Bwrdd Iechyd Prifysgol Hywel Dda University Health Board

PWYLLGOR CYLLID
FINANCE COMMITTEE

DYDDIAD Y CYFARFOD: **DATE OF MEETING:**	13 March 2020
TEITL YR ADRODDIAD: **TITLE OF REPORT:**	Pharmacy and Medicines Management Priority Value-Based Prescribing Areas.
CYFARWYDDWR ARWEINIOL: **LEAD DIRECTOR:**	Jill Paterson , Director of Primary Care, Community and Long Term Care
SWYDDOG ADRODD: **REPORTING OFFICER:**	Jenny Pugh-Jones Clinical Director of Pharmacy and Medicines Management

Pwrpas yr Adroddiad (dewiswch fel yn addas) **Purpose of the Report** (select as appropriate)
Er Sicrwydd/For Assurance

ADRODDIAD SCAA
SBAR REPORT

Sefyllfa / Situation

Prescribing in Primary Care accounts for a significant level of expenditure within Hywel Dda University Health Board (HDdUHB), at over £70m per annum (pa). Comparing 2014/15 to 2018/19, expenditure has grown by only £322k, although spending levels have fluctuated over the same period. Growth (in terms of prescription items) for the period has stood at around 1%. This relatively flat out-turn has been due to effective and successful cost improvement initiatives to contain the growth in expenditure and demand.

In the current year, despite delivery of challenging efficiency targets, HDdUHB prescribing costs in Primary Care have increased, while item growth has remained flat. This is due to national influences on medicines pricing structures across the NHS.

There are over 10 million items prescribed every year in Primary Care; therefore, managing demand is a key activity for Pharmacy and Medicines Management (MM) across the sectors, while ensuring that prescribing is appropriate, and that there is no compromise in access to medicines for patients.

Delivery of improvement in prescribing against the National Prescribing Indicators (NPIs), which form part of national key delivery areas set by Welsh Government (WG) is a priority and supported through peer discussion, review and monitoring through a multi-professional approach.

Improving the quality of prescribing remains the driver for clinical and cost effective outcomes for patients, in addition to reducing inappropriate variation across our practices. This paper outlines the key challenges and actions, both those implemented and those under development, to progress identified priority areas and mitigate pressures.

This paper provides detail on the prioritised areas of work and rationale for targeting these areas of prescribing, with a focus on improving value-based prescribing, managing demand and demonstrating improvements to delivery of the NPIs.

Cefndir / Background

The All Wales Medicines Strategy Group (AWMSG) has developed a number of key prescribing indicators, which provide a range of clinical and cost effective efficiencies data to support and influence changes in prescribing at Health Board (HB) and GP practice level.

Currently, there are 11NPIs, of which four are National Key Delivery areas within Primary Care. The four indictors are:

- Total antibacterial items per 1,000 Specific Therapeutic Group Age Related Prescribing Units (STARPUs);
- Fluoroquinolones, Cephalosporins, Clindamycin and Co-amoxiclav items per 1,000 patients;
- Opioid average daily quantities per 1,000 patients;
- Number of patients aged 65 years or over prescribed an antipsychotic.

Prescribing expenditure is influenced both by choices made (e.g. generic products over branded products) but is also more widely influenced by the control that the Department of Health (DoH) and WG have in place to manage the Community Pharmacy contract and increasing demands to use new medicines while managing growth. Use of Category M products is encouraged, ensuring that the NHS secures good value for money in addition to supporting the sustainability and development of Community Pharmacy through management of profit margins. The result of this strategy is that large swings in the cost of Category M products can directly influence the expenditure on medicines in Primary Care at Health Board level.

The Pharmaceutical Price Regulation Scheme (PPRS), caps growth of branded products, with any excess reimbursed directly to WG. The HB holds the cost pressure associated with use of branded products over and above the cap.

In addition to this, the increasing number of shortages across the NHS is pushing the cost of medicines up further through the necessary use of No Cheaper Stock Obtainable (NCSO) endorsements. Generic products that usually cost in the region of £1-£2 per box escalate to prices of over £100+ per packet and more, with little or no notice and often with limited alternatives to the treatment option available.

Asesiad / Assessment

1. Current Position

Influences on prescribing arise from a range of factors, such as the cost of individual medicines on a prescription, item growth and national influences at DoH level. These are explored below in relation to the impact on HDd UHB Primary Care prescribing expenditure.

1.1 Primary Care Prescribing – Expenditure

All Health Boards are seeing pressures from increased costs and activity in Primary Care prescribing. Table 1 below shows the year-to-date (YTD) position across Wales. This illustrates that HDdUHB is currently containing growth, compared with all other Health Boards, with average growth at over 1.6%. This is a challenging position to maintain. While growth is contained, costs within HDdUHB are increasing at a higher level; this can to an extent be accounted for in section 1.3 below, detailing the impact of Category M pricing.

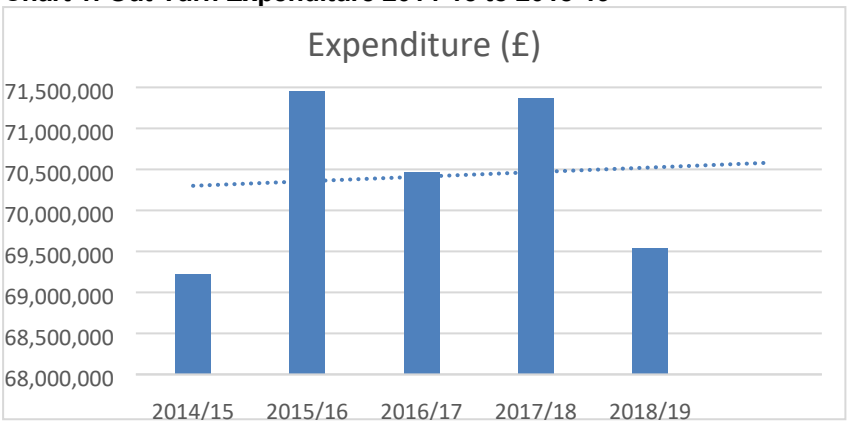
Table 1 below shows the NHS Wales Health Boards' current positions up to October 2019. This shows HDdUHB to be best placed in terms of containing growth and in 3rd position in terms of expenditure. Further discussion on the variance in expenditure is included at Section 1.3.

