EXPLANATORY MEMORANDUM TO

THE NATIONAL HEALTH SERVICE (CHARGES FOR DRUGS AND APPLICANCES) AMENDMENT REGULATIONS 2009

2009 No. 29

1. This explanatory memorandum has been prepared by the Department of Health and is laid before Parliament by Command of Her Majesty.

2. Purpose

These Regulations amend the National Health Service (Charges for Drugs and Appliances) Regulations 2000 to give effect to the Prime Minister's announcement that cancer patients would not have to pay NHS prescription charges from 2009.
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3. Matters of special interest to the Joint Committee on Statutory Instruments *or* the Select Committee on Statutory Instruments

3.1 None

4. Legislative Context

4.1 The amount of the charge for an NHS prescription item, the circumstances in which a charge shall, or shall not, be made and the patients who are exempt from prescription charges are set out in the National Health Service (Charges for Drugs and Appliances) Regulations 2000. These Regulations set out a list of medical conditions which give exemption from prescription charges. The Prime Minister announced on 23 September that cancer patients would be exempt from prescription charges from 2009. This amendment adds cancer to the list of medical conditions that give exemption from prescription charges with effect from 1 April 2009.

5. Extent

5.1 This instrument applies to England.

6. European Convention on Human Rights

As the instrument is subject to negative resolution procedure and does not amend primary legislation, no statement is required.

7. Policy background

7.1. Prescription charging policy is that a charge should be made for each prescription item dispensed unless the patient is exempt from charges. The arrangements are set out in the the National Health Service (Charges for Drugs and Appliances) Regulations 2000. Policy is that patients suffering from a list of specified medical conditions may apply for an exemption certificate, exempting them from payment of NHS prescription charges for all prescribed items, not just those for treatment of the exempting condition. The Prime Minister has announced that cancer patients will be exempt from charges from 2009. The new exemption will apply from 1 April 2009. The arrangements will be that people undergoing treatment for cancer, the effects of

cancer or the effects of cancer treatment will be entitled to apply for an exemption certificate which will relate to all prescription items dispensed or supplied on or after 1 April.

Revised application forms are being sent direct to doctors and NHS Trusts from 19 January 2009. Application for a certificate may be made as soon as the regulations come into force.

Consolidation

7.2 The charging arrangements in respect of people with long term conditions are currently the subject of a review by Professor Ian Gilmore.The need for consolidation will be considered once Professor Gilmore's recommendations have been considered.
Professor Gilmore will report to Ministers in Summer 2009.

8. Consultation Outcome

No consultation has taken place as this instrument gives effect to an announcement.

9. Guidance

Guidance has been prepared for doctors and a copy will be included with each pack of revised application forms. However, the guidance will not overrule their clinical judgement as to which patients meet the relevant conditions. A copy of the guidance will be placed in the Library and will also appear on the website of the Department of Health and the NHS Business Services Authority.

10. Impact

10.1 These Regulations have no impact on business, charities or voluntary bodies.

10.2 There is a small impact on the NHS Business Services Authority, Oncology Departments of NHS Primary Care Trusts and General Practitioners.

10.3 An Impact Assessment relating to the impact on the NHS is attached to this memorandum.

11. Regulation Small Business

The legislation does not apply to small business.

12. Monitoring and Review

The outcome of this instrument will be claims for exemption certificates from cancer patients.

The policy will be implemented and monitored by the NHS Business Services Authority. The policy will be reviewed by 2012.

13. Contact

Gina Jones at the Department of Health Tel: 020 7972 2954 or e-mail: gina.jones@dh.gsi.gov.uk can answer any queries regarding the instrument.

Summary: Intervention & Options

Department /Agency:	Title:	
Department of Health	**Impact Assessment of Free Prescriptions for cancer patients - Implementation**	
Stage Final	**Version:** 1	**Date: January 2009**
Related Publications:		

Available to view or download at:

http://www.dh.gov.uk

Contact for enquiries: Gina Jones **Telephone: 0207 972 2954**

What is the problem under consideration? Why is government intervention necessary?

There is a concern that the current system of prescription charges may be placing an undue additional financial burden on cancer patients. Prescription charges may also act as a barrier to access to required and recommended medicines for patients diagnosed with cancer, which can result in suboptimal health outcomes. Therefore, the Government considers that intervention is necessary to ensure that cancer patients can be exempted from prescription charges.

What are the policy objectives and the intended effects?

The policy objective is to enable patients who are battling cancer to obtain prescribed medication without having to pay prescription charges. The intended effect is a lower financial burden for cancer patients, optimal adherence to their medications and, as a result, improved health outcomes.

What policy options have been considered? Please justify any preferred option.

Option 1. No Change in existing policy.
Option 2. Free prescriptions for patients receiving treatment for cancer (including effects of this or any previous cancers).

When will the policy be reviewed to establish the actual costs and benefits and the achievement of the desired effects?

Within 3 years of implementation (by 2012).

