

NHS Grampian
Pharmacy & Medicines Directorate,
Grampian Medicines Management Group
&
Finance Directorate

**Health and Social Care
Prescribing Budget
Supporting
Information and Data**

For 2017-2018

Version 7
January 2017

Health and Social Care Prescribing Budget 2017-2018 Supporting Information and Data

Contents	Page number
Executive Summary	2
1. Introduction.....	4
2. Prescribing Budgets - 2017-2018.....	5
2.1. Primary care prescribing budget for 2017-2018	5
2.1.1. Prescribing trends.....	5
2.1.2. Demographics	8
2.1.3. New medicines affecting primary care.....	10
2.1.4. New clinical guidance and local protocols.....	14
2.1.5. Generic Prescribing Costs.....	14
2.1.6. Formulary Support (incorporating Scriptswitch, formulary communication / publicity campaigns, stakeholder engagement).....	18
2.1.7. Areas for further prescribing efficiencies	19
2.2. Community Hospitals and Community Services.....	20
2.2.1. Grampian Community – Prison Service	20
2.2.2. Police Custody – Kittybrewster.....	21
Appendices.....	24
Appendix 1 - Aberdeen City Health and Social Care Partnership.....	25
Appendix 2 - Aberdeenshire Health and Social Care Partnership	27
Appendix 3 - Moray Health and Social Care Partnership.....	29

Health and Social Care Prescribing Budget 2017-2018 Supporting Information and Data

Executive Summary

The Health and Social Care Partnerships (HSCPs) now have responsibility for primary care prescribing budgets within their own areas. This paper seeks to describe the need for prescribing resources in 2017/18 along with the key drivers of growth and risks that HSCPs will need to consider to allow Integrated Joint Boards (IJBs) to make an estimation of the prescribing budget requirements for the financial year 2017-18. The paper also provides information for NHS Grampian and other stakeholders to use when considering the appropriateness of final budgets within primary care in meeting the identified need for prescribing resource and the achievement of corporate objectives.

Predicted Year Out Turn 2016-2017 and proposed budgets

The following table summarises predicted year out turn for drugs expenditure for each of the different sectors in NHS Grampian for the year 2016-2017 and the recommended increased requirements for 2017-2018.

Summary of suggested budget requirements

Sector	Full Year Budget 2016-17 £'000	Estimated Out-turn 2016-17 £'000	Proposed Budget 2017-18 £'000	Budget Pressure Full Year 2016-17 Budget £'000	Budget Pressure on 2016-17 Out-turn £'000	Budget Pressure on 2016-17 Budget %	Budget Pressure on 2016-17 Out-turn %
City GP Prescribing (Net)	39326	40095	39869	543	-226	1.4%	-0.6%
Shire GP Prescribing (Net)	42793	43896	43649	856	-247	2.0%	-0.6%
Moray GP Prescribing (Net)	16939	17386	17288	349	-98	2.1%	-0.6%
Aberdeen City HSCP	1016	1096	1096	80	0	7.8%	0.0%
Aberdeenshire HSCP	770	760	770	0	9	0.0%	1.2%
Moray HSCP	292	307	307	15	0	2.5%	0.1%
HMP Grampian	213	252	253	40	1	18.5%	0.4%
Police custody	9	7	14	5	7	60.0%	108.7%
Overall Total	101359	103798	103245	1886	-554		

Analysis suggests that increased medicines expenditure is a combination of 'product mix', the prescribing of newer, more expensive medicines, followed by the 'volume effect',

comprising growth in the number of prescription items and in the number of tablets per prescription.

Financial risk areas

The following are the main financial risks which are not included in the above summary:

- The risk that the future prices for generic medicines, and associated reimbursement levels set within the Scottish Drug tariff, remain difficult to predict. Recent rises in prices have been related to the changes to the EU rules governing the importation of active pharmaceutical ingredients and worsening drug shortages; both of which may continue to bring upward pressure. However, there is also a general view that community pharmacy purchasing in the last year has delivered stronger discounts than have been allowed for under the margin sharing agreement. This view suggests that in addition to the clawback of this excess margin, to address any historical overpayment, there will need to be a drug tariff correction across prices paid for generic medicines. At the time of writing this report the negotiations for the 2017/18 community pharmacy contract and the associated discount and clawback arrangements are yet to be completed. Indications are that the net effect on generic prices will be to reduce costs but it is difficult to provide a robust estimate of the level of benefit to Grampian.
- The timing and ability of NHS Grampian to maximise the savings from generic medicines, particularly pregabalin which will form the vast majority of any savings in 2017/18.
- The risk that item volume rises greater than currently predicted.
- Further discount or rebate changes or removal of current rebate /PAS schemes.
- The introduction of new medicines/new treatment modalities has resource implications above and beyond the costs of just the medicine. While some medicines may replace existing treatments and be easier to manage, the overall effect of new medicines introduction may increase the resource requirements in order to treat patients safely and effectively.
- Unmanaged movement of prescribing from secondary care to primary care without appropriate financial resources moving to support such change.
- A diminution in the new GMS contract support for medicines management activities focussed on the cost effective use of medicines.
- Macroeconomic effects related to currency fluctuation and broader impacts of Brexit preparations.

Recommendation

HSCPs and their IJBs are asked to consider the recommendations made in this paper with regard to volume, costs, risks and the net predicted need for budget resource as part of the overall HSCP budget setting process for 2017/18.

**NHS Grampian
Health and Social Care Prescribing Budget 2017-2018
Supporting Information and Data
Primary Care**

1. Introduction

For a number of years the NHS Grampian Pharmacy and Finance departments have undertaken a modelling exercise to predict the budgetary requirements for prescribing in the following year. The analysis and predications produced are subjected to professional scrutiny within both the pharmacy and finance departments prior to validation by the Grampian Medicines Management Group. This process is broadly well respected and has been the subject of positive external audit scrutiny in 2014.

However, predicting future medicines use is extremely complex with multifactorial drivers and a wide range of external influences over which there is little local control. In considering the analysis and recommendations within this paper the reader should consider that predictions within this field are as much art as science and should firmly note the risks to the overall prediction's accuracy.

In past years, in predicting the primary care prescribing budget, consideration has been given to:

- The rate of growth in volume and cost of the drugs prescribed in both in primary and community hospital care.
- National changes in respect of remuneration prices/re-imburement for branded medicines as a consequence of the current Pharmaceutical Price Regulation Scheme (PPRS) agreement.
- Acquisition costs of existing generic medicines.
- National procurement initiatives.
- New drugs coming to market that had the potential to impact significantly on clinical care and resources
- Significant changes to the licensing of drugs
- Changes in drug use locally driven by national / international research or new evidence-based guidelines / protocols.
- Changes in local services that had the potential affect the pattern of medicine use
- Increases in non-medical prescribing.
- Prescribing initiatives aimed at reducing costs.
- Opportunities to reduce waste in prescribing and to maximise procurement efficiencies.

With the establishment of the HSCPs, the responsibility for determining the prescribing allocation for the 2017-2018 financial year, and funding that allocation, falls to the IJBs. This paper seeks to highlight the many variables driving prescribing cost, providing information to support IJBs in their decision making.

2. Prescribing Budgets - 2017-2018

2.1. Primary care prescribing budget for 2017-2018

2.1.1. Prescribing trends

The primary care prescribing budget for 2016/17 was set at £99,058K. Primary Care Prescribing has in 2016/17 increased in both items dispensed and overall cost of items for each of the HSCPs. This increase in volume and cost has resulted in an overspend position as shown in the table below to October.

Table 1 Overspend to Month 8 2016/17 Prescribing budget (£000's)

Area	Overspend to M8	Forecast overspend
Aberdeenshire	-946	-1319
Aberdeen City	-795	-1108
Moray	-378	-527
Total	-2,119	-2,954

This overspend includes the impact of an increase in both prescription volume and cost (G IC) from April. Using PRISMS data compared to the same timeframe in 2015, this is shown in the table below for each individual HSCP. (This excludes Hospital prescriptions dispensed in primary care).