Table 1: Current Prescribing Position for Health Boards across NHS Wales

Health Board Cumulative	Month to	Amount (£)	Total Items	Amount (£)	Total Items	Amount (£)	Total Items	2018/19 & 2019/20 (£)	2018/19 & 2019/20 Items	Amount (£) RANK	Amount (£) %	Total Items %	Total Items RANK
ANEURIN BEVAN	October	58,809,551	9,159,526	56,647,231	9,188,395	59,375,702	9,406,153	2,728,471	217,758	5	4.82%	2.37%	5
CARDIFF AND VALE UNIVERSITY	October	44,456,258	5,861,334	42,792,074	5,907,947	44,155,384	6,018,551	1,363,310	110,604	2	3.19%	1.87%	4
HYWEL DDA	October	42,063,019	6,039,566	40,585,236	6,018,867	42,223,604	6,097,110	1,638,368	78,243	3	4.04%	1.30%	1
BETSI CADWALADR UNIVERSITY	October	67,265,740	10,210,643	64,352,691	10,197,670	67,333,122	10,355,139	2,980,431	157,469	4	4.63%	1.54%	3
Swansea Bay UHB	October	57,129,992	8,324,847	55,522,565	8,411,741	39,819,990	6,040,623	-15,702,575	-2,371,118		-28.28%	-28.19%	
POWYS TEACHING	October	14,155,633	2,021,851	13,711,333	2,020,734	14,121,461	2,051,775	410,128	31,041	1	2.99%	1.54%	2
Cwm Taf Morgannwg UHB	October	33,115,746	4,985,886	32,289,928	5,100,809	50,527,697	7,629,584	18,237,769	2,528,775		56.48%	49.58%	
TOTAL		**316,995,939**	**46,603,653**	**305,901,058**	**46,846,163**	**317,556,960**	**47,598,935**	**11,655,902**	**752,772**	**Ave**	**3.81%**	**1.61%**	**Ave**

The change in expenditure over the past 5 years has also remained flat, albeit with fluctuations across the years, in the main due to NCSO endorsements and use of Category M products. Chart 1 illustrates the out-turn expenditure for the past five years, showing that in 2018-19 expenditure on Primary Care drugs was only £320k higher than in 2014/15. Without the influence of NCSO in 2018-19, out-turn would have been an estimated £500k- £1m less.

Chart 1: Out-Turn Expenditure 2014-15 to 2018-19



1.2 Primary Care Prescribing - Growth (Items)

Normally growth in Primary Care increases by 1%-2% year on year. This reflects an increasingly elderly population and wide use of polypharmacy to manage chronic conditions within this population. Table 2 shows the percentage of patients over the age of 65 years in 2018 and the change in this level over the past 3-4 years.

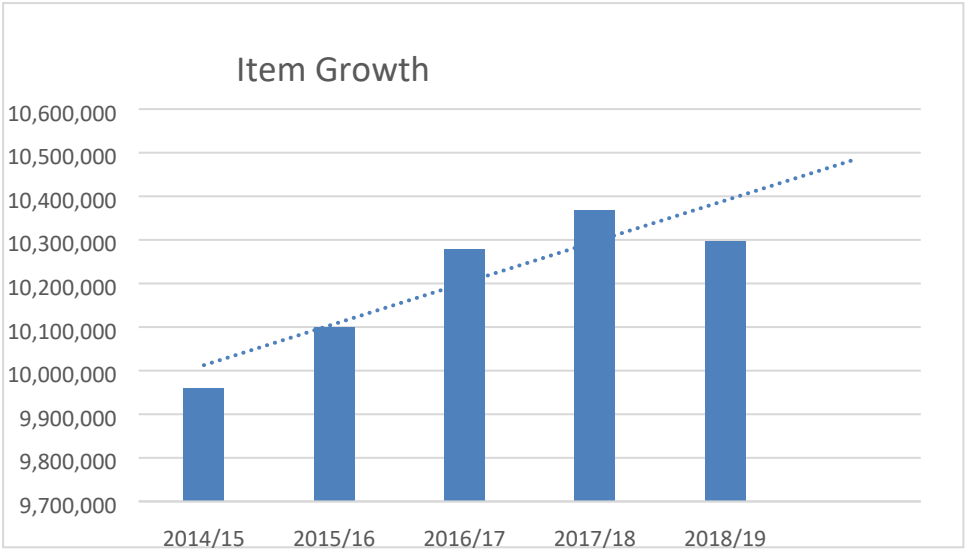
Table 2: percentage of Patients over the age of 65 years

Health Board (HB)	% of Patients > 65yrs of all Patients (2018)	% Change (Increase) in >65 yrs from 2015 to 2018
Aneurin Bevan University HB	20	0.6
Cardiff And Vale University HB	15	0.5
Hywel Dda University HB	24	1.0
Betsi Cadwaladr University HB	22	0.8
Abertawe Bro Morgannwg University HB	20	0.5
Powys Teaching HB	26	1.1
Cwm Taf	19	0.6
National GP	20	0.7

Data to date indicates that HDdUHB has managed to contain growth in prescribed items through working with GP practices across Primary Care. This is a positive position and one that HDdUHB will strive to maintain, given an increasingly elderly population and associated needs. It should be noted that patients are managed effectively in Primary Care through their medication and therefore do not need to go into hospital for treatment, thereby releasing efficiencies both in medicines costs and staff capacity within the acute services.

The growth in prescribed items is shown in Chart 2 below

Chart 2: Item Growth 2014-15 to 2018-19



If item growth had continued at the rate shown from 2014/15 to 20117/18, the associated expenditure for 2018/19 would have been over *£1.6m higher.*

1.3 Impact of Category M and NCSO

The strategic direction has been to encourage generic prescribing of medications to optimise the cost savings available. The generic prescribing rate for HDdUHB in August was 83.66% - higher than the National average rate of 82.55%. This has meant that changes in Category M drug prices have had a greater effect on HDdUHB and Powys Teaching Health Board, who have the highest generic prescribing rates. This is shown in Chart 3 and Table 3 as increases in the percentage cost of items for the period July to August 2019

Chart 3: % Cost per Item Change July to August 2019 (Cat M)

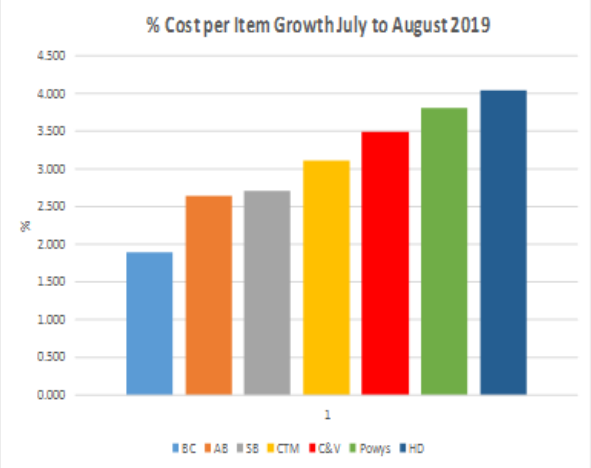
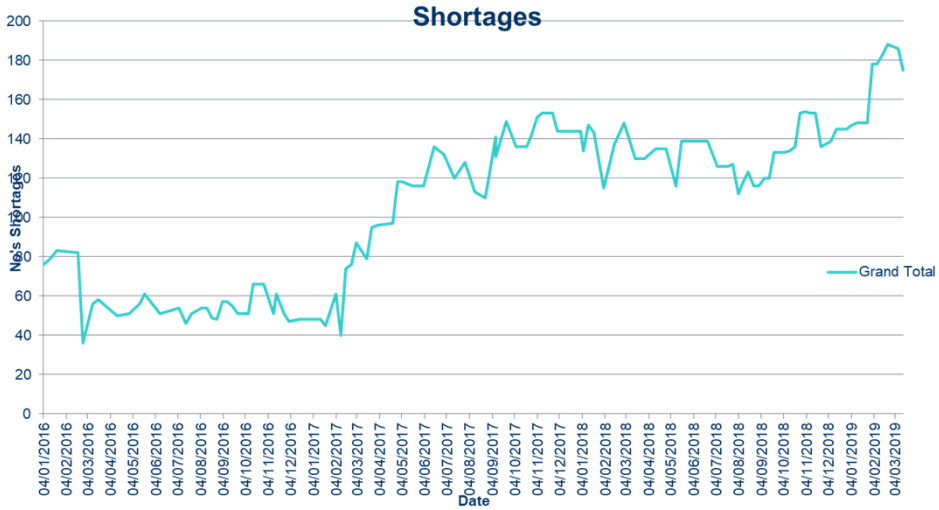