Ministerial Sign-off For final proposal/implementation stage Impact Assessments:

I have read the Impact Assessment and I am satisfied that (a) it represents a fair and reasonable view of the expected costs, benefits and impact of the policy, and (b) the benefits justify the costs.

Signed by the responsible Minister:

Dawn Primarolo .....Date: ***13th January 2009***

Summary: Analysis & Evidence

Policy Option: 2	Description: Free prescriptions for patients receiving treatment for cancer (including effects of this or any previous cancers).

COSTS

ANNUAL COSTS		Description and scale of **key monetised costs** by 'main affected groups'
One-off (Transition)	**Yrs**	BSA costs from having to change their systems (one-off): £0.4mn.BSA costs from increased processing of MedEx applications: £70k (Yrs 2-5); £146k (Yr 6); £110k (Yrs 7-10).
£ 0.4mn	1	Transfer from Government to patients: £15.6mn Increased Drugs Bill costs: £5.3mn Increased demand for surgery appointments: £1.2mn
Average Annual Cost (excluding one-off)		
£ 22mn	10	**Total Cost** (PV) **£ 184mn**

Other **key non-monetised costs** by 'main affected groups'

BENEFITS

ANNUAL BENEFITS		Description and scale of **key monetised benefits** by 'main affected groups'
One-off	**Yrs**	Transfer from Government to patients: £15.6mn
£ -	1	Improved health outcomes for patients: £11.9mn - £15.2mn
Average Annual Benefit (excluding one-off)		
£ 27mn-31mn	10	**Total Benefit** (PV) **£ 226-254mn**

Other **key non-monetised benefits** by 'main affected groups' Disbenefits to pharmacists: Loss of cash flow from prescription charge revenue, resulting in a one-off cash pressure to pharmacists. Pharmacists could also lose revenue from OTC sales.

Key Assumptions/Sensitivities/Risks All annual values are averages over the life of the policy. Average numbers of prescription items have been used for all patient groups. Range of values for health outcomes is provided to illustrate uncertainty in the increase in demand for prescription items. Doubling costs to illustrate the opportunity cost to Government from abolishing prescription charges for cancer patients would result in a negative net benefit in the range of (£113mn) to (£141mn).

Price Base Year 2008	Time Period Years 10	**Net Benefit Range** (NPV) **£ 43mn to 71mn**	**NET BENEFIT** (NPV Best estimate) **£ 43mn to 71mn**

What is the geographic coverage of the policy/option?				England
On what date will the policy be implemented?				1 April 2009
Which organisation(s) will enforce the policy?				NHSBSA
What is the total annual cost of enforcement for these organisations?				£ N/A
Does enforcement comply with Hampton principles?				N/A
Will implementation go beyond minimum EU requirements?				N/A
What is the value of the proposed offsetting measure per year?				£ N/A
What is the value of changes in greenhouse gas emissions?				£ N/A
Will the proposal have a significant impact on competition?				No
Annual cost (£-£) per organisation (excluding one-off)	Micro	Small	Medium	Large
Are any of these organisations exempt?	N/A	N/A	N/A	N/A

Impact on Admin Burdens Baseline (2005 Prices) (Increase - Decrease)

Increase of £ 0 Decrease of £ 0 **Net Impact** **£** 0

Key: **Annual costs and benefits:** **(Net) Present**

INTRODUCTION

There is evidence to suggest that in addition to adding to the financial burden already being felt by patients with cancer, prescription charges may affect patients' medicines management behaviour and reduce medicines use. The Government considers that it is vitally important that people get the medicines they need and that the system of prescription charging in England becomes fairer. Therefore, the Prime Minister announced on 23 September 2008 that from 2009 prescription charges for cancer patients would be abolished and that free prescriptions for patients with long-term conditions would be phased in over the next few years. DH ministers subsequently confirmed that the cancer exemption would start from 1 April 2009.

Ministers have asked Professor Ian Gilmore, President of the Royal College of Physicians, to review the options for extending exemption from prescriptions charges for patients with long-term conditions. The review is expected to report in Summer 2009. This impact assessment focuses solely on the options for exempting cancer patients from prescription charges.

BACKGROUND

Patients in the UK are liable for a prescription charge for prescriptions prescribed to them by NHS medical practitioners. Many people are, however, exempt from paying prescription charges, either on grounds of age, existing medical conditions or if they are in receipt of certain benefits. Pregnant women and young people in full-time education are also exempt from charges. In all, around 40% of patients are liable to pay for their prescriptions. However, these 40% only account for about 11% of all prescription items, with 89% of prescription items incurring no charge[1].

From 1 April 2008, the prescription charge was £7.10 per prescription item. Patients who need regular prescriptions can also buy prepayment certificates (PPCs), which cover all prescriptions received during a period. Patients who need to pay for more than 4 prescription items in 3 months can buy a 3-month PPC at a one-off cost of £27.85, which will cover them for all their prescriptions for this period, and patients who need to pay for more than 14 prescriptions in a 12-month period can buy a 12-month PPC costing £102.50.