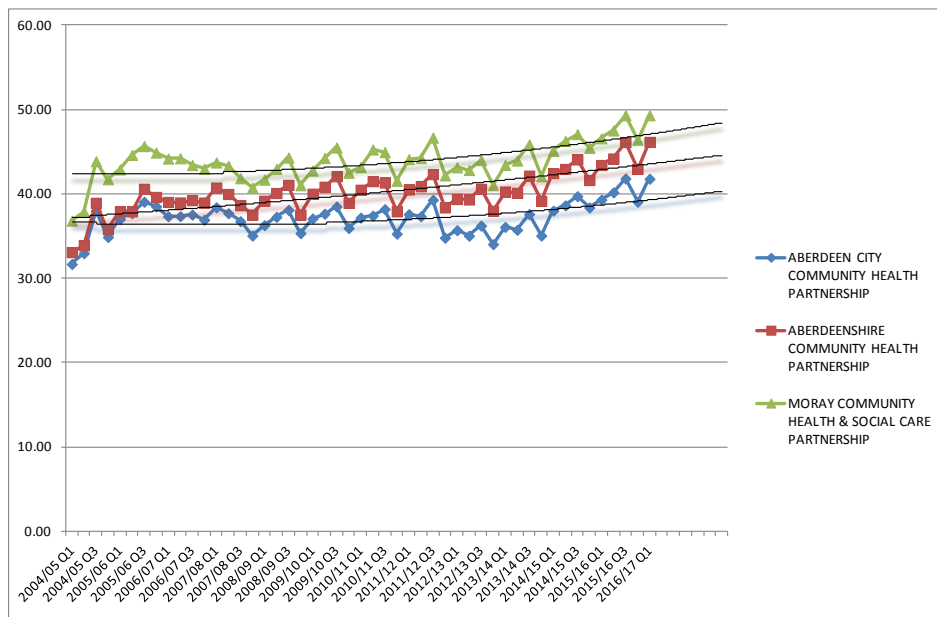
Charts 1, 2, and 3 show the quarterly trend in cost per patient, items per patient and cost per item for each HSCP.

A polynomial trend line has been applied to the current data for Charts 1, 2 and 3. This trend line was considered the best fit as it provides a curved line which is used when data fluctuates, as in the case of the prescribing data. It is useful for analysing gains and losses over a large data set.

The patient denominator used in these graphs represents the total HSCP populations.

Chart 1 - Cost per patient (GIC)

Excludes hospital prescriptions



As can be seen in Chart 1 the cost per patient in Grampian has been rising significantly since Q1 2014. The rate of rise is broadly the same for each HSCP and a continuation of this trend is expected.

Chart 2 - Items per patient

Excludes hospital prescriptions

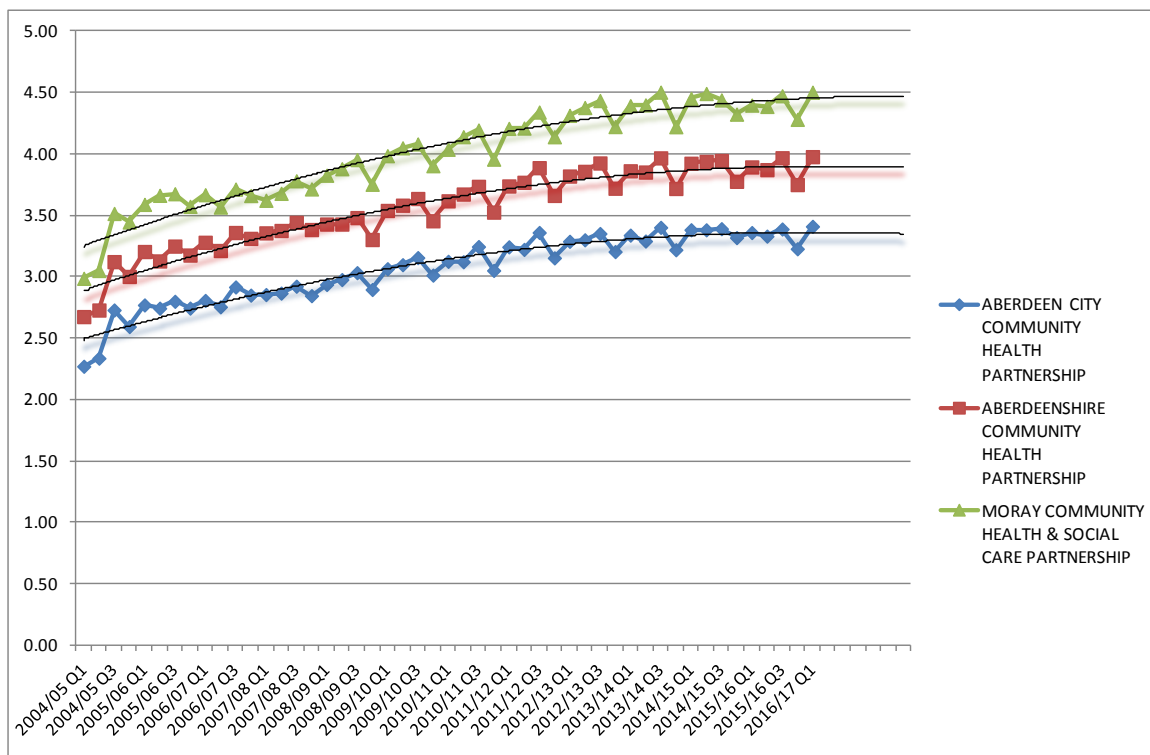


Chart 2 shows the number of prescription items prescribed per patient. Again the volume has been increasing over the years. More recently the volume growth has been slowing down and may be expected to stabilise with only slight ongoing increases. Polypharmacy reviews and application of realistic medicine principles may support deprescribing (removing medicines from a patient's regimen where they are no longer appropriate, not contributing to the goals of treatment or do not provide an appropriate balance of benefit and risk for the patient) where this is clinically appropriate.

Chart 3 - Cost per item
Excludes hospital prescriptions

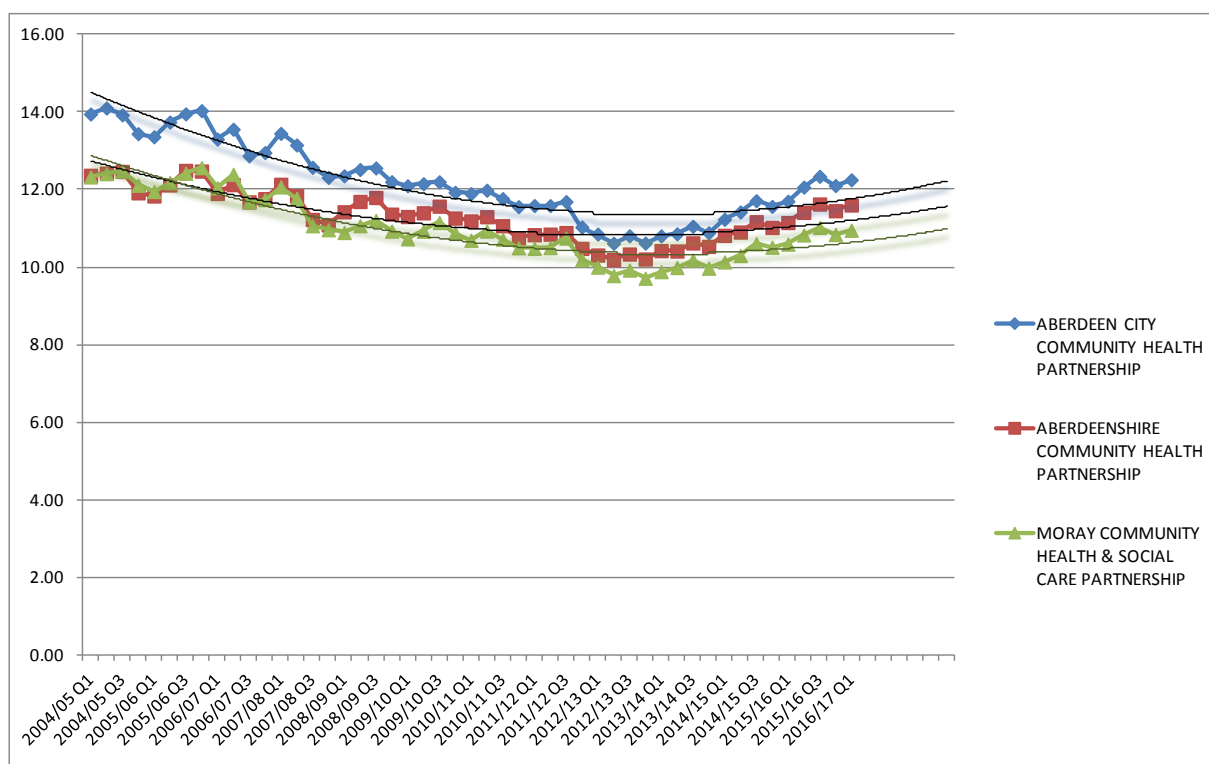


Chart 3 above show the cost per item in Grampian over the last decade. Previously years have seen a reduction in cost per item as a number of significant medicines lost patent protection and generic equivalents became available. Competition in the generic market also helped to drive costs down. Latterly generic prices have started to rise again, frequently as a function of supply shortages. Use of new branded medicines has also started to drive up the cost per item.