Table 3: Generic Rates

Entity	Percentage (Generic)
Cardiff And Vale UHB - GP	80.13%
Betsi Cadwaladr UHB - GP	80.63%
Swansea Bay UHB - GP	81.66%
Aneurin Bevan UHB - GP	82.58%
Cwm Taf Morgannwg UHB	82.74%
Hywel Dda UHB - GP	83.66%
Powys Teaching HB - GP	86.49%

Dealing with medicine shortages has always been challenging and is something that Pharmacy - Community, Primary and Acute - has dealt with as part of usual practice, to the extent that, generally, patients and clinical teams have been relatively unaffected by shortages. In recent years however, the number and level of shortages have increased dramatically, as shown in Graph 1 below, and are impacting directly upon capacity within pharmacies, as the time taken to resolve them becomes ever longer. The medicines involved are more frequently those that are widely used or very specific for complex conditions (eg. Epilepsy) and require significant clinical input to source suitable alternatives, causing disruption across the entire pathway.

Graph 1: Number of NCSO Medicines



1.4 Cost Improvement Plans

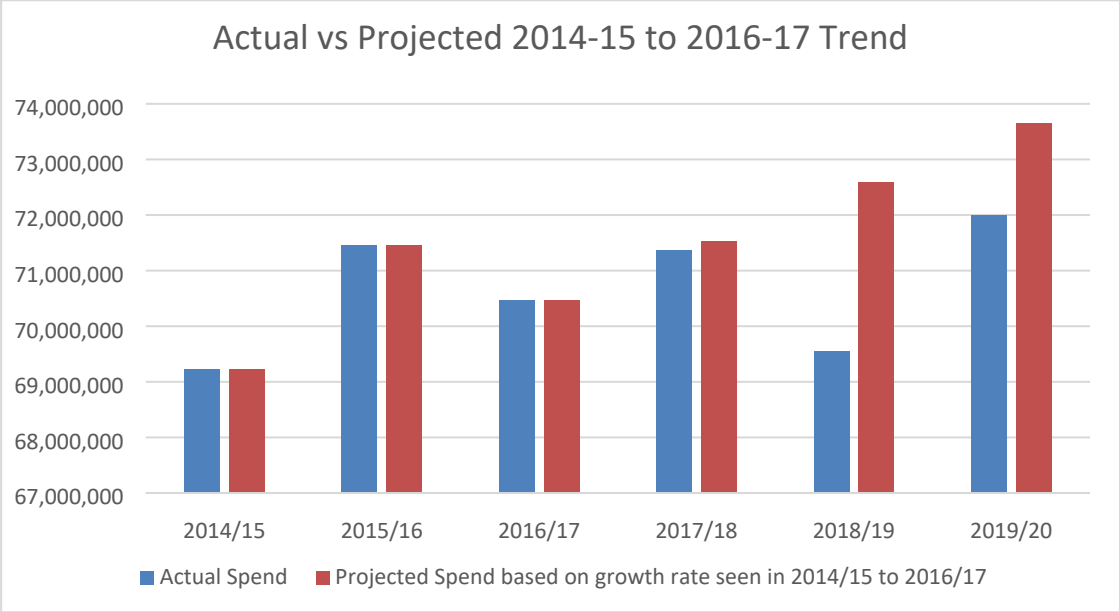
Assessment of the delivery of cost efficiency plans over the past three years has resulted in containment and a reduction in expenditure on Primary Care prescribing of just under £8m, as shown in Table 4 below:

Table 4: Cost Efficiency Plans

Cost Efficiency Plans	Target (000)	Achievement (000)	Variance
2017-18	£1,625	£2,732	£1,107
2018-19	£2,015	£3,011	£996
2019-20*	£2,928	£2,200	-£728
Total 2017-2020	£6,568	£7,943	£1,375
*Projected Savings			

If no action had been taken to contain both the demand and costs, then based on the growth rate in 2014/15 and 2015/16, the outturn would have been significantly higher than that currently seen. Chart 4 (below) shows the impact of the year on year growth rate and subsequent costs associated with increased activity. This clearly illustrates the positive impact of the work undertaken with GP practices across the Health Board.

Chart 4: Actual Cost and Projected Cost (if no action taken).



The effects of Category M and NOAC (Non-Vitamin K antagonist Oral Anticoagulation) drugs and NCSO, as outlined in Section1.3, impact the relatively poor position of 2019-20.

2. Priority Areas for Medicines Management 2020-21

The Medicines Management Team is a small team operating across 48 GP practices covering a population of 370,000 patients, making it essential to focus work in areas that are likely to have the most significant impact, whether this is in improved patient safety, patient outcomes or cost improvements.

However where there are concerns regarding sustainability of a practice, the focus of work undertaken must be to support the practice's needs first to ensure continuity of services to patients, rather than to focus upon specific MM initiatives.

2.1 Patient Safety

There are a number of indicators used within MM as markers of patient safety:

- AWMSG Patient Safety Indicators;
- General Medical Services (GMS) Contract (new 2020-21) - Quality Assurance and Improvement framework (QAIF) - Reducing Medicines Harm;
- National Prescribing Indicators (National Key Performance Indicators - KPIs) - Four of the AWMSG indicators are included in the National Performance Framework.

AWMSG NPIs– while the Health Board has made progress against these targets there remains further work in many of the focus areas; this will result in a positive impact on the status of the KPI.

The Health Board demonstrates an improving position for the four NPIs in the National ratings, although not yet meeting the absolute target of being in the lower centile. Table 5 shows the current position.

The indicators are monitored and discussed at peer review GP Prescribing Leads meetings, sharing best practice across the Health Board.