There is a concern that many people with cancer consider having to pay prescription charges an unfair financial burden and are faced with choosing between food or their required medication, which has a negative impact on their health. A poll of cancer patients by Macmillan Cancer Support showed that 44% of cancer patients had cut back on essential items such as food or heating so that they could afford to pay for their prescriptions.[2] Although many patients affected by cancer are already exempt from prescription charges, as a large proportion of new cancer registrations (74%) occur in patients over the age of 60 and who are therefore exempt on age grounds, there is a significant number of people who would benefit from no longer having to pay for their prescriptions. Every year over 240,000 patients are registered as having a malignant cancer, and it is estimated that there are currently

[1] Table 2: Prescriptions dispensed in the community Statistics for 1997 to 2007: England. Information Centre.
[2] http://info.cancerresearchuk.org/news/archive/newsarchive/2008/august/18730951

1.6mn cancer survivors in England[3], which indicates that although there would be a financial cost to the Government from losing the prescription charge revenue, the health benefits of the policy could be significant.

To help cancer patients with the financial costs of prescriptions and to ensure that prescription charges do not deter patients from accessing necessary medicines, regulations will be changed to add cancer to the list of conditions that are exempt from prescription charges.

PRESCRIPTION CHARGES AND MEDICINES USE

A number of studies have shown that prescription charges in the UK can affect patients' behaviour and their medicines use, in particular that prescription charges may be acting as a barrier to use of medicines (e.g. Schafheutle et. al. 2004)[4]. However, it is likely that the cost of medicines to patients is only one of many influences in patients' decisions to adhere to the treatment. Schafheutle et. al. (2002)[5] found that while cost influenced the medicines management behaviour of patients, particularly those from less affluent backgrounds, it was not the most important factor in medicines management, with disease severity, effectiveness or necessity of treatment playing a more important role. Studies of non-dispensing of prescriptions have similarly shown that even when the primary reason for non-dispensing a prescribed medicine is cost, in the majority of cases the prescribed medicine is substituted for over-the-counter (OTC) medicines or private prescriptions instead of simply not taken. Schafheutle et. al. (2002)[6] found that of the prescribed medicines that were not dispensed nor substituted for an alternative, 36% were deemed clinically important. The impact of prescription charges has also been linked to increases in hospital and nursing home admissions.[7] It is therefore reasonable to assume that extending prescription charge exemption to cover cancer patients could improve medicines management behaviour of those patients, increase adherence and lead to improved health outcomes.

In addition to increasing the numbers of prescriptions that are dispensed, increased demand for prescriptions could result in increased demand for GP appointments. A survey of 133 GPs by the Welsh Liberal Democrats[8] found that since free prescriptions were introduced in Wales in April 2007, 48% of respondents had witnessed an increased in the requests for GP appointments. The same survey also reported that the nature of prescriptions being asked by patients had changed, with GPs reporting increased demand for OTC medicines on prescription. Other studies have also demonstrated the impact of prescription charges on GPs' prescribing behaviour. Weiss et al. (2000)[9] found that GPs used a number of strategies to either reduce the impact of prescription charges (by recommending OTC medicines, increasing the amount of medicines supplied, prescribing more effectively and reducing the number of prescription items supplied) or to increase the value for money position of the prescription in the eyes of

[3] The Cancer Reform Strategy (2008), DH. http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_091261

[4] Schafheutle, E., Hassell, K. & Noyce, P. (2004). Coping with Prescription Charges in the UK. International Journal of Pharmacy Practice Vol. 12., pp. 239-246.

[5] Schafheutle, E., Hassell, K. & Noyce, P. (2002). Access to Medicines: Cost as an Influence on the Views and Behaviour of Patients. Health and Social Care in the Community Vol. 10., No. 3., pp. 184-195.

[6] Schafheutle, E., Hassell, K., Seston, E. & Noyce, P. (2002). Non-dispensing of NHS Prescriptions in Community Pharmacies. International Journal of Pharmacy Practice Vol. 10., pp. 11-15.

[7] Tamblyn, R. et. al. (2001). Adverse Events Associated with Prescription Drug Cost-Sharing Among Poor and Elderly Persons. JAMA, Vol. 285, pp. 421-429.

[8] At What Cost? A Report into the Impact of Free Prescriptions Upon GP Workload and Prescribing Levels, Jenny Randerson, Spring 2008.

[9] Weiss, M., Hassell, K., Schafheutle, E. & Noyce, P. (2000). Strategies Used by General Practitioners to Minimise the Impact of the Prescription Charge. European Journal of General Practice Vol. 7, pp. 23-27.

the patient (by prescribing medicines that were perceived to be more efficacious or more expensive to the NHS). Given the evidence from Wales and other research, it is therefore plausible that GP's prescribing behaviour could change to reflect the fact that cancer patients now receive their medicines free of charge. This could result in a larger number of prescription items being prescribed to a patient, or prescription items being prescribed for a shorter duration. However, while the cost of additional GP appointments has been quantified, the impact of free prescriptions on the nature of GP prescribing has not been assessed in this Impact Assessment.

COSTS AND BENEFITS

Option 1: No change in policy.

