2023/24[30].

Complex clinical pathways

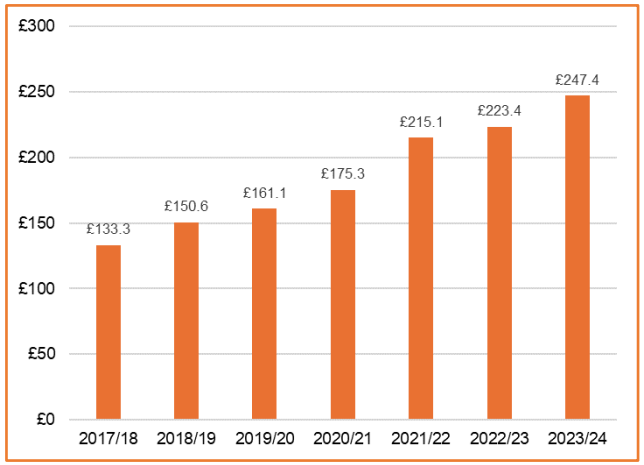
The cost of making a new medicine available is not just the cost of the medicine, and also includes infrastructure such as staffing. There is an increasing need to embed medical and digital technologies into clinical pathways to support diagnosis, screening and after care.

Balancing access and affordability

NI patients and the HSC benefit from participation in the UK-wide 2024 voluntary scheme for branded medicines pricing, access and growth (VPAG) [31]. The scheme aims to promote better patient outcomes and a healthier population, support UK economic growth, and contribute to a financially sustainable health service.

Total expenditure on commissioned high-cost medicines **was £247.4m** in 2023/24, an increase of **85.6%** from **£133.3m** in 2017/18

Secondary care pharmacy expenditure on commissioned high-cost medicines, 2017/18 – 2023/24 (£m)[32]



The Department's priority is to ensure that the population of NI can benefit from advances in medicine and science on an equitable basis compared to those living elsewhere in the UK.

Case for Change:

Advances in medical practice are leading to highly effective and costly medicines becoming available.

The timely introduction of new and innovative medicines into clinical pathways needs to be managed cost-effectively to enable continued access for the future.

5. Medicines Safety Issues

In NI, there are effective and robust systems for the safe prescribing, dispensing and administration of medicines that have been developed in the HSC over many years.

However, a constant focus is needed to drive improvements that aim to reduce or prevent the risk of harm to patients.

At any one time, **70%** of the population take prescribed or over the counter medicines to treat or prevent ill health

4 in 10 adults are dispensed **5** or more prescription items

9 in 10 patients aged **75 and over** are dispensed **5** or more prescription items

800 non-elective hospital admissions each year are due to avoidable medication related adverse events

Avoidable medication errors in NI cost the HSC **£1.9m** annually.

Medication safety is a **health inequalities** issue. People's social and personal circumstances can influence how they take their medicines safely.

Sources: Transforming Medication Safety in Northern Ireland, DoH NI[33]
Our Lives, Our Meds, Our Health: Exploring Medication Safety Through a Social Lens, DoH NI, CDHN[34]

With an ageing population with more complex needs and the volume of prescriptions rising every year, there is a need to fully implement and support improvements that aim to reduce or prevent the risk of avoidable harm to patients.

Current strategies for improving medication safety

Transforming Medication Safety in Northern Ireland

In 2020, the DoH published the **'Transforming Medication Safety in Northern Ireland (TMSNI)'**[35] five-year strategic plan in response to the World Health Organisation's 'Medication without Harm' [36] challenge, which aims to reduce severe, avoidable medication-related harm by 50%. The NI strategy focuses on three priority areas; high-risk situations, polypharmacy, and transitions of care. Specific programmes have been designed for improving medication safety across four domains: **Patients and the Public, Health and Social Care Staff, Systems & Practice, and Medicines,** including a dedicated programme for **reducing harm from opioids** [37].

Reducing Antimicrobial Resistance

Antimicrobial resistance (AMR) is one of the most serious threats to global health. Bacteria and other microbes can develop resistance to antimicrobials such as antibiotics, making infections harder to treat and undermining the effectiveness of treatments which the public have come to rely on. In May 2024, NI signed up to the UK national action plan 'Confronting antimicrobial resistance 2024 to 2029' [38] and is now developing a local implementation plan to advance the plan's nine strategic outcomes.

Yellow Card Centre for Northern Ireland

2023 saw the launch of the Yellow Card Centre for Northern Ireland which promotes the reporting of suspected safety concerns associated with healthcare products [39]. The centre staff work to increase awareness, educate, and promote reporting of suspected adverse events to the Medicines and Healthcare products Regulatory Agency (MHRA) Yellow Card scheme.