Table 5: National Prescribing Indicator (NPI) Position

Indicator	Target	Q3 2018/19	Q4 2018/19	Q1 2019/20
Total antibacterial items per 1,000 STARPUs (specific therapeutic group age related prescribing unit)	A quarterly reduction of 5% against a baseline of April 2017 – March 2018	314.0	312.2 **Improving**	273.8 **Improving**

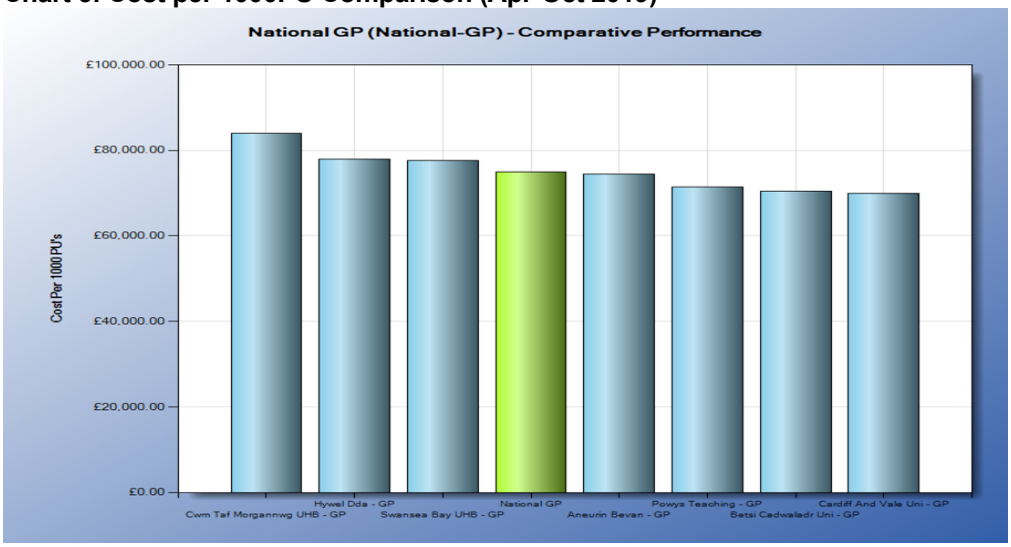
Fluoroquinolones, Cephalosporins, Clindamycin and Co-amoxiclav items per 1,000 patients	A quarterly reduction of 10% against a baseline of April 2017 – March 2018	16.8	15.7 **Improving**	14.3 **Improving**
Opioid average daily quantities per 1,000 patients	4 quarter reduction trend	5,168.4	4,964.4 **Improving**	4,991.2 **Static**
Number of patients aged 65 years or over prescribed an antipsychotic	4 quarter reduction trend	Data not available	Data not available	1.27%

2.2 Cost Per Prescribing Unit (PU)

Analysis of the data of usage and costs in prescribing across the British National Formulary (BNF) categories indicates variance across clusters (and practices); this in turn provides the basis for further discussion and work to understand the variance, as some variance is appropriate and reflective of good prescribing. Prescribing data (Comparative Analysis System for Prescribing - CASPA) provides an indication, not the answer, as prescribing is influenced by a range of factors including demographics and co-morbidities. This is also affected by local service provision and how patients may access a service and their medicines.

The Health Board is above the national level of Cost per 1000 PU for all Primary Care prescribing. Both Pembrokeshire and Ceredigion are below the average, with Carmarthenshire driving the main pressures. Chart 5 shows the current position:

Chart 5: Cost per 1000PU Comparison (Apr-Oct 2019)



Examining the data and comparing across all the main BNF categories for HDdUHB in comparison with Wales allows the identification of the high-pressure areas, based on cost per 1000PU. This supports the small MM Team in focusing its capacity on the areas where the greatest impact is likely to be made. The cost per 1000PU comparisons across BNF categories for HDdUHB and Wales can be seen in Table 6.

Table 6: Cost per 1000PU Comparison of BNF Categories - HDdUHB and Wales

Apr-Oct 2019 Average Cost Per 1000 PU's	Wales	+2%	HDUHB
Gastro-Intestinal System	550.96	561.98	502.36
Cardiovascular System	1472.62	1502.08	1765.80
Respiratory System	1403.87	1431.95	1345.49
Central Nervous System	1720.92	1755.34	1756.70
Infections	209.60	213.80	211.83
Endocrine System	1709.77	1743.96	1864.08
Obstetrics,gynae+urinary Tract Disorders	396.96	404.90	369.27
Malignant Disease & Immunosuppression	209.03	213.21	306.00
Nutrition And Blood	776.71	792.24	694.94
Musculoskeletal & Joint Diseases	310.64	316.85	320.53
Eye	200.18	204.19	206.95
Ear, Nose And Oropharynx	105.99	108.11	93.17
Skin	302.82	308.87	266.11
Immunological Products & Vaccines	142.30	145.14	147.69

This would indicate that the key pressure areas, in terms of costs, are the following:

- Cardiovascular system
- Central Nervous System (CNS) (included as Opioid Analgesia is already a priority area)
- Endocrine system
- Malignant Disease and Immunosuppression
- Musculoskeletal (MSK) and Joint Disease
- Eye
- Immunological products and vaccines

A focus on these areas is likely to have the greatest impact in terms of improving efficiencies across prescribing.

The level of prescribing in Eye, MSK and Vaccines, while still requiring analysis and work, accounts for less than 5% of prescribing items and 6% of costs together.

This leaves four high cost per 1000PU areas to target (not exclusively, as work still continues in all areas as appropriate). These are:

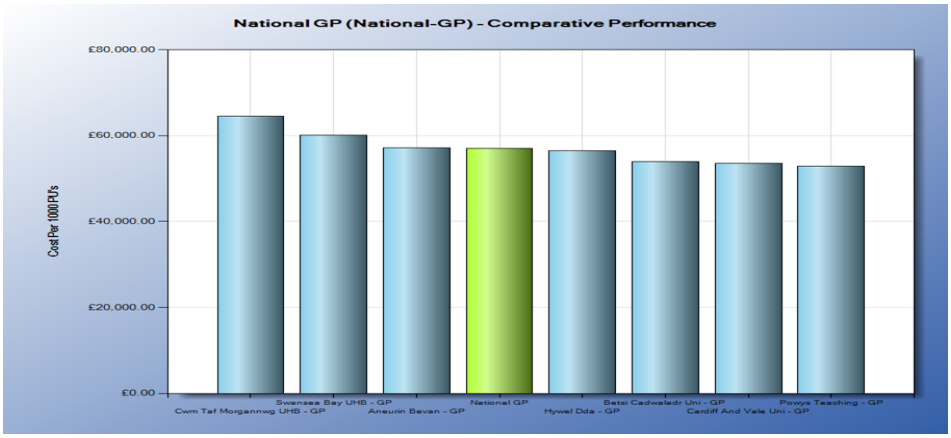
- Cardiovascular
- Endocrine
- CNS
- Malignant Disease and Immunosuppression

To ensure resources are utilised effectively to provide maximum impact, the three high volume BNF categories are being targeted (Cardiovascular, CNS, Endocrine). Malignant Disease and Immunosuppression, while above average, is low volume (<2%). The higher level of costs per 1000PU in this category result from prescribing and service provision in Primary Care rather than Secondary Care. For example, Urology teams request that all Gonadorelin analogues be prescribed in Primary Care, reducing the demand on the acute sector, whereas in many Health Boards items are initially provided in Secondary Care (at over £230 per item). Similarly, the drugs Octreotide/ Sandostatin currently included in this data are due to be brought under

Secondary Care and Homecare supply (similar to arrangements in other Health Boards). This is likely to result in the cost per 1000PU being more in line with the national average.

If these identified areas of high cost per 1000PU, which account for around 20% of all Primary Care prescribing within HDdUHB, are removed from the Cost per 1000PU analysis for the Health Board, then this drops to below average.

Chart 6: Cost per 1000PU adjusted for Priority Areas*



*This excludes: NOACs, Diabetes Medicines, Thyroid Medicines, Malignant Diseases and Immunosuppression.