This is the baseline for all costings and therefore all costs and benefits for this option are set to zero.

Option 2: Free prescriptions for patients receiving treatment for cancer (including effects of this or any previous cancer).

Costs

There would be one-off costs to the BSA from needing to change their systems to accommodate the changes and a small annual increase in costs due to the issuing of exemption certificates to newly diagnosed patients. The Government would incur annual costs from the loss of prescription charge revenue from community-based cancer medications.

It is possible that demand for prescriptions could increase from patients who would previously have bought the same medicines over-the-counter, leading to an additional burden on the drugs bill. This option could result in an increased demand for GP appointments and GP time. The option would be implemented through 5-year Medical Exemption certificates, and GPs would have to assess every five years whether a patient is still 'suffering from cancer' or whether they have now been completely cured. Any patients who later suffer from the effects of treatment for cancer at a later date would also be eligible for the exemption.

Benefits

There would be a transfer of money from Government to cancer patients, as those cancer patients who are not otherwise exempt would no longer pay prescription charges on any of their medicines while suffering from cancer or its effects.

In addition to a financial benefit, cancer patients could also see an improvement in health outcomes if the policy encouraged patients to access and adhere to their recommended course of medicines. Particularly less affluent

cancer patients and those just above the exemption income threshold will benefit from the exension of prescription charge exemption.

As pharmacists currently collect the prescription charge revenue when the transaction occurs, the reduction in the numbers of patients paying for prescription charges could have an impact on pharmacy cash flow position (although the pharmacy would ultimately still receive the reimbursement they are entitled to from the BSA).

Detailed calculations and analysis of costs and benefits for this option are set out in Annex B.

RISKS

As the risk of being diagnosed with cancer increases with age, patients over the age of 35 and under the current upper exemption age (60) are the main beneficiaries of the policy. Neither of the options focuses on redistribution nor takes account of patients' ability to pay. It is therefore possible that existing wealth inequalities will remain under the proposed option.

ENFORCEMENT AND MONITORING

Current monitoring arrangements for prescription charges will remain in place. All NHS prescription forms dispensed in England by community pharmacists, appliance contractors and GPs are sent to the NHS Business Services Authority (BSA). It collects information about the number of charges paid, number of items exempt and the exemption type according to the box ticked on the back of the prescription form (but it does not collect information about individual patients). It will continue to collect information on prescription exemptions and charges. This data is currently published by the NHS Information Centre and is available at www.ic.nhs.uk.

Further changes would be made to charges and exemption if the policy has not achieved its desired effects.

REVIEW OF IMPACT ASSESSMENT

The policy and this impact assessment will be reviewed within 3 years of implementation.

COMPETITION IMPACT ASSESSMENT

This policy has no significant impact on the drugs markets as it considers the removal of prescription charges from a group of patients. While there may be some substitution away from OTC medicines towards prescription medicines, this is not expected to have an impact on the market structure or the ability of suppliers to compete. The OFT competition filter also indicates that a competition assessment is not necessary.

EQUALITY IMPACT ASSESSMENT IS ATTACHED AS ANNEX A

Specific Impact Tests: Checklist

Use the table below to demonstrate how broadly you have considered the potential impacts of your policy options.

Ensure that the results of any tests that impact on the cost-benefit analysis are contained within the main evidence base; other results may be annexed.

Type of testing undertaken	*Results in Evidence Base?*	*Results annexed?*
Competition Assessment	No	No
Small Firms Impact Test	No	No
Legal Aid	No	No
Sustainable Development	No	No
Carbon Assessment	No	No
Other Environment	No	No
Health Impact Assessment	Yes	No
Race Equality	No	Yes
Disability Equality	No	Yes
Gender Equality	No	Yes
Human Rights	No	Yes
Rural Proofing	No	No

Annexes

ANNEX A: EQUALITY IMPACT ASSESSMENT

Introduction

The main purpose of the proposal is to exempt patients who are suffering from cancer, its effects, or the effects of previous treatment for cancer from prescription charges. There is at present limited information available on cancer in relation to some of the six equality categories, which makes it difficult to draw firm conclusions on the impact of the proposed policy. However, it is not anticipated that the proposal would have a negative impact on any of the six equality categories, and is likely to have a positive impact on some of them. The Department of Health's Cancer Reform Strategy (December 2007) set out a process of systematic collection of cancer data, which should begin to give a fuller picture of cancer incidence and outcomes with respect to the specific equality categories. The Strategy was accompanied by an Equality Impact Assessment, which discussed in detail the risk factors and incidence of cancer related to the different equality categories. The Cancer Reform Strategy equality impact assessment, should be read alongside this Impact Assessment. The Impact Assessment can be found on the Departments website.[10]