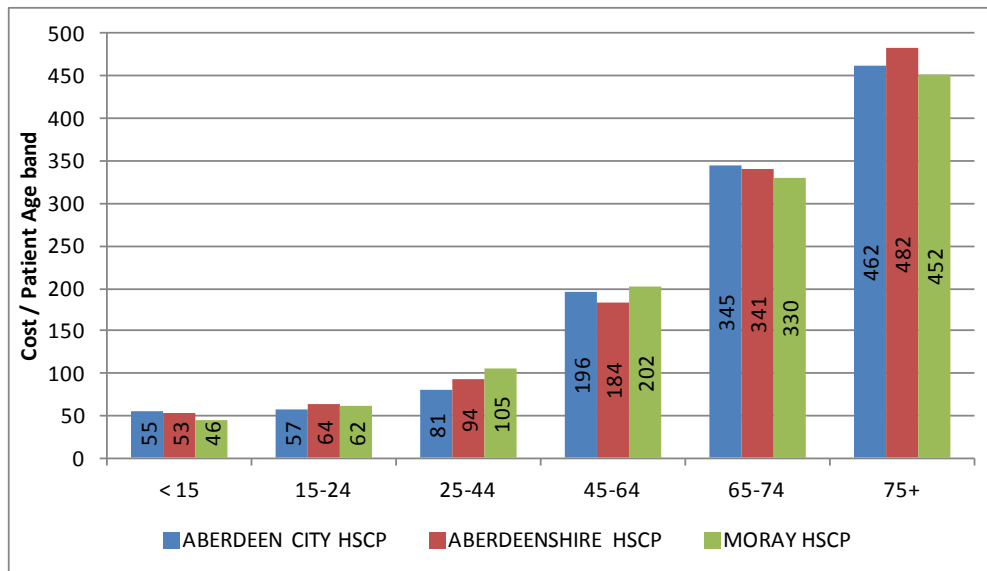
Comparison and interpretation of prescribing data between Grampian HSCPs, like comparison between Grampian and other Scottish Health Boards, is dependent on knowledge of the variables that exist between HSCPs that drive prescribing costs, key amongst which are patient demographics and how services are delivered.

The upward trend in cost per patient is largely a function of the increasing cost per item/cost per DDD imposed on a gradually increasing volume growth driven by population demographics.

2.1.2. Demographics

Underpinning much of the growth is the effect of population change, both in absolute numbers and also the increasing numbers of older people. Increasing multi-morbidity is also associated with obesity and other factors that can contribute to increase medicine costs.

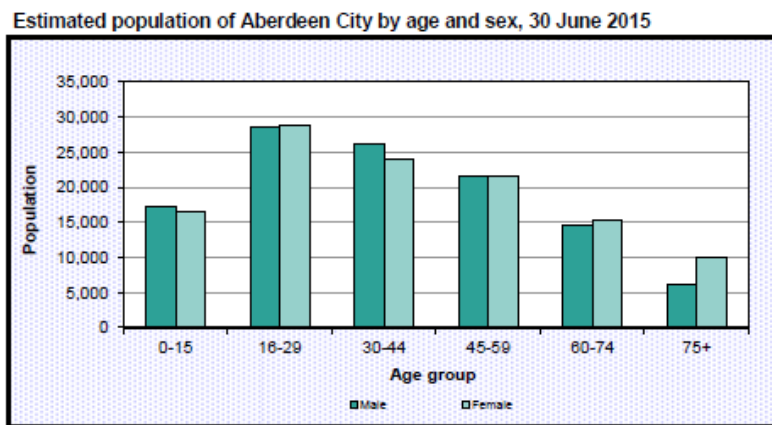
Chart 4 – HSCP average prescription spend by age group (2015/16)



A growing and aging population will continue to put pressure on the drug budget over the coming years if current needs and prescribing behaviours remain unchanged. Chart 4 above shows the average annual HSCP medicine costs per patient by age grouping. As can be seen costs significantly increase with increasing age. As the older population grows this will inevitably put pressure on medicines budgets.

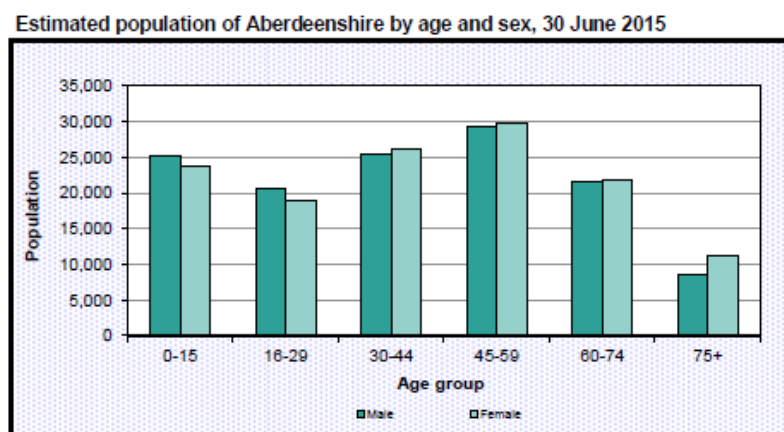
Population age and sex profiles (Charts 5-7) are not the same across each of the HSCPs. This variation in population profile across the HSCPs accounts for some of the variation in medicines expenditure, particularly as age is the most significant driver of medicine need and use.

Chart 5 – National Records for Scotland estimated populations Aberdeen City



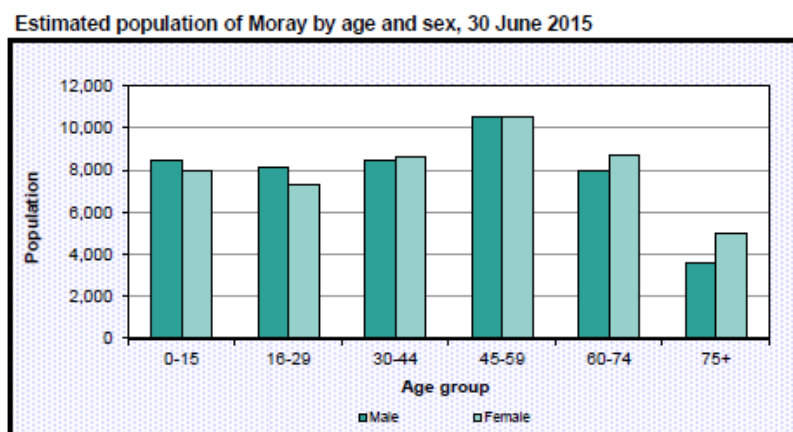
1. Population estimates for mid-2002 to mid-2012 are based on 2011 Census.

Chart 6 – National Records for Scotland estimated populations Aberdeenshire



1. Population estimates for mid-2002 to mid-2012 are based on 2011 Census.

Chart 7 – National Records for Scotland estimated populations Moray



1. Population estimates for mid-2002 to mid-2012 are based on 2011 Census.

2.1.3. New medicines affecting primary care

The Scottish Medicines Consortium (SMC) reviews all new medicines and new indications for existing medicines. The Scottish Government directs that Health Boards implement the recommendations of the SMC, unless clear alternative products are available. The SMC and UKMI produce horizon scanning documents that attempt to predict how new medicines, currently in development, will affect prescribing costs in future years.

Table 2 highlights those drugs likely to impact in 2017/18 on prescribing within primary care based on SMC Forward Look 12 (October 2016), supplemented by additional information from the UKMI Prescribing Outlook, September 2016. SMC Forward look only provides estimated costs for those new medicines likely to have a significant financial impact. Other new medicines will be licensed in 2017/18 which SMC have deemed will have a low budget impact which are not individually identified in this budget paper but collectively could still present a financial risk to HSCP. Some new medicines, such as new inhaler choices may introduce further competition to the market and result in reduced costs. New medicines already licensed and accepted by SMC, or still to be assessed by SMC in 2016/17 may have yet to reach their full potential financial impact. Licensed medicines previously “not recommended” by SMC may be accepted on a resubmission with the consequent financial implications. These factors contribute to a fluid landscape where delays in launch or SMC submission and advice may have significant impacts on the timing of costs to H&SCPs.