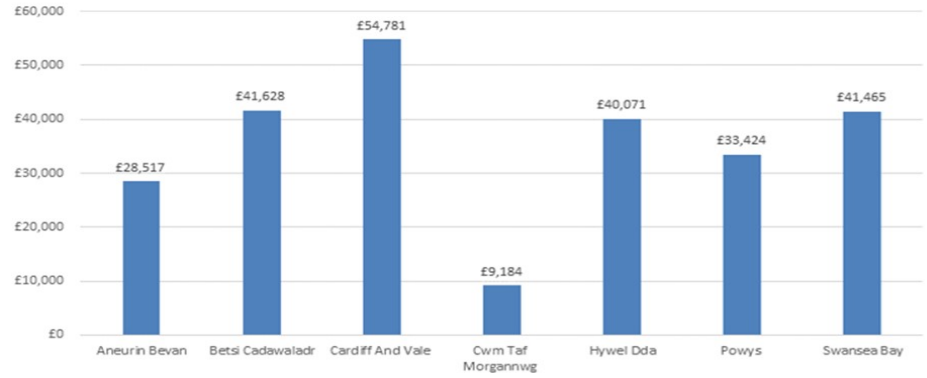
2.3 Low Value Medicines and KPMG Identified Areas for Improvement

KPMG identified three areas for consideration of potential efficiency. This included two overlapping areas relating to low value medicines and one to Community Pharmacy provision across the Health Board.

2.3.1. Low Value Medicines

The aim of the '*Low Priority for Funding in NHS Wales'* initiative is to minimise the prescribing of medicines that offer a limited clinical benefit to patients and where more cost-effective treatments *may be* available. The list developed by AWMSG utilises data from (CASPA across NHS Wales, and is monitored on a monthly basis at national level. It is not expected that Health Boards eliminate usage of medicines that offer a limited clinical benefit, but that they work towards a 30% reduction from baseline. Taking the most recent data, all Health Boards are showing an actual YTD saving on spend for the nine low priority for funding medicines combined, when compared with the equivalent period for the previous year. Further savings are expected locally following the review of patients by the Pharmacy Pain Team.(Chart 7)

Chart 7: Achieved Savings by Health Board for 2019-2020 (data to September 2019)



2.3.2. Community Pharmacy

The third area identified by KPMG as an area for potential efficiency linked with the Community Pharmacy Contract and a reduction in the number of pharmacies per 100,000 population. A nominal savings sum of £800k was identified. A reduction in the number of pharmacies, however, appears to conflict with the direction of travel set out by the Health Board in its Clinical Strategy: *A Healthier Mid and West Wales*. A Pharmaceutical Needs Assessment (PNA) is currently being undertaken and the outcomes will inform the position. This is anticipated to be completed by April 2021.

3 Cluster Analysis

Focusing on the key areas to drive the work plan for 2020-21 will improve the overall position of the Health Board. Analysis of this position across the 7 Clusters further focuses on the key areas where support is required.

A breakdown of these areas into sub-categories shows that Cardiovascular, Opioid Analgesic, Diabetes medicines and malignant diseases are assessed as Red in a significant number of areas across all regions.

This analysis also identifies that Amman Valley and Llanelli are above the national average across all categories, with the exception of Gastrointestinal in Llanelli. *This is not unexpected* as, while the cost per 1000PU takes into account the age of patients, it does not account for wider social deprivation and the potential impact on health this may cause; hence prevalence and demographics need to be considered alongside this analysis to provide a more rounded picture. It does however indicate that there is wide variance across the HB and opportunities to take best practice from one cluster to inform others and influence prescribing trends (see Table 7)
Appendix 1 provides a further breakdown of variation within a cluster.

Table 7: Cost Per 1000PU Comparisons of BNF and sub-BNF categories

Apr-Sept 2019 Average Cost Per 1000 PU's	Wales	+2%	+3%	HDUHB	2T's	Amman	Llanelli	North Ceredigion	South Ceredigion	North Pembs	South Pembs
Gastro-Intestinal System	550.96	561.98	567.49	502.36	473.07	586.51	541.47	412.58	497.13	475.78	543.92
Cardiovascular System	1472.62	1502.08	1516.80	1765.80	1754.73	1874.53	1951.63	1450.45	1909.34	1727.64	1759.15
Respiratory System	1403.87	1431.95	1445.99	1345.49	1172.17	1611.15	1619.09	963.38	1380.82	1356.11	1316.11
Central Nervous System	1720.92	1755.34	1772.55	1756.70	1611.57	1930.30	2089.10	1334.69	1685.96	1680.53	1743.91
Opioid Analgesics	280.51	286.12	288.93	350.87	303.07	401.58	377.01	321.86	388.05	288.65	401.30
Infections	206.48	210.61	212.67	207.07	180.83	237.38	232.50	164.23	212.32	199.71	200.59
Drugs Used In Diabetes	1321.92	1348.36	1361.57	1457.84	1334.57	1616.54	1631.65	1287.60	1512.51	1369.16	1555.96
Thyroid And Antithyroid Drugs	112.79	115.04	116.17	126.08	129.64	163.42	119.78	113.10	131.92	110.81	122.98
Malignant Disease & Immunosuppression	207.94	212.10	214.18	303.57	315.13	250.82	270.21	318.78	456.60	295.20	280.96

Further analysis of the BNF categories shows there are key drivers within them.

3.1 Anticoagulants and Protamine (Table 8)

Further analysis of the Cardiovascular system shows a high use within the HB of NOAC medicines, which offer an alternative to Warfarin, and the need for International Normalized Ratio (INR) testing.

Table 8: Comparison of Anticoagulant Prescribing Cost per 1000 PU.

Apr-Oct 2019 Average Cost Per 1000 PU's	Wales	+2%	% Above	HDUHB	2T's	Amman	Llanelli	North Ceredigion	South Ceredigion	North Pembs	South Pembs
Cardiovascular System	1472.62	1502.08	20%	1765.80	1754.73	1874.53	1951.63	1450.45	1909.34	1727.64	1759.15
Anticoagulants And Protamine	619.36	631.75	31%	810.62	801.26	869.06	907.47	583.24	908.04	842.90	776.19

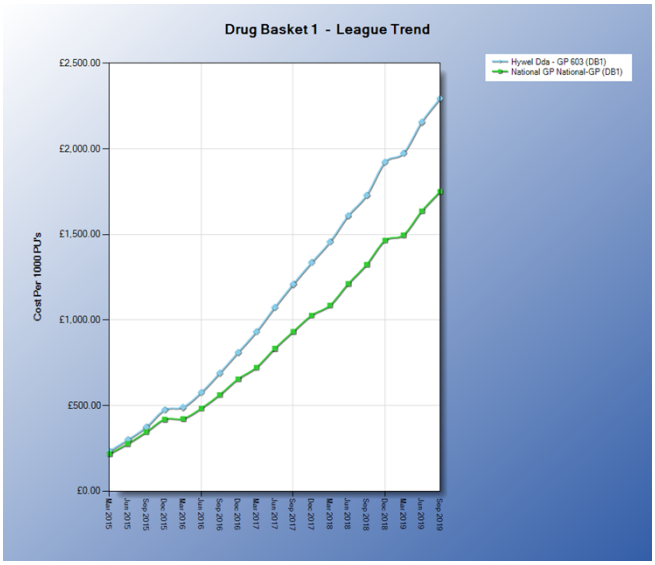
When first launched the use of NOACs was initially 2nd line, following the inability to optimise therapy utilising the traditional anticoagulation drug Warfarin. Advice from NICE and AWMSG now recommends that a NOAC should be considered alongside Warfarin, and choice of anticoagulant should be based on clinical presentation and patient preferences. Following recommendations from WG, HDdUHB, in line with other Health Boards, introduced a Local Enhanced Service (LES) to support GPs to initiate, prescribe and monitor patients on a NOAC. Until the introduction of LES many GPs would not prescribe as they felt it was more appropriate to continue to provide from Secondary Care services or continue with the current Directed Enhanced Service (DES) for Warfarin and INR testing. The implementation of the LES (as predicted at the time) has led to an increase in prescribing of NOACs, and an associated cost pressure in Primary Care expenditure. This is exacerbated locally, with HDdUHB seeing a much higher level of prevalence than the Welsh Average for Atrial Fibrillation (AF) (3.1% vs 2.3%).