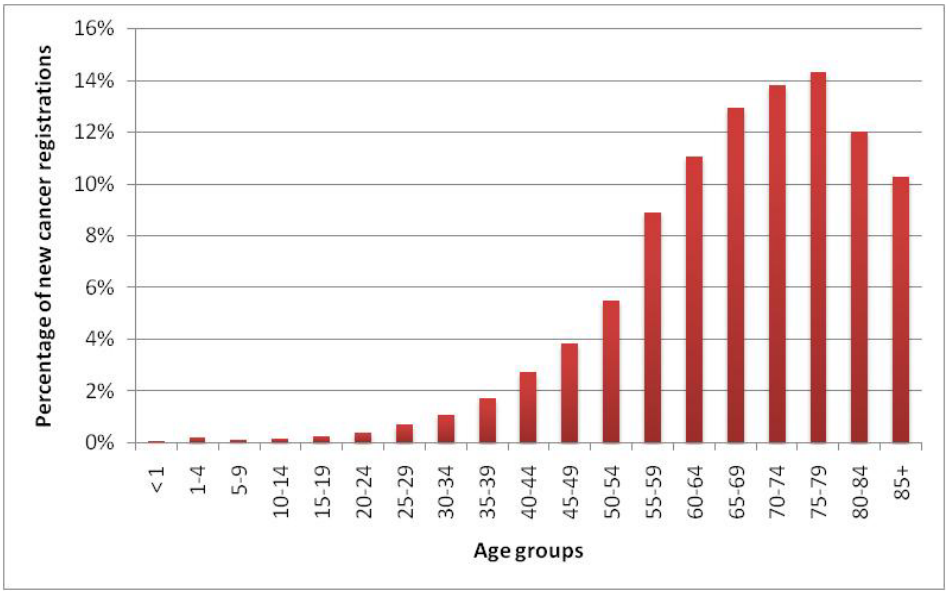
It is anticipated that extending the prescription charge exemption for cancer patients will also support the Departments End of Life Care Strategy, and reduce inequalities for patients during the terminal phase of their illness. The Strategy and accompanying Impact Assessment were published on the Department's website on 16 July 2008.[11]

Age

While one in three people with be affected by cancer at some point in their lives, the risk of cancer increases significantly with age for most cancers. Data from the ONS shows that 74% of all new cancer registrations were for people aged 60 and over (Figure 1A)[12].

Figure 1A: Percentage of new cancer registrations in each age group in 2006.

[10] http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsLegislation/DH_081005
[11] http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_086277
[12] Cancer registration Statistics England, 2006. http://www.statistics.gov.uk/StatBase/Product.asp?vlnk=7720



Patients under the age of 16 are exempt from prescription charges as are patients aged 60 and over. The main benefit from the extension of the exemption therefore occurs to patients aged 16-59, with the age group benefitting the most being nearer the 60 exemption age due to the incidence of cancer increasing with age.

Disability

There are a number of disability categories, ranging from a physical impairments to mental health conditions, learning difficulties and long-standing illnesses (including cancer). As the policy targets cancer patients, there is likely to be a positive impact on this inequality category. The policy is also beneficial to those with other disabilities to the extent they are diagnosed with cancer. Although the Department has not found specific examples of inequality relating to the policy, there may be specifically tailored approaches that need to be adopted to ensure that people with disabilities are not deterred from accessing free medicines, and (for example) that patients in nursing homes are able to benefit from the policy. As it will be the GP that signs off the Medical Exemption certificate, it is not anticipated that patients with disabilities would be less able to access free prescriptions.

Race

There is little evidence of the effect of race on the likelihood of being diagnosed with cancer. Race has historically been poorly recorded in the NHS, limiting the quality of available data. In addition, it is not always possible to differentiate between the influence of race and deprivation. In general, the number of cancer deaths is lower among BME groups than among British white people, which could be explained by the younger age profile of BME groups. However, there is evidence that the incidence of specific cancers varies between ethnic groups (e.g. incidence of prostate cancer is high among men of African origin; incidence of mouth cancer is high among South Asians; incidence of liver cancer is high among Bangladeshis; while breast cancer incidence is generally lower among BME groups than among white British women)[13]. There is also evidence that awareness and acceptance of screening is generally lower among BME groups. Although it is not possible to draw firm conclusions of the number

[13] Cancer Reform Strategy, Department of Health, December 2007.

of patients benefiting from the proposals, it is anticipated that free prescriptions for cancer patients would encourage BME groups to access their medicines, which could improve health outcomes for this group.

Gender

The risk of cancer is affected by gender as some cancers are gender specific, while others affect one gender more than the other due to biological or lifestyle factors. New cancer registrations are roughly equally distributed between men and women, with 50.2% of new registrations for men and 49.8% for women in 2006. Among the specific age group targeted by this policy, 16-59 year olds, new cancer registrations are more predominant in women (60%) than men (40%)[14], indicating that women may benefit more from the proposals.

However, mortality rates for cancer are generally higher for men than women. Although the policy will not target incidence (e.g. through influencing lifestyle factors), which is likely to be the main factor in the gender differences in cancer survival rates, both genders will benefit from the extension of the prescription charge exemption to cancer patients. More women tend to be on lower incomes and thus exempt from prescription charges.

Religion or Belief

There is no strong evidence of how religion or belief impacts on how a person accesses health care for the diagnosis or treatment of cancer. Therefore, it is not possible to draw firm conclusions of the number of patients benefiting from the proposals on exempting cancer patients from prescription charges.