Table 2: New Medicines (Additional Spend) NB costs and launch dates redacted as commercial in confidence

New medicine	Expected launch date	Predicted additional expenditure 2017-18 (£000s)*
<p>Eluxadoline (Truberzi®) Adults for the treatment of irritable bowel syndrome with diarrhoea.</p>		
<p>Liraglutide (Saxenda®) subcutaneous injection Indicated as an adjunct to a reduced calorie diet and increased physical activity for weight management in adult patients with an initial body mass index of $\geq 30\text{kg/m}^2$ (obese), or $\geq 27\text{kg/m}^2$ to $< 30\text{kg/m}^2$ (overweight) in the presence of at least one weight related comorbidity.</p>		
<p>Sacubitril/valsartan (Entresto®) Indicated for adult patients for treatment of symptomatic chronic heart failure with reduced ejection fraction. Initiated in secondary care, maintenance in primary care</p>		

<p>Nicotine electronic inhaler (e-Voke®) e-Voke is indicated to aid smokers wishing to quit or reduce prior to quitting, to assist smokers who are unwilling or unable to smoke, and as a safer alternative to smoking for smokers and those around them</p>		

*Estimates are taken from SMC's horizon scanning spreadsheet, NICE impact resources and other prescribing centre publications. NB The SMC horizon scanning publication only includes financial details for new medicines, including new applications of existing medicines, estimated to have an incremental net drug budget impact of more than £0.5m per annum for Scotland, at steady state

Some of the new medicines listed above may not reach the UK market within the predicted timeframe or at all. Of those that are marketed, some may not be accepted by SMC for use in NHS Scotland. Historically 61% of medicines were accepted by SMC for use or restricted use on first submission, this rose to 70% taking account of re-submissions, some of which came with a Patient Access Scheme. In some cases, therefore, costs will be reduced or will not be incurred or will be minimal. However, it is clear that SMC acceptance rates are rising, especially for medicines for use in rare conditions and those used at the end of life. Where a medicine is not accepted for use by SMC then the predicted cost impact will not be realised. Medicines previously identified as primary care could end up being prescribed only via secondary care and for some medicines prescribing starts in the specialist secondary care service and is moved to primary care prescribing in later months / years.

Due to the very large uncertainties around new medicines in terms of launch date, estimated price and positioning it is not possible to accurately estimate the likely financial effect in primary care of new medicines launched in 2017/18 or the ongoing effects of new medicines launched in earlier years and still to appear in primary care prescribing.

An element of the increase in cost per item predicted for the coming year will reflect the uptake of newly introduced medicines in previous years i.e. there is an element of new drug adoption built in to the year on year prediction.

The use of direct acting anti-thrombotic drugs (DOACs) has been highlighted in each budget prediction paper since 2008 and the growth of these medicines will still continue in 2017/18. Growth to date has been much slower than first anticipated mainly due to cautious adoption of these medicines and some early concerns regarding safety and reversibility. Prescribing of DOACs in Grampian is slightly behind the Scottish average with 25.4% of oral anticoagulant prescribing being of the newer agents versus 26.9% across Scotland.

Across the North of Scotland NHS Tayside is currently sitting at 41.4% and NHS Highland at 36.5% whilst Lothian is currently at 28.9%. Chart 8 shows the rising costs of these new medicines compared to warfarin. With warfarin being such a low cost medicine the rising use of DOACs comes at largely additional costs to NHS Grampian. An updated national consensus statement on the place of DOACs in treatment is expected in 2017 but this is unlikely to significantly impact on the cost trajectory. As can be seen from Chart 8 spend in NHS Grampian on DOACs is now rising quickly. It would appear sensible to assume a further rise in percentage use in the coming year. At the lower end of expectations this may see use at 40% in line with Tayside for this year but given that most new patients are being initiated on DOACs, some practices are now beginning to switch patients in large numbers and the likely normalisation of use expected in the national guidance it would be prudent to budget for around 50%. At 50% DOAC usage the additional budget impact will be approximately £550k. Chart 9 displays the number of patients on each treatment and Chart 10 the changes in the percentage of anticoagulants in Grampian which are DOACs over time.

Chart 8 – NHS Grampian, Cost of Direct Acting Anti-Coagulants vs Warfarin

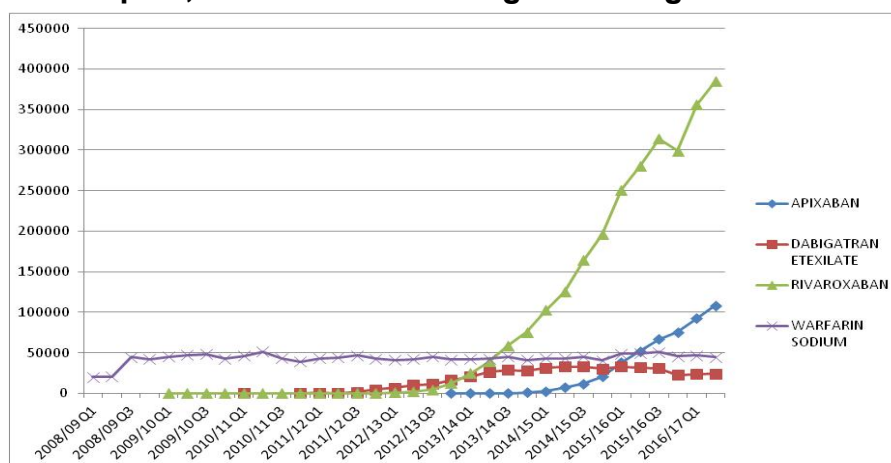


Chart 9 – NHS Grampian, Numbers of distinct patients taking Direct Acting Anti-Coagulants vs Warfarin