As set out in NICE guidance, the increased costs in Primary Care prescribing should be offset at a systems level by the following benefits:

- Decrease in the rate of strokes – this is very difficult to determine due to the longevity of the outcomes, increasing elderly population and therefore higher prevalence anticipated.
- Decrease in the level of testing required as a NOAC requires a baseline and annual review (as most drugs recommend). There is no regular INR testing required.
- Decrease in patients requiring outpatient appointments for INR testing, releasing time and capacity in the Anticoagulation services offered by Secondary Care.

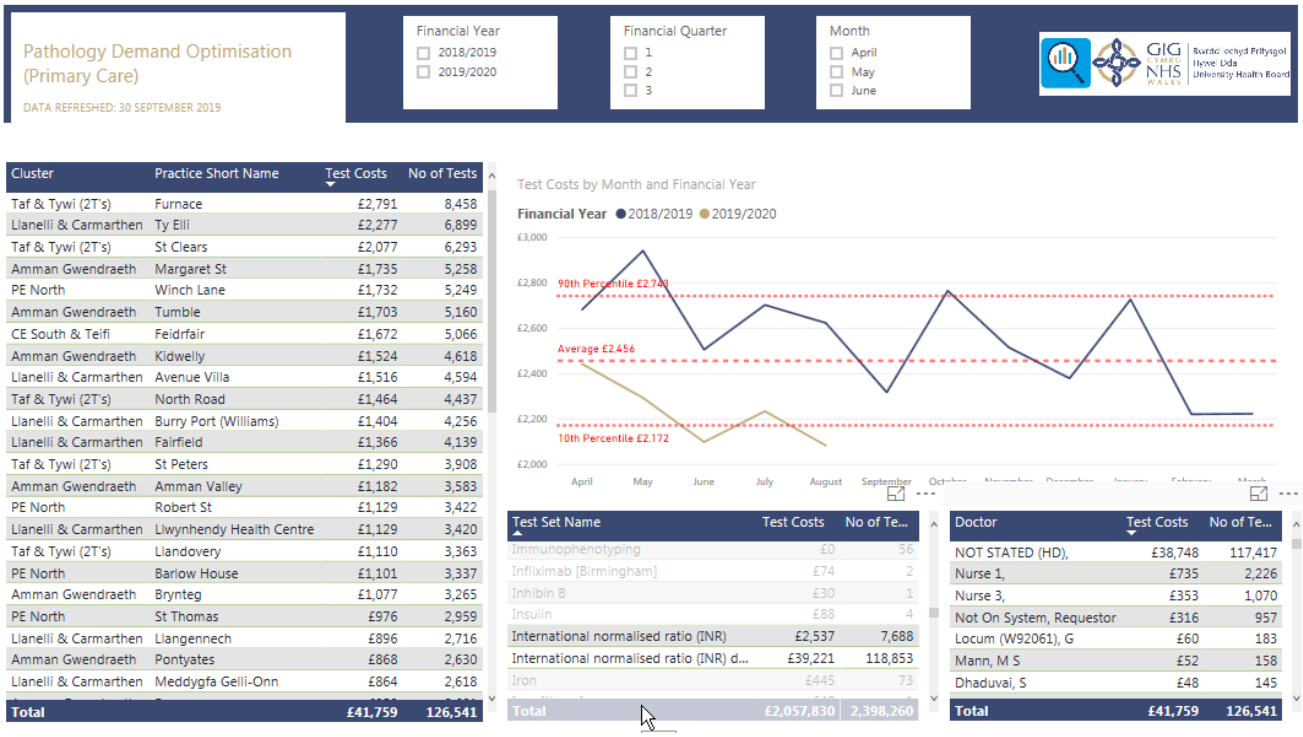
Current usage of NOAC drugs continues to grow and yet there is no indication of plateau. The current rise is shown in Graph 2.

Graph 2: Growth of expenditure on NOAC



There is also a high uptake of the Local Enhanced Service (LES) provided by GPs for NOAC initiation and monitoring. This reduces the demand on the Acute sector for INR clinics and INR testing. The drop in INR requests is illustrated in Chart 8 below.

Chart 8: INR testing in Acute Sector



Cluster	Practice Short Name	Test Costs	No of Tests
Taf & Tywi (2T's)	Furnace	£2,791	8,458
Llanelli & Carmarthen	Ty Elli	£2,277	6,899
Taf & Tywi (2T's)	St Clears	£2,077	6,293
Amman Gwendraeth	Margaret St	£1,735	5,258
PE North	Winch Lane	£1,732	5,249
Amman Gwendraeth	Tumble	£1,703	5,160
CE South & Teifi	Feidrfair	£1,672	5,066
Amman Gwendraeth	Kidwelly	£1,524	4,618
Llanelli & Carmarthen	Avenue Villa	£1,516	4,594
Taf & Tywi (2T's)	North Road	£1,464	4,437
Llanelli & Carmarthen	Burry Port (Williams)	£1,404	4,256
Llanelli & Carmarthen	Fairfield	£1,366	4,139
Taf & Tywi (2T's)	St Peters	£1,290	3,908
Amman Gwendraeth	Amman Valley	£1,182	3,583
PE North	Robert St	£1,129	3,422
Llanelli & Carmarthen	Llwynhendy Health Centre	£1,129	3,420
Taf & Tywi (2T's)	Llandovery	£1,110	3,363
PE North	Barlow House	£1,101	3,337
Amman Gwendraeth	Brynteg	£1,077	3,265
PE North	St Thomas	£976	2,959
Llanelli & Carmarthen	Llangennech	£896	2,716
Amman Gwendraeth	Pontyates	£868	2,630
Llanelli & Carmarthen	Meddygfa Gelli-Onn	£864	2,618
Total		£41,759	126,541

Test Set Name	Test Costs	No of Te...
Immunophenotyping	£0	56
Infliximab [Birmingham]	£74	2
Inhibin B	£30	1
Insulin	£88	4
International normalised ratio (INR)	£2,537	7,688
International normalised ratio (INR) d...	£39,221	118,853
Iron	£445	73
Total	£2,057,830	2,398,260

Doctor	Test Costs	No of Te...
NOT STATED (HD),	£38,748	117,417
Nurse 1,	£735	2,226
Nurse 3,	£353	1,070
Not On System, Requestor	£316	957
Locum (W92061), G	£60	183
Mann, M S	£52	158
Dhaduvai, S	£48	145
Total	£41,759	126,541

While the cost pressure is seen in Primary Care prescribing, the current efficiencies can be seen in Pathology services and the operational service level in delivery of INR clinics, releasing capacity in the Anticoagulation services in the acute sector. Due to changes in demand there is currently a review of the Anticoagulation services, through the Hospital Acquired Thrombosis (HAT) Group, led by the Medical Director and Assistant Director of Nursing Quality Improvement.