Sexual Orientation

Sexual orientation affects the risk of cancer through increasing incidence of specific cancers, such as anal cancer among gay men (HPV related), and breast cancer among Lesbians (lower likelihood of having children).[15] It is not anticipated that patients with different sexual orientation would be adversely affected by the policy, and due to higher incidence of some cancers, there could be positive outcomes for some groups.

ANNEX B: QUANTIFICATION OF OPTION 2 (Free prescriptions for patients receiving treatment for cancer (including effects of this or any previous cancer))

Discounting

All costs and benefits are discounted at 3.5% over a 10 year period.

Costs

Administrative costs

[14] Cancer registration Statistics England, 2006. http://www.statistics.gov.uk/StatBase/Product.asp?vlnk=7720
[15] Equality Impact Assessment for Cancer Reform Strategy, Department of Health, December 2007.

There will be administrative costs to the BSA from having to change their systems to accommodate the proposed changes. The BSA estimates that they would have to spend £100,000 in systems changes, £260,000 for processing the first stock of applications (which is based on existing processing costs) and for destroying old forms and £80,000 for publicising the changes. In total, transitional BSA costs from the changes would amount to £440,000 in the first year of the policy.

Given the ongoing number of new cancer registrations, there would be an additional cost of £70,000 per annum from processing new Medex forms in the first five years of the policy. A proportion of this would be offset by reduced number of PPC forms. However, to ensure a conservative estimate, the cost savings from fewer PPC forms have not been estimated. Therefore, it is estimated that the cost of processing new, additional, Medex applications would be approximately £70,000 per annum, after the initial number of cancer patients has been registered. After five years of the policy, there would be likely to be a rise in Medex applications as a proportion of cancer patients would seek to renew their Medex status. It is estimated that in Year 6 of the policy, processing costs would rise to £146,000, falling to around £110,000 per annum thereafter.

Loss of prescription charge revenue to the Government

The Government would lose a significant amount of revenue from prescription charges. This loss has been estimated by building a model of the numbers of new patients qualifying for an exemption each year. Age-specific numbers of new cancer registrations and patients' survival rates were obtained from the ONS (Cancer Registration Statistics England 2000-2005)[16]. The numbers of patients living with cancer were projected forwards from the statistics, by applying the appropriate 1-year and 5-year survival rates to each age category (the survival rates for 2, 3 and 4 years after initial diagnoses were projected from the 1-year and 5-year reported survival rates). Patients who were exempt on age grounds (under 16 or over 60) were removed from the data, and the general population exemption rates were applied to the remaining age groups. Weighted average survival rates (across different cancers and among men and women) were used for all age groups.

As it is not possible to estimate what proportion of cancer patients would be classified as having fully recovered from their cancer, and no longer requiring ongoing treatment, after five years, it was assumed that a number of patients surviving beyond five years would continue to receive ongoing treatment. The numbers of patients in this group were proxied by the share of breast and prostate cancer patients of total patients. This is reasonable given these diseases are some of the most common cancers, and, particularly with prostate cancer, can remain several years in a relatively dormant state in the body or require on-going medication after the patient has been diagnosed patient free.

NOTE: These projections were made to illustrate the potential impact of the exemption, they must not be taken as official estimates of likely future cancer rates.

[16] http://www.statistics.gov.uk/StatBase/Product.asp?vlnk=7720

Figure 1 illustrates the total numbers of patients who would receive free prescriptions under this policy and would have had to pay for them before. Existing exemptions have been removed and numbers have been adjusted for patients newly registered with cancer. Numbers are also adjusted for cancer survival rates (1 to 5 year rates) and patients becoming exempt on age grounds (for example, cohort of 55 year olds being registered for cancer in year 2009 and the survivors of that cohort ageing with the rest of the population and reaching the exemption age of 60 in year 2014).

Figure 1: Numbers of patients eligible for free prescriptions under Option 2.

Age groups	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
15-19	1,969	1,987	1,977	1,992	1,991	1,989	1,985	1,979	1,973	1,969
20-24	3,280	3,381	3,432	3,479	3,517	3,536	3,537	3,525	3,501	3,471
25-29	5,720	6,083	6,420	6,765	7,147	7,517	7,870	8,212	8,539	8,831
30-34	8,543	8,849	9,161	9,550	10,048	10,613	11,217	11,837	12,472	13,120
35-39	14,321	14,789	15,191	15,550	15,923	16,344	16,858	17,480	18,220	19,083
40-44	22,997	24,421	25,722	26,951	28,132	29,222	30,244	31,188	32,059	32,914
45-49	32,565	35,067	37,559	40,020	42,438	44,457	46,014	47,128	47,777	47,950
50-54	41,545	43,371	44,997	46,386	47,423	48,677	50,922	53,303	55,585	57,752
55-59	33,421	33,059	32,988	33,259	33,833	34,587	35,519	36,608	37,770	38,948
Total:	**164,362**	**171,008**	**177,446**	**183,953**	**190,452**	**196,941**	**204,165**	**211,260**	**217,896**	**224,038**

The value of the transfer from Government to patients was calculated by estimating the numbers of prescriptions these patients would demand and valuing these prescriptions at current charge levels. Average annual numbers of prescription items (IMS data for 2007) were used for each age group (see Figure 2).