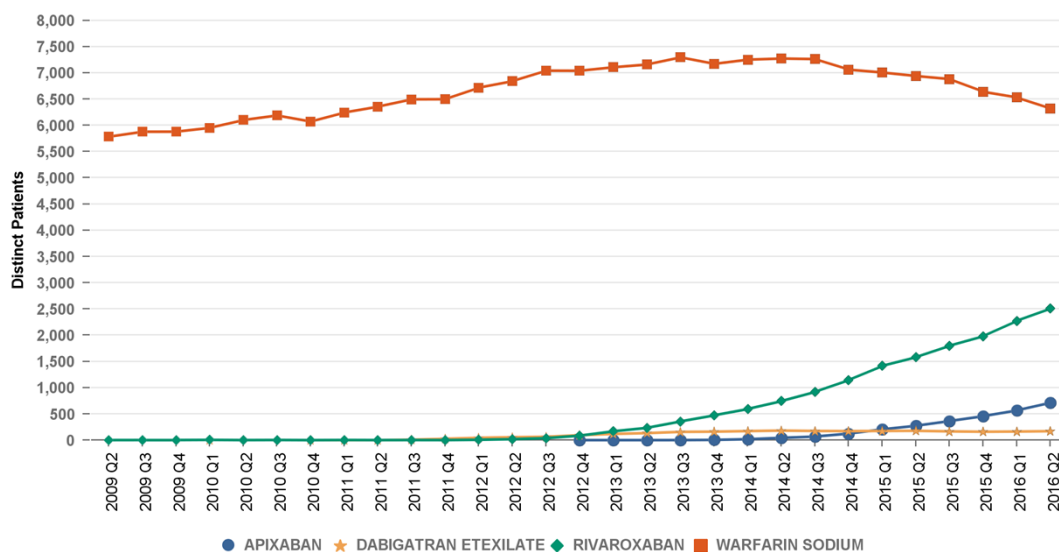
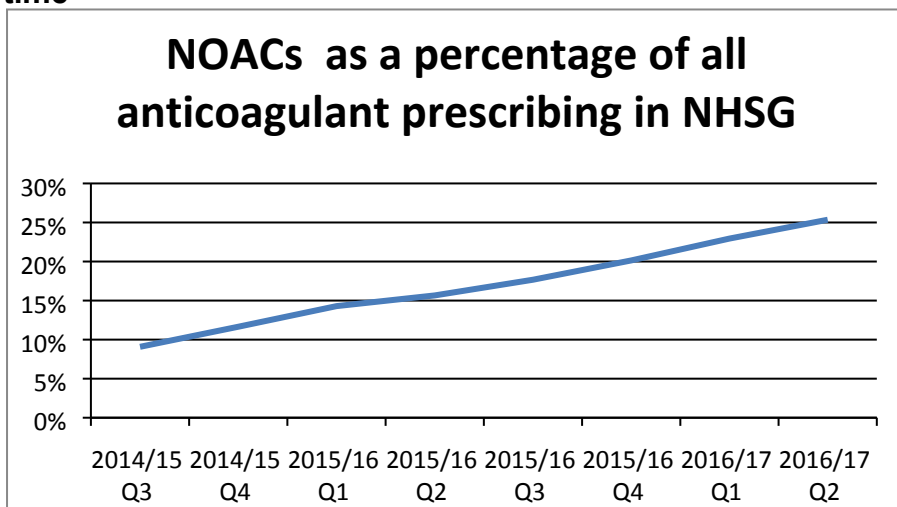
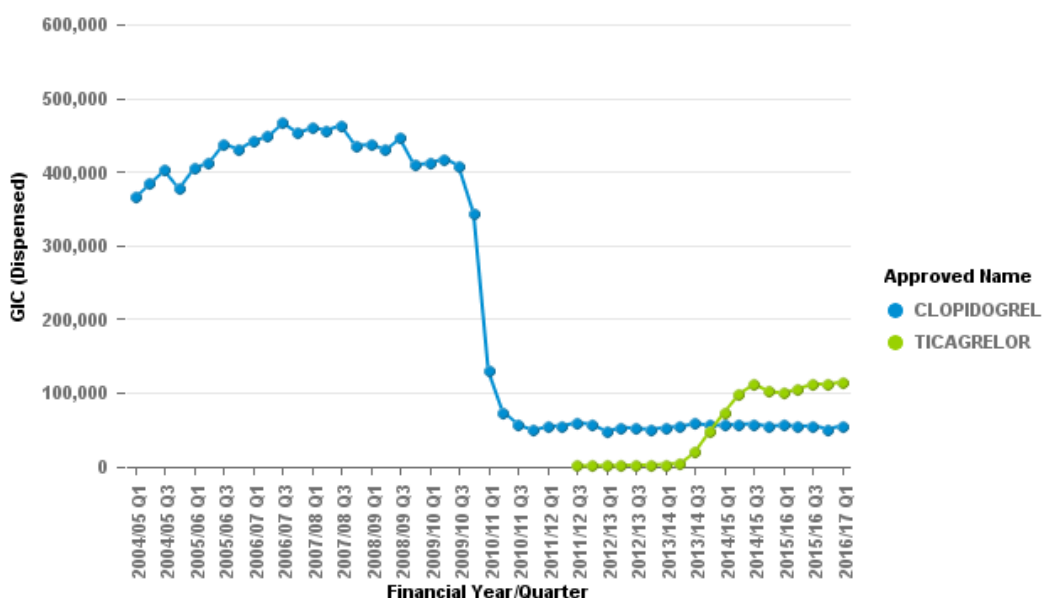


Chart 10 NOACs as a percentage of all anticoagulant prescribing in Grampian over time



The European Society of Cardiology Guideline for Acute Coronary Syndromes in patients presenting without persistent ST-segment elevation (2011) recommended that ticagrelor be used in preference to clopidogrel. This change was then reflected in our local Grampian guideline, updated in September 2015, with a subsequent a rise in the use of branded ticagrelor instead of generic clopidogrel (see Chart 12 below). This switch appears to have reached steady state. However, in Q1 SMC is expected to comment on the license extension for ticagrelor as an option for preventing atherothrombotic events in adults who have had a myocardial infarction and who are at high risk of a further event. This will extend treatment beyond the current 12 months for new and existing patients. This will potentially mean around 235 patients being eligible to take ticagrelor in Grampian for their second year of treatment. Budget impact likely to be around £170K.

Chart 11 NHS Grampian – clopidogrel and ticagrelor costs per quarter



2.1.4. New clinical guidance and local protocols

New guidance documents can impact on diagnostic criteria as well as treatment pathways. This may result in additional patients being identified as suitable for treatment or recommending newer medicines to replace existing cheaper therapy in treatment pathways.

An example of changing diagnostic criteria is the NICE Guideline (CG181) “*Cardiovascular disease: risk assessment and reduction, including lipid modification*” updated in 2014 in which there was a recommended change in patients who should be prioritised for a full formal 10 year cardiovascular disease risk assessment. The threshold for treatment was changed from 20% to 10% following the publication of new health economics data. While applicable to Scotland, this guidance has yet to be fully supported and implemented in Grampian. Full additional costs of using atorvastatin for these additional patients are modelled to be £89,000 per 100,000 population with an assumption of linear growth to steady state over 5 years i.e. around £100,000 per year.

2.1.5. Generic Prescribing Costs

Charts 12 and 13 below show the difference in items and expenditure for generic vs branded (proprietary) medicines for NHS Grampian. In terms of growth in items, both generic (G) and proprietary (P) (branded) medicines show a steady growth in volume with generic medicines accounting for 2-3 times the volume of branded products. Chart 8 shows a different picture with significant changes in total costs especially the increasing costs for branded products. Additionally, the previous historic trend of reducing generic prices, which in the past has offset some of the branded price increases, has now reversed and increasing volume and cost of generic medicines have been impacting significantly on total expenditure.

While branded medicines are regulated by the Pharmaceutical Price Regulation Scheme (PPRS) generic prices are set on NHS Tariffs using the average market prices for each drug. This will be sensitive to competition and the prices charged by the manufacturer. When there is a shortage of generic medicines prices can increase significantly and the Tariff payments adjusted accordingly. Additionally, a small number of pharmaceutical manufacturers with minimal competition for their products, usually low sales volumes with competitors deciding it is not worth entering the market, have significantly increased the prices charged for their products. Chart 14 shows how the cost per item as increased over the recent years.

Chart 12 NHS Grampian Items per Quarter Branded vs Generic Medicines

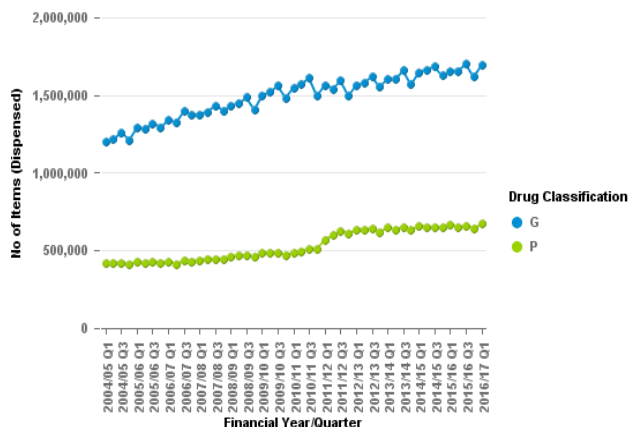


Chart 13 NHS Grampian Cost (GIC) per Quarter Branded vs Generic Medicines

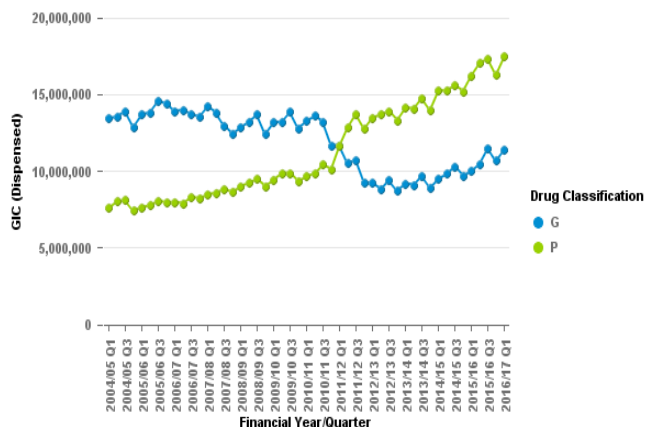
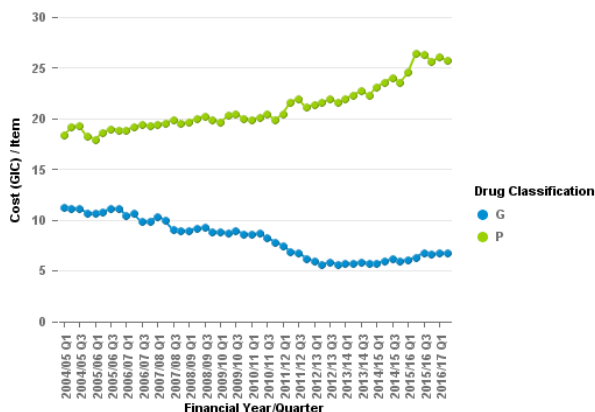


Chart 14 NHS Grampian Cost per Item per Quarter Branded vs Generic Medicines



Changes Category M prices

Category M refers to a section of the Scottish Drug tariff that is used for generic drugs only. The reimbursement price of a drug in Category M is based on average selling price supplied by different generics manufacturers and the volume of the drugs dispensed recently.