Know, Check, Ask

'Know, Check, Ask'[40] is a simple three-step message to help increase public awareness and understanding about the importance of using medicine safely: **KNOW** your medicines and keep an up-to-date list. **CHECK** that you are using your medicines in the right way. **ASK** your healthcare professional if you're not sure.

Community Pharmacy

The DoH funds community pharmacies to provide **Medicines Adherence Support**[41] to patients in accordance with Disability Discrimination Act 1995 requirements. This supports patients to take their medicines safely, on time and as prescribed and can include the use of medication reminder charts, large print labels, multi-compartment medicine systems, and simplifying medication regimens. Some community pharmacies also support the safe and effective management of medicines in care homes through delivery of the **'Care Home Support Service'**[42].

Developing the Pharmacy Workforce

Currently 25% of pharmacists are Independent prescribers (IPs). Reforms to the pharmacist education is increasing the clinical focus of their training, and **from 2026 onwards all new pharmacists joining the register will be qualified IPs** [43].

Between 2015 and 2020 the DoH introduced new roles for General Practice Pharmacists (GPPs), and today in NI **every GP practice has a pharmacist working as an integral part of their clinical team** . Evaluation showed that GPPs deliver excellent value for money to the HSC by supporting prescribing efficiencies, improving the safety, effectiveness and consistency of prescribing, and freeing up GPs to focus on patient care. Based on these findings the DoH has developed the GPP NI 2030 Strategy, outlining plans for the future of the GP pharmacy sector [44].

Case for Change:

High medicines use is associated with an increased risk of avoidable harm and adverse outcomes for patients.

A constant focus on medicines safety is needed so that errors can be avoided and harm reduced or prevented.

6. Environmental Issues

Climate change is the biggest global threat to health in the 21st century, threatening clean air, water and food supplies, and leading to mental health issues, worsened respiratory and other conditions due to air pollution, and heat-related deaths[45]. Medicines use contributes to climate change and has negative effects on the environment and living organisms through the carbon footprint of their production, excretion and improper disposal contributing to pharmaceutical pollution of waterways, direct release of greenhouse gases from inhalers, and the cascade of healthcare activity associated with prescribing medicines. Delivering change in this area requires change in behaviour and practices from patients, public, industry, and the HSC.

Waste medicines

Once medicines are dispensed to a patient, they cannot be reused by the health service. Ordering and supplying medicines that are not used creates waste.

Medicines waste has a significant environmental impact through the incineration of waste medicines, inherent carbon footprint of the medicine, packaging waste and plastic device waste. Pharmaceutical packaging and devices, such as medicines blisters and inhalers, are difficult to recycle. In NI, **over 2 million inhalers** are prescribed every year, yet **less than 1%** are recycled[46]. **Wasted medicines have all the financial and carbon cost with no clinical benefit.**

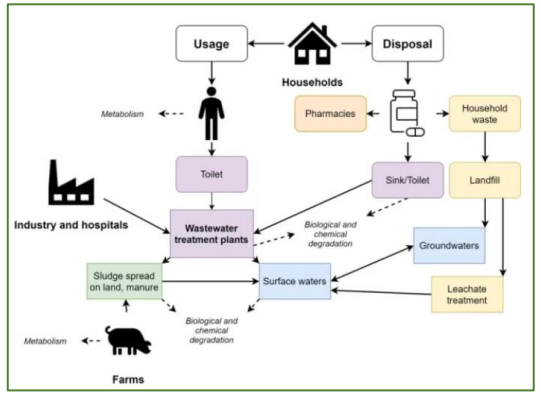
165 tonnes
of unused medicines worth approximately
£18 million
are disposed of annually in NI through community pharmacies.

£650,000
cost to safely dispose of these unused medicines.

Source: Strategic Planning and Performance Group, DoH[47]

Pharmaceutical pollution

NI's extensive use of medicines results in large quantities of active pharmaceutical ingredients (APIs) entering water streams through excretion, following ingestion of medicines. Additional contributions come from washing off skin preparations, improper disposal of medicines in household waste or by flushing medicines down sinks or toilets.



Sources and pathways of pharmaceutical pathways into WWTPs or the environment (Niemi, 2020) [49]

Wastewater treatment plants cannot fully eliminate pharmaceuticals, leading to their direct release into the environment. The effects of this pollution, while not fully understood, include the spread of AMR in bacteria, negative impacts on local ecosystems and biodiversity and potential contamination of raw water sources[48].

A recent study placed **Belfast's River Lagan above the 70th percentile for pharmaceutical pollution**, the second worst in the UK[50].

Carbon emissions

Health systems contribute around 4.6% of global greenhouse gas emissions[51], with the UK health service responsible for 4-5% of the nation's total carbon emissions[52]. Medicines account for **25% of NHS emissions**, with a significant portion coming from **inhalers (3%)** and **anaesthetic gases (2%)**, which release potent greenhouse gases directly into the atmosphere[53].