Figure 2: Average number of prescription items per person.

Age group (years)	16-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59
Average Px items	**3.27**	**3.11**	**3.64**	**4.23**	**5.26**	**6.46**	**7.98**	**10.60**	**13.96**

The prescription items were proportioned into single items, which were valued at £7.10 (prescription charge in England since April 2008), and 12-month PPCs, which were valued at the current price of £102.50. A poll by Breast Cancer Care suggested that 45% of the respondents were buying PPCs, as opposed to paying for single items. It was therefore assumed that 55% of items were bought as single items, while 45% of the items were bought through a PPC.

Based on this model, the loss of prescription charge income, through both single items and PPCs would amount to approximately £13.3mn in the first year of policy, rising to £18mn in year 2018 (see Figure 3).

Figure 3: Loss of prescription charge revenue to the Government (£mn).

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Loss of Prescription charge revenue (£mn)	13.30	13.80	14.29	14.79	15.29	15.79	16.37	16.94	17.48	17.97

Increased consumption: Impact on the Drugs Bill

Once patients receive free prescriptions, it is likely that their consumption of medicines would increase. Under this option, all medicines prescribed to patients diagnosed with and suffering from cancer would be free, which could result in patients a.) being more likely to have their prescriptions dispensed and b.) obtaining medicines on prescriptions that they previously would have had to access over-the-counter and pay for (a number of studies have shown a positive cross-price elasticity of demand between prescription medicines and OTC medicines). While this would be likely to result in improved health outcomes for patients, it also increases the drugs bill costs to the Government.

The likely impact of a fall in price on consumption is reflected in the price elasticity of demand estimates.[17] Prescription drugs have limited substitutes (though some may be substituted to OTC medicines) and many consumers perceive them as a necessary expenditure. This means that demand is likely to be relatively inelastic (demand shows only limited response to changes in price).

There are a number of studies that have attempted to measure the price elasticity of demand for prescription drugs. However, most studies are specific to particular patient groups within a specific institutional framework, which makes it difficult to assess the overall impact of a price change to a heterogeneous population. Nevertheless, a study by Gemmill et al. (2007)[18] used the results from a number of other academic papers to perform a meta-regression analysis on the observed values of prescription drug price elasticity. Their literature review found that demand for prescription drugs is indeed inelastic, but that there was significant variation in the elasticity estimates, depending on the country, specific patient group and specific drug in question. Their own analysis found a value of -0.209 for prescription drug price elasticity, also indicating that the demand is relatively inelastic and that patients are not particularly responsive to price. This elasticity estimate of -0.209 has also been used in this Impact Assessment to assess the effect of a removal of price to patients' consumption.

The average numbers of prescription items per person in each age group have been adjusted for a 21% increase in the quantity demanded, in response to a 100% fall in price (see Figure 4).

Figure 4: Increase in Demand for prescription items as a result of a fall in price.

[17] Price elasticity of demand measures the percentage change in quantity in response to a 1% change in price.
[18] Gemmill, M., Costa-Font, J. & McGuire, A. (2007). In Search of a Corrected Prescription Drug Elasticity Estimate: A Meta-Regression Approach. Health Economics, Vol. 16, pp. 627-643.

Age group (years)	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59
Items per person after exemption	**3.95**	**3.76**	**4.40**	**5.11**	**6.36**	**7.81**	**9.65**	**12.82**	**16.88**
Increase in average items per person	**0.68**	**0.65**	**0.76**	**0.88**	**1.10**	**1.35**	**1.67**	**2.22**	**2.92**

It is assumed that once the prescription charges are removed, patients' consumption will increase, as reflected by Figure 4, and that these prescription items would not have been consumed under existing policy. While there is no loss in revenue to the Government, as this is new consumption, there is an impact on the Drugs bill, which would increase as a result of this additional demand.

The impact on the drugs bill is estimated by valuing the additional demand by the average Net Ingredient Cost (NIC) of prescription items. The average NIC per item for patients with chronic conditions was £15 in 2007[19], and it was assumed that this would also reflect the average NIC for cancer medicines. Multiplying the additional prescription items by average NIC per item, gives an additional drugs expenditure of £4.6mn in the first year of policy, rising to £6.1mn in year 2018 (see Figure 5).

Figure 5: Drugs Bill impact of increased demand for prescription drugs.