The average cost per item of Drug Tariff Part 7 medicines has increased by 8.9% during the period April to July 2016 when compared to the same time frame in 2015 (£4.96 vs £5.4). Increases in cost per item are the same for both Aberdeen City and Aberdeenshire at 8.3% however Moray has displayed an increase of 11.9%.

Any primary care drug which comes off patent during the year is likely to impact on prescribing costs as increasing competition once the patent is lost drives down market prices. The Information Services Division (ISD) Scotland used to find that on average costs reduce by about 15% in the first year after patent expiry, however since the introduction of category M pricing this has changed and it has become more difficult to predict the exact level of fall. It usually takes 3 months after the loss of patent for drugs to appear on the

Drug Tariff. Some drugs, however, may take longer to appear in the Tariff and some may never be included. Patent date expiry information is taken from the UK Medicines Information network and ISD; patent expiry can change, for example if a Pharmaceutical company requests an extension to the patent.

Table 3 shows the likely cost savings for the 2017/18 financial year based on the patent expiry date and a best guess percentage price reduction in the first year post-patent loss. However, the prices for some drugs may drop much lower than this, or where no generic equivalent is available, the price may remain the same. Price changes may also occur for example, if a major company sells on the marketing authorisation of a patent loss product to a smaller supplier the costs may increase even though the product is now essentially generic.

It is difficult to accurately estimate the savings still to accrue from medicines that became available as generic in 2015/16. However the main potential benefit for 2017/18 will be pregabalin.

Generic versions of the original brand of pregabalin (Lyrica) became available in 2016. However, very limited savings have been accrued for pregabalin in NHS Grampian due to two reasons:

- The manufacturer of Lyrica, Warner-Lambert owned by Pfizer, has aggressively defended its remaining patent for neuropathic pain. This has in effect meant little change in the dispensing of the branded product even where the drug has been prescribed generically. The legal process is coming to an end with a final appeal to the supreme court anticipated in Q1 2017. Regardless of the outcome of this appeal the remaining patent expires in July 2017.
- The tariff price for generic pregabalin is currently lagging behind the wholesale price. Whilst the impact of this is limited at the moment there is a need for responsive tariff pricing to maximise the benefit for NHS Scotland.

NB if Pfizer lose their appeal it is likely that action will be taken by the NHS across the UK to recover the costs associated with Lyrica prescribing in 2016/17. It is not anticipated that any benefit will accrue within 2017/18 but it may be as much as a single recovery of £3M in future years.

Assumptions for 2017/18 are made in Table 3 based on estimated Drug Tariff Part 7 inclusion dates and medicines likely to impact in primary care. Medicines with an existing low market share may not be targeted as new generics if returns on sales are likely to be low. Potential savings shown are maximal i.e. they assume all prescribing is moved to the generic product immediately the product is available and assumes that all patients accept the change to a generic version of their medicine. The level of discount applied depends on the appetite, commitment and organisational leadership that might be mustered to deliver these savings. Pregabalin in particular should be a case where maximal, collective effort is applied to change all prescribing to generic from the first available opportunity. Such changes do not happen without engagement of clinicians and patients with appropriate direction, support and resources where necessary. Without a significant clinical leadership and management commitment to deliver these savings IJBs should consider discounting the maximal savings including in budget predictions.

Table 3: New Generics impacting Grampian in 2017/18

Approved Name	GIC (Dispensed) August 2015 - July 2016	Patent expiry date	Comments	Generic or biosimilar available/ in development	Best guess % initial price reduction*	Potential savings 2017/18**
PREGABALIN	3626077.38	Initial expiry already passed. 2nd patent expiry July 2017	Subject to court appeal	Yes	80%#	£1,933,907.94
ROSUVASTATIN	1094337.7	2017 Dec		Yes	50%	£136,792.21
TADALAFIL	490568.1	2017 Nov	Depends on indication	Yes	50%	£100,566.46
MYCOPHENOLATE	450782.56	2017 Nov	Depends on indication		20%	£36,964.17
ETORICOXIB	137482.81	2017 Jul*	UK patent only, not SPC	Yes	20%	£20,622.42
VALGANCICLOVIR	137341.4	2017 Mar		Yes	20%	£27,468.28
TRAVOPROST	66576	2017 May		Yes	20%	£11,983.68
BIMATOPROST	65003.3	2017 Mar		Yes	20%	£13,000.66
DUTASTERIDE	63150.72	2017 Jul	for prostatic hyperplasia	Yes	20%	£9,472.61
PRASUGREL	15504.56	2017 Sep			20%	£2,046.60
TOTAL	6146824.53					£2,292,825.03

*This is only a very rough estimate and could be significantly different at time of launch

**This is based on best the guess initial price reduction and number of months in 2017/18 when benefit might occur

Based on assumption Supreme Court appeal not finding in favour of the Pharmaceutical company

Table 4 below identifies the relative expenditure by HSCP, for the period August 2015 to July 2016, on those medicines where potential generic savings may be realised in 2017/18.

Table 4: HSCP Expenditure on Potential New Generics (Aug 2015 - July 2016)

	ABERDEEN CITY COMMUNITY HEALTH PARTNERSHIP	ABERDEENSHIRE COMMUNITY HEALTH PARTNERSHIP	MORAY COMMUNITY HEALTH & SOCIAL CARE PARTNERSHIP
BIMATOPROST	£29,262.35	£29,650.93	£5,722.50
DUTASTERIDE	£8,391.14	£22,090.18	£32,580.34
ETORICOXIB	£32,348.05	£85,523.96	£19,145.28
MYCOPHENOLATE	£187,694.31	£197,095.69	£65,161.38
PRASUGREL	£2,948.72	£7,371.80	£5,136.48
PREGABALIN	£1,330,151.75	£1,487,494.61	£787,808.18
ROSUVASTATIN	£373,128.24	£585,067.28	£133,009.46
TADALAFIL	£190,100.98	£197,093.56	£102,894.76
TRAVOPROST	£34,886.70	£29,159.85	£2,255.70
VALGANCICLOVIR	£55,276.62	£73,232.87	£8,723.76
TOTAL	£2,244,188.86	£2,713,780.73	£1,162,437.84

Generic savings still to be realised from pre 2017

There is also still scope to improve on generic prescribing to maximise efficiencies. The Grampian generic savings report for August 2015 to July 2016 suggests that for all

proprietary prescribed items with generic equivalent (excluding modified release preparations, antiepileptic drugs, items in short supply) there is the potential to save around £828K (0.74 % GIC). However it is prudent to exclude mycophenilate which is counted in this standard PRISMs report leaving a net figure of £380k. Grampian has a generic prescribing rate of 80.19% for items which are prescribed and dispensed as generic for this period. This rate is historically slightly lower than other areas of Scotland.

Note: Mycophenolate is used in organ transplantation rejection and any changes to brand would need to be under the recommendation of the hospital specialist with close monitoring required. The risk of possible organ rejection is a mitigating factor when deciding if a patient can switch to generic alternatives.

Not all of these generic savings could be realised as there will be some patients from whom branded prescribing has been deemed clinically appropriate. Given the maturity of the push to use generic over branded medicines it is likely that any further improvement will require a significant effort from both GPs and their staff and to be supported by a corporate communications strategy to engage the local population. Patients who have 'chosen' to remain on branded products may well see any change as not being patient centred.

2.1.6. Formulary Support (incorporating Scriptswitch, formulary communication / publicity campaigns, stakeholder engagement).