Reducing the carbon footprint of pharmaceuticals during manufacturing is a key focus of responsibility for the pharmaceutical industry[54]. The production of medicines carries a carbon footprint related to the sourcing of raw materials, manufacturing, distribution, use and disposal. There is a further carbon footprint associated with any consumables or accessories required for administering medicines.

Going forward, all HSC pharmacy tenders will include a mandatory requirement for suppliers seeking contracts to register on the NHS Evergreen Sustainable Supplier Assessment tool[55] or commit to doing so within a set timeframe. NHS Evergreen enables suppliers to share their sustainability information with the health service and understand their alignment with the goals set out in the NHS Net Zero Supplier Roadmap[56].

Making lower-carbon prescribing choices can significantly reduce carbon emissions. For example, a **25% reduction** in CO_2 emissions from inhaler use has already been achieved in NI by transitioning to lower-carbon alternatives where clinically appropriate[57]. While these alternatives may initially be more expensive, they represent a long-term, environmentally responsible choice.

Cascade of healthcare activity

Prescribing medicines can start a cascade of healthcare activity, fostering reliance on the healthcare system and encouraging medicine-seeking behaviour over self-care. This can result in a broader carbon footprint and environmental impact, including prescription dispensing and delivery, travel to appointments, running diagnostic tests, follow-up care and so on.

In NI, **over 45 million prescription items** are dispensed annually in primary care[58], with paper prescriptions moving between prescribers, pharmacies and onward for payment. The introduction of electronic prescribing will remove this paper trail and increase efficiency.

In many cases, non-pharmaceutical interventions such as addressing diet and physical activity have positive population health benefits in addition to planetary health benefits.

Case for Change:

Medicines make up 25% of the carbon footprint of the HSC and medicines waste has significant negative effects on the environment.

Optimising medicines use and decreasing medicines waste will save the HSC money and reduce harmful environmental impacts.

Valuing Medicines: A Strategy for the Sustainable Use of Medicines in Northern Ireland

Defining the goals we want to achieve

1. Close the gap

Goals

- Deliver annual savings for the HSC through the MORE programme by focusing on consistent delivery of cost-effective prescribing policies in primary and secondary care.
- Deliver additional efficiencies through targeted cost-improvement programmes for medicines in both primary and secondary care, considering opportunities for all-system change.
- Support sustainable change by releasing funding from efficiencies to drive initiatives that seek to improve patient outcomes, modernise services, introduce new technologies and data initiatives and build a more sustainable health system for the future.

Outcome

- **Reduce the historical gap between our current prescription (ingredient) cost per head and that in the rest of the UK in primary care.**
- **Manage equitable access to new medicines in secondary care and other high-cost treatment pathways cost-effectively.**

2. Take climate action for better health

Goals

- Raise awareness of the environmental impact of medicines.
- Reduce over prescribing, including a focus on antimicrobials.
- Reduce medicines waste.
- Increase access to non-medical therapies to use alongside medical treatments.
- Reduce the environmental impact of prescribing by choosing lower carbon alternatives and reducing medicines packaging.
- Support the Northern Ireland Climate Action Plan by contributing to carbon emission reductions within the HSC.

Outcome

- **Reduce medicines waste and embed lower carbon initiatives for medicines into HSC systems.**

Department of Health
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Männystrie O Poustie
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Our Response to the Case for Change

Theme 1

Ensure equitable access to appropriate, safe and cost-effective medicines

Theme 3

Reduce waste and the environmental impact of medicines

Embed sustainable medicines culture and practice into all health and social care settings

Theme 2

Involve patients in decisions about their medicines, promote preventive care, and offer options alongside prescribed medicines