3.2 Pain management - Opioids (Table 9)

Work is already progressing to address the high opioid burden within HDdUHB across all the clusters with a recently recruited Lead for Pharmacy and Medicines Management, and supporting staff working in close collaboration with the Chronic Pain Team. Guidelines for both acute and chronic pain have already been developed and are due to be signed off in the next few weeks for implementation across the HB. This will support the work in practices to reduce the opioid burden. A small project has commenced with the Value Based Healthcare Team and chronic condition management to improve patients' quality of life- *Living Well with Pain.*

Table 9: Cost per 1000 PU Opioid Prescribing across Hywel Dda compared to national average

Apr-Oct 2019 Average Cost Per 1000 PU's	Wales	+2%	+3%	HDUHB	2T's	Amman	Llanelli	North Ceredigion	South Ceredigion	North Pembs	South Pembs
Opioid Analgesics	281.30	286.92	289.74	352.79	303.57	401.62	378.70	320.73	389.12	289.08	407.73

The existing work plan, and those that have been implemented over the past two years have realised efficiencies of over £250k. While the activity to date has focused on cost effective prescribing, more focused and time-consuming work is underway to reduce prescriptions and activity, in collaboration with the wider Pain Management services. If the HB can reduce the expenditure further to align with the national average, a further £50,000 pa could be released.

3.3 Drugs used in Diabetes and Thyroid (Table 10)

The sub-category within Endocrine indicates higher than average costs across a number of areas, in particular Diabetes and Thyroid.

Table 10: Comparison of Cost per 1000 PU Diabetes and Thyroid

Apr-Oct 2019 Average Cost Per 1000 PU's	Wales	+2%	% Above Nation	HDUHB	2T's	Amman	Llanelli	North Ceredigion	South Ceredigion	North Pembs	South Pembs
Drugs Used In Diabetes	1334.44	1361.13	10%	1472.08	1348.45	1630.82	1646.60	1292.10	1518.67	1378.90	1570.68
Thyroid And Antithyroid Drugs	112.79	115.04	116.17	126.08	129.64	163.42	119.78	113.10	131.92	110.81	122.98

The MM Team is working with the Diabetic teams and the Chronic Conditions Management Executive work stream, identifying opportunities for cost improvements through the use of Biosimilar Insulin and a review of Glucagon-like Peptide-1 medicines (GLP1s). This is in line with work that Cardiff & Vale UHB has undertaken, successfully reducing its use of these high cost medicines.

The team are working with the Endocrine consultants to review the appropriateness of the prescribing of Lio-Thyronine, including Armour® and Erfa® thyroid preparations, in line with NHS Wales's recommendation for low value medicines for patients in HDdHB. Audits are currently underway by the MM Team to check the numbers prescribed in Primary Care and to confirm who has initiated, specialist involvement and reviews undertaken. These patients will be reviewed and monitored through the acute sector.

3.4 Respiratory (Table 11)

While a significant amount of work has already been undertaken in the Respiratory system in recent years to maximise the most cost effective options, there is further work specific to Amman Valley and Llanelli, as both these clusters are significantly above both the national and HDdUHB average. There is further potential across Respiratory to increase the use of Triple Therapy (a single inhaler with three drugs combined) which has been endorsed in the recently published national guidelines in the Respiratory Winter Plan. This has potential to release efficiencies in the region of £80k pa.

Table 11: Cost per 1000 PU Respiratory across Cluster

Apr-Oct 2019 Average Cost Per 1000 PU's	Wales	+2%	% Above National	HDUHB	2T's	Amman	Llanelli	North Ceredigion	South Ceredigion	North Pembs	South Pembs
Respiratory System	1403.87	1431.95	-0.04	1345.49	1172.17	1611.15	1619.09	963.38	1380.82	1356.11	1316.11
Bronchodilators	495.32	505.22	0.00	494.87	387.67	615.13	606.72	353.61	538.61	506.49	460.51
Corticosteroids (respiratory)	788.00	803.76	-0.08	724.89	668.16	846.31	879.66	524.14	723.91	737.40	690.90

4. Cost Improvement Work 2020-21 Actions

Targeting these key areas as a priority (while maintaining focus upon other smaller areas that require attention) will support increased efficiencies and value-based healthcare across the HB.

Much of this work is being progressed through the MM Executive Work Stream, although this is reliant on increased capacity to support GP practices which are already under intense pressure.

Prioritisation is being given to the following areas:

4.1. Diabetes and Thyroid

Working with MM Executive Work Stream to develop and plan, learning from the Cardiff & Vale UHB model which has seen a reduction in the region of £300k ***gross*** covering:

- Increased usage of Biosimilar Insulins (a 50% switch from Lantus® to the Biosimilar Insulin Semglee® would realise gross savings of £93,000 pa);
- Ensure appropriate prescribing of Freestyle Libre (currently >£400k pa expenditure- 50% in Pembs);
- Review and amend the Diabetic pathway (Therapeutic) to support improvements in prescribing - reduce use of GP-1 - potential of £74k;
- Improved HbA1c outcomes through moving from LA Insulin - potential of £190k;
- Work with colleagues to collate data from a range of sources to develop a more informative dashboard to support improved patient outcomes;
- Reduction in spend on Armour and Erfa Thyroid – estimated £40k pa.

4.2. Pain management

As well as actions outlined in section 3.2, the Pharmacy Pain Team are undertaking a programme of teaching with clinicians across the HB. Practices are supported to review low value and high-risk medications. The HB Prescribing Management scheme continues to be utilised to support this work. Work is underway with the Value Based Healthcare Team to test new models of working. The investment in the Pain Management Team is projected to be at minimum cost neutral by March 2020, after just six months of establishing.

4.3 Cluster Analysis

As well as tackling the area above, a focus on the two clusters which are demonstrating above-average prescribing across all areas is being undertaken. Population age alone cannot fully explain variation both across the HB and within the clusters, and therefore closer working with these clusters will support further improvements, both in the key priority area but also in areas such as Respiratory and Central Nervous System (CNS).

4.4 Respiratory

There are further cost improvement initiatives in Respiratory. Increased compliance with the recently published AWMSG Asthma and Chronic Obstructive Pulmonary Disease (COPD) guidelines have potential to reduce direct costs of £80k pa in addition to improving nursing and GP time, admissions and carbon footprint.

4.5 AWMSG KPI

Working towards the AWMSG KPI Prescribing Indicators through reduction in prescribing as appropriate. The HB's Prescribing Management Scheme is based on the AWMSG Prescribing Indicators and provides a tool to support GPs in taking ownership of improvements, with MM support at both practice and cluster level. These are regularly discussed and reviewed through the quarterly GP Prescribing Leads meetings held by the MM teams across HDdUHB.