NHS Grampian has utilised the ScriptSwitch system for a number of years and as such is a mature deployment. Scriptswitch is focussed on providing real time electronic message advice to the prescriber at the point of prescribing to encourage cost effective choices. The system requires ongoing local maintenance of messages i.e. development and deployment of localised messages to support local cost effective prescribing. This local management continues to produce significant savings. In the year 2016/17 annualised gross savings will be £514K per annum (based on actual savings of £257K April to September 2016). Actual HSCP savings from April to September 2016 are £104.9K for Aberdeen City, £98.6K for Aberdeenshire and £53.7K for Moray. These savings do not take into account cost savings resulting from changes in prescribing behaviours influenced by ScriptSwitch messages but not actually triggered by the system i.e. prescribers learn from the messages and change their prescribing behaviour for future prescribing.

ScriptSwitch is the tool which underpins, and delivers, on many of the cost saving initiatives being taken forward as part of HSCP medicines management work plans. In order to continue to achieve this level of savings the underpinning data base must be updated on a monthly basis to optimise the savings potential. These savings are realised as a reduction in the overall prescribing expenditure.

This element of the prescribing budget also underpins funding of:

- Independent contractor practitioners to attend GMMG, MGPG and FG
- publication / communication of the Grampian Joint Formulary and cost effective prescribing prompts via web, APP and GP systems
- annual waste campaigns to support prescription medicine waste reduction
- antimicrobial prescribing campaigns.

The budget impact for this element remains unchanged from 2016-17.

2.1.7. Areas for further prescribing efficiencies

National Therapeutic Indicators

NHS Scotland is now working with the fifth set of National Therapeutic Indicators (NTI) which have been developed and maintained by the Therapeutics Branch of the Scottish Government Pharmacy and Medicines department. The aim of the NTIs is to help continue to improve the quality, safety and efficiency of primary care prescribing. The Prescribing Information System for Scotland (PRISMS) provides all of the data used for the NTIs.

The NTIs for the coming year are being developed with on-going, detailed consultation with medicines management experts from all of the Scottish NHS Boards. Some elements of the national NTIs have been incorporated into the GP Medicines Management Locally Enhanced Service (LES)

GP Medicines Management Locally Enhanced Service

A GP enhanced services contract for Medicine Management Interventions has been developed for HSCPs to adopt and utilise. It comprises two parts. Part one defines an enhanced role for practice support staff in undertaking a Level 1 technical prescription review of a list of patients' medicines to help improve the management of repeat prescriptions. It provides an opportunity for such support practice staff to be trained and the practice resourced to use these staff to help enhance practice performance and the care of patients. This activity is not covered by the General Medical Services Contract Quality or existing Enhanced Services. It is well documented that the prescribing of multiple medications to any given individual increases their risk of drug-related hospital admissions and adverse events.

Part two supports GP practices to undertake a pre-defined set of cost effective and quality prescribing switches and initiatives which are intended to generate prescribing savings as well as improving the quality of patient care.

It is not possible to accurately predict the savings associated with this initiative at present as savings will be predicated on the numbers of practices that sign up to the LES, the topics they choose to focus on and the numbers of interventions they are able to make.

Patient Access Schemes and Rebates in Primary Care

In primary care, rebates and Patient Access Schemes (PAS) are required to be simple finance based schemes whereby the company provides a rebate to NHS Boards based on the volume dispensed in the community. Details of the process for each PAS are outlined in the PAS Implementation Pack which is distributed to NHS Boards by the Patient Access Scheme Assessment Group (PASAG) through SMC. For 2016/17 NHS Grampian is estimating -£697k of income from rebate and assumed PAS income. Income received from medicines rebates and PAS rebates is off set against prescribing expenditure at a HSCP level. Whilst it is likely the value of this rebate will increase in 2017/18 it is not possible to

accurately predict the value and therefore for budget setting purposes a rebate at the same level as 2016/17 should be assumed.

2.2. Community Hospitals and Community Services

In recent years, community hospitals have received an increase in budget consistent with previous years spend. This has been sufficient to deal with the GP acute patients and those transferred from acute services. While the general principles as described above also apply, Community Services and Community Hospitals are now being asked to deliver more complex care with increasingly more expensive medicines. Consideration needs to be given to the budgetary implications of any service change resulting in a shift of provision of medicines from acute services to community hospital/primary care. An agreement between the acute sector and relevant H&SCP needs to be in place to provide responsive movement of medicines budget to support shifts in medicine supply from acute to community hospital settings.

Additional factors to be considered when setting community hospital drugs budgets:

- Current level of expenditure.
- Current level of growth in volume of drugs prescribed.
- New developments coming from acute services but also within Primary Care e.g. Patients attending as out-patients for treatment traditionally administered at ARI clinics and increasing numbers of patients being admitted by GPs directly from home rather than transfers from Acute.
- Effect of NHS Grampian prescribing policy decisions.
- The potential for early discharge from ARI where courses of specialist treatment need to be continued in particular IV treatments given to both in-patients and out-patients.
- Transfer of services from acute to primary care – each new project needs to have appropriate budget transfer and allocated budget needs reviewed once the service is established.
- GMED - there is costs incurred by the casualty /minor injury units to support the out of hours service providing medicines to refurbish their bags and also to treat patients seen in the departments. Any change in supply requirement must be discussed with the H&SCP.

Table 6: Community Hospitals and Community Services prescribing allocation

Sector	Full year budget 2016/17 £000's	Estimated Out-Turn 2016/17 £000's	Suggested Budget 2017/18 £000's	Growth on 2016/17 Budget %	Growth on 2016/17 Out-turn %
Aberdeen City	1016	1096	1096	7.8%	0.0
Aberdeenshire	769	760	769	0.0%	1.2%
Moray	292	307	307	2.5%	0.0%

2.2.1. Grampian Community – Prison Service

In Nov 2012 budgets were transferred to each Health Board when they took over the responsibility of providing health care for prisoners in place of the Scottish Prison Service. The two prisons in Grampian closed and in April 2014 the new HMP & YOI Grampian was

opened. The prisoner population when the prison is at full capacity will exceed the total of the two previous prisons. Healthcare in the new prison is now being provided by NHS Grampian services so changes in prescribing have been seen as a result.

The budget will need increased to accommodate:-

- Increased prisoner population in 2017/18 as the prison is at capacity.
- Provision of take home naloxone for appropriate prisoners at liberation. This was previously funded nationally but must now be funded locally.
- Increased dispensing fee charges if numbers of in-possession medicines increases.
- Prescribing of Suboxone® for opiate dependency (expensive compared to methadone).
- Penalty charges in management fees if volume increases above the allocated level allowed for in the national pharmacy contract this should be off-set by a significant reduction in the monthly Management Fee paid by Grampian when the new pharmacy contract started in April 2015.
- Increasing costs for NRT as the Prison estate moves to becoming "smoke free".

In recognition of this a suggested budget for 2017/18 is undernoted:

Table 7: Prison Service Prescribing allocation

Sector	Full year budget 2016/17 £000's	Estimated Out-Turn 2016/17 £000's	Suggested Budget 2017/18 £000's	Growth on 2016/17 Budget %	Growth on 2016/17 Out-turn %
HMP Grampian	213	252	253	18.5%	0.4%

2.2.2. Police Custody – Kittybrewster

In April 2014 NHS Grampian took over responsibility for the healthcare of persons in police custody. A new Custody Unit in Aberdeen was opened in July 2014 and whilst no changes are planned to either the choice or volume of stock drugs there will be a need to monitor any impact on changes to usage as cell numbers have doubled.

A suggested 2017/18 budget is undernoted:

Table 8: Police Custody prescribing allocation

Sector	Full year budget 2016/17 £000's	Estimated Out-Turn 2016/17 £000's	Suggested Budget 2017/18 £000's	Growth on 2016/17 Budget %	Growth on 2016/17 Out-turn %
Custody	9	7	14	60.1%	108.7%

Summary of position for 2017/18

Having considered the general trend in increasing cost per item and the growth in volume along with changes to patent status, organisational and development commitments, closer working, new medicines coming to market and other key factors, predictions for the primary care prescribing budget needs for 2017/18, for individual HSCPs, are given in Appendices 1, 2, & 3.

The following risks have been identified as being significant and HSCPs and NHS Grampian Board are asked to consider the significant risk of growth outside the predictions made.