Theme 4

Drive improvement through data, technology, research and innovation

Theme 1

Ensure equitable access to appropriate, safe and cost-effective medicines

Strategy Recommendations	Rationale
1.1 Through the MORE programme continue to ensure that prescribing in all HSC sectors is in line with NI cost-effective medicines policies.	In NI, compliance with cost-effective medicines policies in the HSC helps to ensure parity of access to medicines for all citizens accessing care. Where possible, patients receive generic medicines, and the choice of medicine is informed by the NI Formulary in both primary and secondary care. When lower cost generic and biosimilar medicines become available, patients are switched onto these therapies and patients leaving hospital receive up to 28 days' supply of medicines. It is important to maintain a focus on achieving high compliance with cost-effective prescribing policies with targeted improvements in areas where needed.
1.2 Consult on actions to restrict or stop prescribing of low priority medicines including those with poor evidence of effectiveness and medicines available over the counter for minor conditions.	The DoH does not support HSC prescribing of products where there is insufficient evidence of effectiveness. While prescribing rates have reduced, £6m was spent last year in primary care in NI on prescriptions for items on the 'Limited Evidence list' and 'Stop list'[59]. Funding these items on prescription may be considered low priority, and resources could be better spent on evidence-based treatments. To support change in this area, current policies should be reviewed and consideration given to further action to limit prescribing of low priority medicines and those available over the counter to treat minor illness.
1.3 Improve the cost effectiveness of supply models for non-medicinal products, including nutritional products, enteral feeds, specialist dressings, and irrigation products and appliances such as stoma care and incontinence management.	Traditionally the only option for patients to access non-medicinal products has been through prescription. Although costs are attributed to general practices there is often minimal clinical input, and prescribers have little influence on the volumes or choice of products supplied. In the 8 years of the MORE programme, efficiencies in these areas have been amongst the most difficult to influence with growing costs and levels of waste. More cost-effective supply models should be introduced for products that do not need to be prescribed.
1.4 Introduce a regional system through the NI Drug Tariff to enable equitable access to 'specials' cost-effectively.	'Specials' are formulations of medicines indicated for patients with specific needs such as liquids and creams and are usually recommended by secondary care. The use of specials varies widely between Trusts and general practices and their costs can be high and difficult to manage. To ensure continued and equitable access to specials to meet patients' needs, a regional system for their cost-effective use should be introduced through the NI Drug Tariff.
1.5 Strengthen the regional arrangements for commissioning of medicines and related medical technologies.	The introduction of new and innovative medicines and medical technologies is becoming increasingly complex and costly for the HSC. Ensuring timely and equitable availability of therapeutic advances such as new treatments for dementia and obesity will require new approaches to the planning and commissioning of services. To allow continued and equitable access to these treatments and their timely inclusion in clinical pathways in ways that are affordable to the HSC, regional robust arrangements for commissioning are needed.
1.6 Introduce a scheme for utilising a portion of medicines efficiency savings for improvement initiatives related to sustainable medicines practice.	The MORE programme already supports small scale invest to save proposals from primary and secondary care linked to delivery of efficiency targets. This approach should be developed and expanded to support investment in wider enablers of change such as data systems and initiatives to deliver efficiency and environmental targets at scale.

Theme 2

Involve patients in decisions about their medicines, promote preventive care, and offer alternatives to prescribed medicines

Strategy Recommendations	Rationale
2.1 Embed shared decision making between clinicians and patients into practice in primary and secondary care when starting, changing and stopping medication.	It is important that individuals are supported to make decisions that are right for them through a collaborative, shared decision-making process with their clinician. This process brings together the clinician's expertise, such as treatment options, evidence, risks and benefits with what is important to the patient such as their preferences, personal circumstances, goals, values and beliefs. All prescribers, including pharmacists in secondary care and General Practice Pharmacists have a key role in supporting this.
2.2 Promote health literacy initiatives to encourage communities and individuals to develop the knowledge they need to be more involved in decisions about their medicines.	Several programmes aim to address health inequalities and improve health literacy within communities by helping individuals make decisions about their own health and well-being. Current examples include the 'Elevate' programme[60] which provides opportunities for the development of skills, knowledge and expertise in community development to tackle health inequalities. The 'Know, Check, Ask' campaign[61] aims to improve health literacy related to medicines by helping to equip people with the knowledge and skills they need to be more involved in decisions about their medication. The Pharmacy Schools Programme[62] equips school children with the knowledge and skills to navigate HSC and pharmacy services and to engage in discussions around medicine use. There are also plans to launch a new 'Five Moments for Medicines Safety' [63] patient engagement tool to provide patients, families or caregivers with information about what types of questions they can ask a health care professional when medication is started, when they are taking it and when medications are added, reviewed and stopped.
2.3 Raise awareness across the HSC of preventive health initiatives available for patients and the public.	The Public Health Agency (PHA)[64] in NI plays a vital role in improving the health and well-being of our population through a range of services and initiatives focused on preventive care. These programmes aim to enable people to choose healthier lifestyles and support physical and mental health and well-being by addressing risk factors that contribute significantly to the burden of disease and reduce health inequalities across the region. One example is the 'Living Well' campaign[65], delivered in partnership with community pharmacies, which runs six targeted campaigns each year to provide public health messages and advice aligned with key public health priorities, such as 'Live longer and stronger' [66]. All sectors of the HSC should be aware of preventive care strategies, actively promote them, and signpost individuals to relevant services and initiatives.
2.4 Improve access to non-medical therapies alongside medical treatments through the continued roll out of multi-disciplinary teams in primary care and the introduction of a regional approach to social prescribing.	Holistic support for the treatment and prevention of illness allows patients to access the expertise of non-medical practitioners, community-based services, activities and support alongside medical treatment as part of their treatment plan. For example, this could involve enabling access to the specialist skills of the multi-disciplinary workforce in primary and secondary care or linking individuals to support within the community to meet their needs through social prescribing.
2.5 Promote and expand the Pharmacy First service so that more conditions can be treated cost-effectively in community pharmacies, including more advanced treatments provided by independent prescribers.	Increasing the range of services offered in community pharmacies can support better access to care and help increase capacity within the health and social care service. This will assist with meeting the demands of a growing and ageing population and reduce pressure on other parts of the HSC. Many community pharmacies offer the Pharmacy First[67] service providing advice and treatments for common ailments, emergency and bridging contraception and uncomplicated urinary tract infections. Planned development of this service[68] will enable larger numbers of people to access convenient, reliable, and standardised services in community pharmacies across NI, making full use of the knowledge and skills within the pharmacy workforce.