4.4 Repeat Prescribing Initiatives

The Prescribing Champion Scheme is operating in 35 out of 48 practices, with staff members taking part in the scheme since its introduction in October 2019. The aim of the scheme is to upskill practice staff to become more active participants in the practice and to reduce the number of items subject to inappropriate requests. The first training session has taken place in each of the locality areas and work has been undertaken to review Glyceril Trinitrate (GTN) inhalers on repeat ordering systems. MM team members continue to support practices in reviewing prescribing processes. To move this forward, additional capacity is required to implement at pace.

5. Projections for Expenditure for 2020-21

Currently Primary Care prescribing expenditure is forecasted to outturn (based on April-October 2019 data) at £4.5m overspend against budget, but £2.447m increase against last year's outturn.

The pressures impacting on this position are discussed earlier in this paper and relate to:

- Significant increased growth in NOAC usage (and uptake of DES for GPs);
- Category M prices increasing over and above national pressures due to the higher generic prescribing rate within HDdUHB.

The mechanism for remunerating Community Pharmacy and the impact of Category M drugs are currently subject to a nationwide consultation by the DoH, which has yet to report. However it is anticipated that there will be no significant changes in Category M prices until this consultation process has been completed and outcomes identified. Based on this, there will be some initial cost pressures from Month 1 to 4; however after M5 these will level off.

Growth, while reduced in comparison to previous years, is anticipated to continue to increase at a minimum of 1% due to the ever-increasing elderly population. This will be mitigated by continued work in GP practices to address the repeat prescription process.

Taking into account these projections, augmented by horizon scanning for new medicines that will impact on Primary Care, the projected outturn and forecast for 2019/20 and 2020/21 is shown in Table 10.

Table 10: Projected Cost Pressures

	£m
Projected Outturn at Month 9	4.177
Use of NR Resources	0.500
Projected Recurrent Overspend	4.677

6. Risks

These are based on the following assumptions:

- There will be no significant changes to Category M products and NSCO;
- Current GP practice fragility will not increase, necessitating enhanced support from the Pharmacy teams across the HB (as this reduces the capacity to influence change);
- There are no significant changes to service provision across HDdUHB resulting in unfunded transfer of medicine costs from Secondary Care to Primary Care.

Argymhelliad / Recommendation

The Finance Committee is requested to note the current position and projections, as evidenced in the paper, and confirm that the rationale and mitigations presented are sufficient to provide assurance of appropriate action.

Amcanion: (rhaid cwblhau) Objectives: (must be completed)	
Committee ToR Reference: Cyfeirnod Cylch Gorchwyl y Pwyllgor:	5.5.2 Receiving assurances in respect of directorate performance against annual budgets, capital plans and the cost improvement programme and innovation and productivity plans.
Cyfeirnod Cofrestr Risg Datix a Sgôr Cyfredol: Datix Risk Register Reference and Score:	Primary Care Prescribing (Category M is noted as Risk No.817)
Safon(au) Gofal ac Iechyd: Health and Care Standard(s):	Governance, Leadership and Accountability 2.6 Medicines Management
Amcanion Strategol y BIP: UHB Strategic Objectives:	4. Improve the productivity and quality of our services using the principles of prudent health care and the opportunities to innovate and work with partners.
Amcanion Llesiant BIP: UHB Well-being Objectives: Hyperlink to HDdUHB Well-being Statement	Improve efficiency and quality of services through collaboration with people, communities and partners

Gwybodaeth Ychwanegol: Further Information:	
Ar sail tystiolaeth: Evidence Base:	AWMSG NICE Guidance
Rhestr Termau: Glossary of Terms:	
Partïon / Pwyllgorau â ymgynhorwyd ymlaen llaw y Pwyllgor Cyllid Parties / Committees consulted prior to Finance Committee:	Medicines Management Sub-Committee

Effaith: (rhaid cwblhau) Impact: (must be completed)	
Ariannol / Gwerth am Arian: **Financial / Service:**	Financial impact due to increase in spend and impact on the ability of the HB to remain within budgetary confines.
Ansawdd / Gofal Claf: **Quality / Patient Care:**	Reduced service provision due to insufficient funding
Gweithlu: **Workforce:**	Capacity to support clinicians to review and monitor changes effectively. GP practices under significant strain.
Risg: **Risk:**	Financial risk to the Health Board due to national influences e.g. Category M, NCSO

Cyfreithiol: **Legal:**	Medico-legal risk if prescribing outside guidelines
Enw Da: **Reputational:**	Potential changes to how patients may access their medicines. Possible recommendations to reduce or discontinue a specific medicine will have potential to impact on individual patients. This may be raised through local AM or MP.
Gyfrinachedd: **Privacy:**	All staff working in MM follow HB procedures relating to privacy and sign local GP practice agreements as appropriate.
Cydraddoldeb: **Equality:**	N/A

Appendix 1

Table 12 shows the variation in cost per 1000PU and items per 1000PU in respiratory prescribing in Primary Care. The data covers the period October 2019 to November 2019
This illustrates the variation in prescribing within a cluster.

Table 12: Demonstrating Variance with Clusters

	Respiratory BNF Category, Nov19-Oct19				
Rank	**Prescriber**	**Entity**	**Parent**	**Cost Per 1000 PUs - Base Period - (DB1)**	**Items Per 1000 PUs - Base Period - (DB1)**
1	603,402	CAPPER WM	Amman/Gwendraeth (60301)	£22,757.81	1,858.96
2	603,369	LOCUM MM	Amman/Gwendraeth (60301)	£21,700.71	1,631.77
3	603,398	SMITH DE	Amman/Gwendraeth (60301)	£20,140.99	1,670.08
4	603,378	LOCUM P	Amman/Gwendraeth (60301)	£18,720.18	1,600.20
5	603,471	WILLIAMS DM	Amman/Gwendraeth (60301)	£17,680.95	1,538.26
6	603,397	HILL AA	Amman/Gwendraeth (60301)	£16,500.13	1,236.37
7	603,411	JONES GJ	Amman/Gwendraeth (60301)	£16,270.82	1,347.15
8	603,407	SCOURFIELD AE	Amman/Gwendraeth (60301)	£15,161.67	1,234.70
			AG Cluster average	**£19,000.55**	**1,541.31**
Rank	**Prescriber**	**Entity**	**Parent**	**Cost Per 1000 PUs - Base Period - (DB1)**	**Items Per 1000 PUs - Base Period - (DB1)**
1	603,399	GWYNNE BM	Llanelli (60302)	£20,986.55	1,505.53
2	603,467	BRZEZINSKA BA	Llanelli (60302)	£19,756.41	1,589.28
3	603,394	HOLMES SC	Llanelli (60302)	£19,705.57	1,473.63
4	603,412	DAVIES BR	Llanelli (60302)	£19,640.58	1,447.61
5	603,466	LOCUM A	Llanelli (60302)	£18,210.01	1,401.01
6	603,385	GONI SARRIGUR	Llanelli (60302)	£18,022.76	1,694.75
7	603,408	RAFIQUE Z	Llanelli (60302)	£14,825.02	1,188.03
			Llanelli Cluster average	**£19,121.11**	**1,489.69**