- The risk that the future prices for generic medicines, and associated reimbursement level set within the Scottish Drug tariff, remain difficult to predict. Recent rises in prices have been related to the changes to the EU rules governing the importation of active pharmaceutical ingredients and worsening drug shortages; both of which may continue to bring upward pressure. However, there is also a general view that community pharmacy purchasing in the last year has delivered stronger discounts than have been allowed for under the margin sharing agreement. This view suggests that in addition to the clawback of this excess margin, to address any historical overpayment, there will need to be a drug tariff correction across prices paid for generic medicines. At the time of writing this report the negotiations for the 2017/18 community pharmacy contract and the associated discount and clawback arrangements are yet to be completed. Indications are that the net effect on generic prices will be to reduce costs but it is difficult to provide a robust estimate of the level of benefit to Grampian.
- The timing and ability of NHS Grampian to maximise the savings from generic medicines, particularly pregabalin, which will form the vast majority of any savings in 2017/18.
- The risk that item volume rises greater than currently predicted.
- Further discount or rebate changes or removal of current rebate /PAS schemes.
- The introduction of new medicines/new treatment modalities has resource implications above and beyond the costs of just the medicine. While some medicines may replace existing treatments and be easier to manage, the overall effect of new medicines introduction may increase the resource requirements in order to treat patients safely and effectively.
- Unmanaged movement of prescribing from secondary care to primary care without appropriate financial resources moving to support such change.
- A diminution in the new GMS contract support for medicines management activities focussed on the cost effective use of medicines.
- Macroeconomic effects related to currency fluctuation and broader impacts of Brexit preparations.

The appendices on the following pages set out the predicted prescribing budgetary requirements for 2017-18 for each of the HSCPs and Mental Health.

These predictions are based on a simplistic model taking into account some of the factors described above. However, each year there is always a significant level of prescribing efficiencies work being undertaken which has always impacted on the budget out-turns.

Equally the predications cannot accurately take account of the effect of new medicine launches within the coming financial year which at present cannot be predicted. Although many companies co-operate by providing information about their products before launch, likely price ranges are not provided.

Given the numerous uncertainties of the predicted model at this point in time it is only possible to give a best guess as to the likely out-turn for 2017-2018, for each of the individual Health and Social Care Partnerships.

It is suggested that HSCPs utilise the intelligence provided in this report to assist them in their prescribing budget allocations for 2017/18.

Appendices

Appendix 1 - Aberdeen City Health and Social Care Partnership

Appendix 2 - Aberdeenshire Health and Social Care Partnership

Appendix 3 - Moray Health and Social Care Partnership

Appendix 1 - Aberdeen City Health and Social Care Partnership

Tables A, B & C: Estimates for Prescribing

Table a – Growth, Expenditure and Savings – Primary Care Prescribing

Factor	Best case		Best guess		Worst case	
	£000's		£000's		£000's	
	Level of		Level of		Level of	
Less under accrual impact from 2015/16	0		0		0	
Contribution for Organisational and development provision	101		101		101	
Partnership working contribution	39		39		39	
Volume growth estimate	161		317		401	
Price movement estimate	366		494		586	
ScriptSwitch allocation and communications	113		113		113	
Discount income	45		40		36	
New Medicines affecting Primary care	274		274		274	
New generic, Tariff Changes	-906		-906		-906	
New Clinical Guidance	107		107		107	
Margin Sharing Arrangements (recovery from 16/17)	-356		-356		-356	
Tariff Changes from 2016/17	-285		-285		-285	
Prescribing Efficiencies	-164		-164		-164	
Total Movements	-504		-226		-54	

Table B - Overall Aberdeen City HSCP Suggested Primary Care Prescribing Budget Requirement 2017/18

Factor	Best case		Best guess		Worst case	
	£000's		£000's		£000's	
Full year Budget 2017-18	39326		39326		39326	
Predicted Year End Out-turn 2016-17	40095		40095		40095	
Total Movements	-504		-226		-54	
Suggested Total budget 2017-18	39591		39869		40041	
% increase on 2016-2017 budget	0.7%		1.4%		1.8%	
% increase on predicted 2016-2017 expenditure	-1.3%		-0.6%		-0.1%	

Table C: Aberdeen City HSCP Community Prescribing (inc Elderly Services at Woodend)

Sector	Full Year Budget 2016-17 £000's	Predicted Out-turn 2016-17 £000's	Suggested Budget 2017-18 £000's	Growth on 2016-17 Budget %	Growth on 2016-17 Out-turn %
City HSCP Total	1016	1096	1096	7.8%	0.0%

Appendix 2 - Aberdeenshire Health and Social Care Partnership

Tables A, B & C: Estimates for Prescribing

Table a – Growth, Expenditure and Savings – Primary Care Prescribing

Factor	Best case		Best guess		Worst case	
	£000's		£000's		£000's	
	Level of		Level of		Level of	
Less under accrual impact from 2015/16	0		0		0	
Contribution for Organisational and development provision	111		111		111	
Partnership working contribution	43		43		43	
Volume growth estimate	176		347		439	
Price movement estimate	401		541		641	
ScriptSwitch allocation and communications	124		124		124	
Discount income	50		43		39	
New Medicines affecting Primary care	300		300		300	
New generic, Tariff Changes	-992		-992		-992	
New Clinical Guidance	117		117		117	
Margin Sharing Arrangements (recovery from 16/17)	-390		-390		-390	
Tariff Changes from 2016/17	-312		-312		-312	
Prescribing Efficiencies	-179		-179		-179	
Total Movements	-552		-247		-59	

Table B - Overall Aberdeenshire HSCP Suggested Primary Care Prescribing Budget Requirement 2017/18

Factor	Best case		Best guess		Worst case	
	£000's		£000's		£000's	
Full year Budget 2017-18	42793		42793		42793	
Predicted Year End Out-turn 2016-17	43896		43896		43896	
Total Movements	-552		-247		-59	
Suggested Total budget 2017-18	43444		43649		43837	
% increase on 2016-2017 budget	1.3%		2.0%		2.4%	
% increase on predicted 2016-2017 expenditure	-1.3%		-0.6%		-0.1%	

Table C: Aberdeenshire HSCP Community Prescribing

Sector	Full Year Budget 2016-17 £000's	Predicted Out-turn 2016-17 £000's	Suggested Budget 2017-18 £000's	Growth on 2016-17 Budget %	Growth on 2016-17 Out-turn %
Aberdeenshire HSCP Total	770	760	770	0.0%	1.2%

Appendix 3 - Moray Health and Social Care Partnership

Tables A, B & C: Estimates for Prescribing

Table a – Growth, Expenditure and Savings – Primary Care Prescribing

Factor	Best case		Best guess		Worst case	
	£000's		£000's		£000's	
	Level of		Level of		Level of	
Less under accrual impact from 2015/16	0		0		0	
Contribution for Organisational and development provision	44		44		44	
Partnership working contribution	17		17		17	
Volume growth estimate	70		137		174	
Price movement estimate	159		214		254	
ScriptSwitch allocation and communications	49		49		49	
Discount income	20		17		16	
New Medicines affecting Primary care	119		119		119	
New generic, Tariff Changes	-393		-393		-393	
New Clinical Guidance	46		46		46	
Margin Sharing Arrangements (recovery from 16/17)	-154		-154		-154	
Tariff changes from 16/17	-123		-123		-123	
Prescribing Efficiencies	-71		-71		-71	
Total Movements	-219		-98		-23	

Table B - Overall Moray HSCP Suggested Primary Care Prescribing Budget Requirement 2017/18

Factor	Best case		Best guess		Worst case	
	£000's		£000's		£000's	
Full year Budget 2017-18	16939		16939		16939	
Predicted Year End Out-turn 2016-17	17386		17386		17386	
Total Movements	-219		-98		-23	
Suggested Total budget 2017-18	17167		17288		17363	
% increase on 2016-2017 budget	1.3%		2.1%		2.5%	
% increase on predicted 2016-2017 expenditure	-1.3%		-0.6%		-0.1%	

Table C: Moray HSCP Community Prescribing

Sector	Full Year Budget 2016-17 £000's	Predicted Out-turn 2016-17 £000's	Suggested Budget 2017-18 £000's	Growth on 2016-17 Budget %	Growth on 2016-17 Out-turn %
Moray HSCP Total	292	307	307	2.5%	0.1%