Theme 3 Reduce waste and the environmental impact of medicines

Strategy Recommendations	Rationale
3.1 Identify a lead for green medicines optimisation within the MORE Programme to develop and oversee a new regional improvement programme to reduce the carbon footprint associated with medicines in the HSC.	A dedicated regional improvement programme is needed to reduce the carbon footprint associated with medicines in the HSC and drive changes and improvements across all sectors. This can be informed by successful 'green medicines' programmes that are already embedded within the NHS across other parts of the UK[69]. Key areas of focus would include reducing carbon emissions, medicines waste, pharmaceutical pollution and overprescribing, and should involve engagement with patients, public, industry and the HSC.
3.2 Include a focus on over-prescribing in the MORE Programme to target initiatives to reduce waste and ensure that all patients on regular medications have their medicines reviewed at least annually.	We need to address the over-prescribing of medicines which happens when people receive treatments they don't need, no longer use, don't want or where an alternative would be more effective. It happens in all healthcare systems and the consequences include sub-optimal health outcomes for patients and wasted medicines that cannot be re-used by the HSC. Over-prescribing also involves items such as nutritional, stoma, and incontinence products and dressings. Actions can be taken by individuals to stop ordering items they don't need, as promoted in the 'Don't Use It, Don't Order It' public awareness campaign[70]. In addition, efficient procedures for handling repeat prescriptions, medicines reconciliation on admission and discharge from hospital and medication reviews in primary care have an important role.
3.3 Raise awareness of the harm caused by medicines waste, actions that can be taken to stop it, and the use of Medicine Waste Schemes in community pharmacies to reduce the amount of harmful waste entering waterways and landfill.	The publication of the Valuing Medicines Strategy should be used to raise awareness of the harmful environmental impact of medicines waste and the need for change in everyday behaviours and actions. Addressing the root cause by tackling over-prescribing is essential as well as ensuring that waste is handled safely. Unfortunately, medicines are often disposed of inappropriately in general waste or flushed down sinks and toilets, contributing to pollution in landfills and waterways. In NI community pharmacies are commissioned to accept medicine which has expired or is no longer needed, and efforts should be made to raise awareness of these schemes.

Theme 4

Drive improvement through data, technology, research and innovation

Strategy Recommendations	Rationale
4.1 Prioritise the implementation of the ePharmacy Programme in primary care settings, including electronic transmission of prescriptions and a digital system for pharmacy services, to streamline supply processes, enhance efficiency and reduce administrative burdens.	In 2023/24, over 45 million prescription items were dispensed on 25 million paper prescriptions in NI. Each paper prescription was individually signed by prescribers in general practice before being collected for dispensing at community pharmacies and onward transmission to the Business Services Organisation for payment. In contrast, in England electronic transmission of prescriptions (ETP) was introduced 19 years ago and 95% of all primary care prescriptions are now sent electronically[71]. ETP is transformative, delivering a safer, faster and more convenient way to prescribe and supply medicines, which supports their cost-effective use. Implementing ETP and a digital system for pharmacy services in primary care settings in NI will streamline supply processes, improve efficiency, reduce administrative burdens, and enhance communication, information access, and service development to support the use of medicines.
4.2 Utilise clinical decision support systems in primary and secondary care to help prescribers choose cost-effective and lower carbon options and notify of medicines shortages.	Clinical decision support (CDS) systems are digital tools that are available to help support clinicians to make more equitable, evidence-based decisions. CDS are currently used in some primary and secondary care settings in NI but are not consistently available for all prescribers. Increasing prescribers' access to CDS support would help to improve awareness of cost-effective and low carbon choices and provide up to date information about medicines shortages.
4.3 Establish a Northern Ireland repository of data relating to medicines, drawing from primary and secondary care sources to map and track information up to population level.	The Northern Ireland HSC Data Strategy 2022-2030[72] commits to developing a central architecture for the archiving and analysis of health and care data. This should include bringing together primary and secondary care medicines data to provide a HSC system-wide view of medicines use and enable improvements to be targeted and tracked more effectively. It would also allow the automation and real time production of standard queries and dashboards and the use of advanced analytics and machine learning.
4.4 Introduce enhanced software systems to monitor and track primary care prescribing data to make it quicker to access, easier to understand, interrogate and share at different system levels.	Data analytics systems are widely used in other parts of the UK to provide visually accessible reporting on medicines use and trends related to clinical areas, safety and efficiency activities. They allow users to quickly access the data they need in a format that is easy to use and can be adapted to their needs. Their introduction in NI would provide practitioners, prescribing advisors and commissioners with the data they need to support benchmarking, progress tracking and provide analysis at general practice, integrated care board and regional level.
4.5 Through the roll out of Encompass in secondary care and GPIP in primary care, harness opportunities for optimizing the cost-effective and environmentally safer prescribing, supply, and administration of medicines.	The HSC Encompass programme[73] rollout will be completed during 2025, creating a single digital care record for every citizen in NI who receives health and social care. The introduction of the General Practitioner Intelligence Platform (GPIP)[74] enables the routine extraction of confidential patient information from GP clinical information systems, integrating it into a single data warehouse. The introduction of these systems across primary and secondary care provides the opportunity to harness data to inform and support improvements in medicines use and delivery of the MORE programme.
4.6 Through the Medicines Optimisation Innovation Centre develop a programme of research and innovation in the sustainable use of medicines.	Areas of research interest and innovation priorities should be identified to support the adoption of sustainable medicines practice in the HSC. This would allow improvement across the four strategic themes of the Valuing Medicines Strategy to be informed by scientific and research evidence from academia and industry, supported by the HSC Medicines Optimisation Innovation Centre (MOIC)[75].