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Drugs bill impact (£mn)	4.59	4.74	4.90	5.06	5.22	5.39	5.58	5.78	5.96	6.13

Increased demands on prescribers' time

It is possible that lower prescription charges would make patients more likely to consult their GPs or more likely to leave their GP consultation with a prescription (instead of advice to buy OTC medicines instead). We do not have the information to assess what proportion of the increased demand for prescription items would result in existing prescriptions now being more likely to be dispensed, and what proportion would be new prescriptions being written by GPs. It was assumed that 90% of the additional demand would be either covered by existing prescriptions now being dispensed, or additional items being added to a prescription form during a consultation that would have happened even without the change in policy. This means that the additional demand for items under this policy would result in a 10% increase in demand for GP consultations for these items by cancer patients (data has been adjusted for the population of cancer patients).

The costs were estimated by multiplying this additional demand for GP appointments by the GP's cost per additional consultation. The Personal Social Services Research Unit (PSSRU)[20] estimates that each surgery consultation costs on average £34. It was estimated that the costs from additional GP visits would amount to £1mn in the first year of the policy, rising to £1.4mn in year 2018 (see Figure 6).

[19] Table 3 in Prescriptions Dispensed in the Community for 1997-2007, England, Information Centre. It is worth noting that some cancer medicines are significantly more expensive than this, but the majority of other medicines (e.g. pain killers) are significantly cheaper than this. We do not know for certain what the average NIC is for cancer patients' medicines.

[20] Unit Costs of Health and Social Care, 2007. PSSRU, p.127.

Figure 6: Increased demand for GP time.

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Increased demand on GP time (£mn)	1.04	1.08	1.11	1.15	1.18	1.22	1.27	1.31	1.35	1.39

Benefits

Financial gain for patients

This policy amounts effectively to a transfer of money from Government to patients. Patients receiving treatment for cancer or its effects, or the effects of a previous cancer would save money from no longer having to pay prescription charges on their medications.

Using the assumptions as described in Figures 1-3, the financial value of the transfer is approximately £13.3mn in the first year of policy, rising to £18mn in year 2018 (see Figure 7).

Figure 7: Financial gain for patients.

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Financial gain for patients (£mn)	13.30	13.80	14.29	14.79	15.29	15.79	16.37	16.94	17.48	17.97

Health gain for patients

It is also likely that the change in policy would result in improved health outcomes as patients are now more likely to have their existing prescriptions dispensed, or more likely to request for more prescriptions when visiting their GPs. The improved health outcomes have been estimated by estimating the QALY gains from additional medicines consumption and monetising these gains.

The improved health outcomes for patients have been estimated by taking the average of a cost per QALY for cancer medicines (£25,000) and the cost per QALY for other medicines (£10,000).[21] The QALYs have been derived from the Drugs Bill cost for the additional items that are now consumed under this policy, by dividing the Drugs Bill by the average cost per QALY of £17,500. The resulting QALYs have then been evaluated at the Department's value of a QALY of £50,000. This gives the upper end of the estimate for the potential health gain from the increased consumption (see Figure 8). In the first year, the monetised value of the health gain is estimated at £13.1mn, rising to £17.5mn in 2018.

It is possible that a part of this increased demand for prescription drugs would be from substitution away from OTC medicines that are currently cheaper than a prescription charge. This means that for

[21] There is significant uncertainty over the appropriate cost per QALY. New cancer medicines are likely to be more effective, but also more expensive than old cancer medicines. In addition, non-cancer medicines are likely to be significantly less effective, but also significantly cheaper. The cost per QALY values provided here are indicative.

the portion of the increase in demand that is substituted away from OTC medicines, patients would not see a health gain. O'Brien (1988)[22] found that the cross-price elasticity of demand between prescription charges and demand for OTC medicines was 0.22 (a 1% increase in the price of prescription charges, leads to 0.22% increase in consumption of OTC medicines). To find a lower bound of the possible QALY gains, it was assumed that 22% of the increase in demand for prescription items, is effectively a substitution from OTC medicines, and therefore there is no health gain for this 22%. Adjusting for the possible substitution effect, the lower end of the health gains is estimated at £10.2mn in the first year, rising to £13.7mn in 2018 (see Figure 8).

Figure 8.Monetised value of health gains to patients

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Upper bound of QALY gains	13.12	13.55	14.00	14.45	14.91	15.39	15.95	16.51	17.04	17.52
Lower bound of QALY gains	10.23	10.57	10.92	11.27	11.63	12.00	12.44	12.88	13.29	13.67

Summary of Costs and Benefits: Option 2

	Impact	Description	Annual Value (average)	NPV (10 years)
Costs	Government	Transfer of money from Government to patients;	£15.6mn	£129mn
		Increased drugs bill costs.	£5.3mn	£44mn
	BSA	Costs to BSA from systems changes (one-off); ongoing costs of medex applications.	£440,000 (one-off) Years: 2-5 £70,000 Year 6: £146,000 Years: 7-10: £110,000	£1.2mn
	GPs	Increase demand for appointments	£1.2mn	£10mn
Benefits	Patients	Transfer of money from Government to patients.	£15.6mn	£129mn
		Improved health outcomes.	£11.9mn- £15.2mn	£98mn- £126mn

[22] O'Brien, B. (1988). The Effect of Patient Charges on the Utilisation of Prescription Medicines. Journal of Health Economics, Vol. 8, pp. 109-132.