Implementation: Delivering Our Recommendations

Our recommendations will be implemented through the Department's **MORE Programme** which will seek to build on the successes of previous cost-effective schemes and expand the focus to deliver improvements related to both efficiencies and environment and climate change.

Successful implementation will require a whole-system approach, which embraces community and patient involvement, social care, multiprofessional leadership and ownership across the HSC.

The introduction of the **Integrated Care System for Northern Ireland**[76] will provide an opportunity for whole-system improvement to support this programme.

Priorities for year one of implementation

Theme	Priorities
 **1** **Ensure equitable access to appropriate, safe and cost-effective medicines**	▪ Through the Medicines Optimisation Regional Efficiency programme, continue to ensure that prescribing in all Health and Social Care sectors is in line with NI cost-effective medicines policies. ▪ Consult on actions to restrict or stop prescribing of low priority medicines including those with poor evidence of effectiveness and medicines available over the counter for minor conditions. ▪ Establish a project to introduce a regional system through the NI Drug Tariff to enable access to 'specials' cost-effectively. ▪ Strengthen the regional arrangements for commissioning of medicines and related medical technologies. ▪ Introduce a scheme for utilising a portion of medicines efficiency savings for improvement initiatives related to sustainable medicines practice.
 **2** **Involve patients in decisions about their medicines, promote preventive care, and offer options alongside prescribed medicines**	▪ Promote health literacy initiatives to encourage communities and individuals to develop the knowledge they need to be more involved in decisions about their medicines. ▪ Promote and expand the Pharmacy First service so that more conditions can be treated cost-effectively in community pharmacies, including more advanced treatments provided by independent prescribers.
 **3** **Involve patients in decisions Reduce waste and the environmental impact of medicines**	▪ Identify a lead for green medicines optimisation within the Medicines Optimisation Regional Efficiency programme to develop and lead a new regional improvement programme to reduce the carbon footprint associated with medicines in the HSC.
 **4** **Drive improvement through data, technology, research and innovation**	▪ Utilise clinical decision support systems in primary and secondary care to help prescribers choose cost-effective and lower carbon options and notify of medicines shortages. ▪ Through the Medicines Optimisation Innovation Centre, develop a programme of research and innovation in the sustainable use of medicines. ▪ Work with Digital Health & Care NI to establish a work programme related to Theme 4.

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- **The Centre for Sustainable Healthcare**
- **Community Development Health Network**
- **The Northern Ireland General Practitioners Committee**
- **General Practice Pharmacists in Northern Ireland**
- **Community Pharmacy Northern Ireland**
- **Public Health Agency**
- **Digital Health & Care NI**
- **Primary Care Directorate (DoH)**
- **Secondary Care Directorate (DoH)**
- **Health Estates Directorate (DoH)**
- **Pharmacy Directorate (DoH)**

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Professor Cathy Harrison,
Chief Pharmaceutical Officer

Department of Health
An Roinn Sláinte
Männystrie O Poustie
www.health-ni.gov.uk

Glossary

Antimicrobials – Medicines used to prevent and treat infectious diseases in humans, animals and plants.

Antimicrobial resistance (AMR) - Antimicrobial Resistance occurs when bacteria, viruses, fungi and parasites no longer respond to antimicrobial medicines. As a result antibiotics and other antimicrobial medicines become ineffective and infections become difficult or impossible to treat, increasing the risk of disease spread, severe illness, disability and death.

Biosimilar - A biosimilar medicine is a biological medicine which has been shown not to have any clinically meaningful differences from the originator medicine in terms of quality, safety and efficacy.

Business Services Organisation (BSO) – Helps to provide a broad range of regional business support functions and specialist professional services to the health and social care sector in Northern Ireland.

Carbon footprint - The sum of greenhouse gas emissions from an individual, product, organisation or country, used to measure their climate change impact.

Carbon emissions - the generally accepted term for the release of carbon dioxide and often greenhouse gases of any type, usually measured in tonnes of carbon dioxide-equivalent (t CO2e).

Chief Pharmaceutical Officer (CPO) – The CPO provides strategic advice to Minister and other Government departments on pharmaceutical related issues.

Clinical Decision Support (CDS) - Clinical decision support (CDS) systems are digital tools that can support clinicians to make more equitable, evidence-based decisions. They can be used across care settings, specialties and pathways to improve healthcare delivery and reduce errors.

Electronic Prescribing - Electronic Prescribing allows prescribers to send prescriptions electronically to a dispenser, such as a community pharmacy. Electronic prescribing refers to a process by which prescription information is created electronically, transferred via electronic means, and dispensed electronically.

Encompass - Encompass is a Health and Social Care programme that will create a single digital care record for every citizen in Northern Ireland who receives health and social care.

Family Practitioner Service (FPS) - Family Practitioner Services is a collective term for General Medical, Dental, Ophthalmic and Pharmaceutical practitioners across the province.

General Practitioner (GP) - GPs are primary care doctors providing the first point of contact with the HSC for most people in their communities.

General Practitioner Intelligence Platform (GPIP) - GPIP provides the mechanism to routinely extract confidential patient information from GP clinical information systems and load it into a data warehouse. This supports the provision of Primary Care data in timely information for decision making required to improve the quality-of-service delivery to patients.

General Practice Pharmacist (GPP): GPPs are experts in medicines and work within General Practice to support the safe and effective prescribing of medicines. They are involved in a wide range of tasks in which they use their clinical knowledge and expertise to achieve better health outcomes for the population from the use of medicines.

Generic prescribing - Generic prescribing allows any suitable generic (or equivalent branded product) to be dispensed.

Health and Social Care (HSC) - This is an umbrella term for Health and Social Care services in NI.

Health Inequalities - Health inequalities are unfair and avoidable differences in health across the population, and between different groups within society. These include how long people are likely to live, the health conditions they may experience and the care that is available to them.

Independent prescribers (IPs) - Independent prescribers are responsible and accountable for the assessment of patients with undiagnosed and diagnosed conditions and for decisions about the clinical management required, including prescribing.

Glossary

Integrated Care System for Northern Ireland (ICS NI) - ICS NI is the new framework for planning HSC services in NI which looks to improve population health and well-being by placing a focus on people keeping well in the first instance, providing timely, co-ordinated care when they are not, and supporting people to self-care when appropriate. It also aims to maximise available resource to deliver the best population outcomes, optimise effectiveness and efficiency and reduce duplication.

The Medicines Optimisation Regional Efficiency Programme (MORE) - The MORE Programme was established in 2016 to help deliver efficiencies from the prescribing budget through initiatives in support of medicines optimisation across Primary and Secondary Care.

Medicines Optimisation - Medicines optimisation looks at the value which medicines deliver, making sure they are clinically-effective and cost-effective. It offers a person-centred approach to safe and effective medicines use, to ensure people obtain the best possible outcomes from their medicines.

The National Institute for Health and Care Excellence (NICE) - NICE evaluate new health technologies for NHS use, considering clinical effectiveness and value for money. NICE also produce usable guidance to help health and care practitioners deliver the best care.

NHS - National Health Service (NHS) is the umbrella term for the publicly funded healthcare systems of the United Kingdom

Northern Ireland Drug Tariff - The Drug Tariff details the amount paid to contractors for services including both reimbursement and remuneration.

Northern Ireland Formulary - The aim of the Northern Ireland Formulary is to support the provision of safe, clinically effective and cost-effective medicines. The formulary covers first and second line drug choices and is intended to be used across both primary and secondary care in Northern Ireland to ensure consistency and continuity of supply to the benefit of patients that require medicines.

Pharmacogenomics - Pharmacogenomics is the study of how our genes affect the way we respond to medications.

Pharmacy First - Pharmacy First services offer advice and treatment for common ailments, emergency and bridging contraception, and uncomplicated urinary tract infections from a pharmacist without the need to visit a GP.

Primary Care - Primary care is a model of health care that supports first-contact, accessible, continuous, comprehensive and coordinated person-focused care. Primary care includes general practice, community pharmacy, dental, and optometry (eye health) services.

Public Health Agency (PHA) - The PHA is a multi-disciplinary, multi-professional body established in 2009. Its purpose is to protect and improve the health and social wellbeing of the NI population and reduce health inequalities through strong partnerships with individuals, communities and other key public, private and voluntary organisations. Its four key functions are: health and social wellbeing improvement; health protection; public health support to commissioning and policy development; and HSC research and development.

Secondary care - Secondary care services are those provided by medical specialists, who in general do not have the first contact with you as the patient. Hospital and community services are often referred to as 'secondary care' as you are usually referred to the service having first been seen by another professional such as a GP, doctor or nurse.

Specials - Specials are a category of unlicensed medicines that are manufactured or procured specifically to meet the special clinical needs of an individual patient.

Strategic Planning and Performance Group (SPPG) - SPPG arranges or ‘commissions’ health and social care services for the population of Northern Ireland. Accountable to the Health Minister the SPPG plans and designs a range of health and social care services that deliver high quality and safe outcomes for patients and service users, are good value for the taxpayer, and comply with statutory duties.

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Annex

Economic Issues: Data Tables

Total medicine spend in NI, 2013/14 to 2023/24 (£)[22]

	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24
Primary care	412,040,600	425,810,000	441,148,500	439,450,500	436,266,500	421,297,200	444,077,600	454,256,200	456,199,600	486,854,300	501,271,900
Secondary care	157,968,357	183,109,666	201,223,248	217,437,305	225,645,136	242,272,316	256,749,077	260,317,635	312,060,008	339,135,634	373,562,908
Total	**570,008,957**	**608,919,666**	**642,371,748**	**656,887,805**	**661,911,636**	**663,569,516**	**700,826,677**	**714,573,835**	**768,259,608**	**825,989,934**	**874,834,808**

Secondary care medicines expenditure, 2017-18 – 2023/24 (£)[23]

	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24
High-cost medicines	133,269,091	150,602,214	161,128,303	175,311,024	215,143,978	223,356,790	247,400,099
General medicines	92,376,045	91,670,102	95,620,773	85,006,610	96,916,030	115,778,844	126,162,809
Total Spend	**225,645,136**	**242,272,316**	**256,749,077**	**260,317,635**	**312,060,008**	**339,135,634**	**373,562,908**

Secondary care medicines expenditure (£m) and cost per head (£) by UK region, 2022/23[24]*

	Secondary care medicines expenditure (£m)	Cost per head (£)
Northern Ireland	339.1	£177.46
England	9,450.0	£165.48
Scotland	905.9	£166.28

*Caveats

Comparisons in medicine use and spend between UK nations should be approached with caution due to a range of factors including:

- differences in contract prices or discounts,
- differences in prescribing patterns arising from differing population health needs, disease prevalence and variations in patterns of deprivation,
- differences in service configuration between countries such as the higher incidence of hospital outpatient dispensing in England compared to NI,
- differences in reporting systems.

It should also be noted that available data on secondary care spend from other UK countries does not provide a breakdown of data to enable more detailed examination. Data from Wales is not yet available.

Annex

Economic Issues: Data Tables - continued

Number of prescription items dispensed in NI within primary care, 2013/14 – 2023/24 (millions)[25]

	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24
Number of prescription items	38.82	40.06	40.71	41.59	41.72	41.83	43.05	41.70	43.19	44.62	45.38

Prescription (ingredient) cost per head by UK region, 2007 - 2023 (£)*[27]

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
NI	220.73	222.14	230.03	241.74	235.62	224.01	223.30	228.14	237.44	235.02	233.58	224.47	229.25	239.48	240.66	246.49	262.51
England	162.95	160.67	163.60	167.82	165.80	159.33	160.12	162.98	169.14	166.55	164.82	157.75	161.29	169.83	171.86	176.33	190.07
Scotland	186.98	187.23	189.45	190.78	191.72	180.17	183.73	190.29	205.73	210.48	215.82	210.02	215.23	204.56	213.29	227.27	237.74
Wales	194.40	190.94	193.55	194.86	191.67	181.36	184.74	188.04	191.50	185.24	185.08	179.41	188.40	197.10	201.67	215.18	222.54

*Caveats

Comparisons in medicine use and spend between UK nations should be approached with caution due to a range of factors including:

- differences in contract prices or discounts,
- differences in prescribing patterns arising from differing population health needs, disease prevalence and variations in patterns of deprivation,
- differences in service configuration between countries such as the higher incidence of hospital outpatient dispensing in England compared to NI,
- differences in reporting systems.