Department of Health

NHS Car Parking

Impact Assessment

December 2009

DH INFORMATION READER BOX

Policy HR/Workforce Management Planning/Performance Clinical	**Estates** Commissioning IM&T Finance Social care/Partnership working
Document purpose	Action
Gateway reference	13312
Title	NHS Car Parking: Consultation on proposals
Author	DH/Income Generation/Gateway Review and Estates & Facilities Division
Publication date	29 December 2009
Target audience	PCT CEs, NHS Trust CEs, SHA CEs, Care Trust CEs, Foundation Trust CEs, PCT Chairs, Special HA CEs, Directors of Finance, Directors of Estates & Facilities
Circulation list	
Description	A consultation document regarding the implementation of free inpatient car parking for inpatients
Cross reference	Income Generation – Car Parking Charges: A Guide to Implementation
Superseded documents	N/A
Action required	Respond to Consultation
Timing	By 23 February 2010
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For recipient use	

First published December 2009

Produced by COI for the Department of Health

www.dh.gov.uk/publications

NHS Car Parking

Impact Assessment

Prepared by Estates & Facilities Division,
Department of Health

December 2009

Summary: Intervention & Options

Department /Agency:	Title:	
Department of Health	Impact Assessment of Access for Visitors and Outpatients	
Stage: Consultation	**Version:** 7	**Date:** 22 December 2009
Related Publications:		

Available to view or download at:

http://www.

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

Hospital attendance by inpatients' visitors and by outpatients is often frustrated by the high cost of access, including car parking fees. This compromises the amenity and perhaps the health of both inpatients and outpatients, particularly the less advantaged, and may be seen as inconsistent with the principle of equality of access to health services irrespective of ability to pay. In a state funded system, incentives to mitigate costs of access are determined by public sector contracts, guidance and regulations; hence it is for government to review levers available to affect such incentives.

What are the policy objectives and the intended effects?

Objective of policy is to reduce the economic costs of hospital attendance for inpatients' visitors and for outpatients not currently entitled to patient transport or reimbursement of costs, and to increase the numbers of inpatients benefiting from regular visits.

The intended effect is to improve the health and wellbeing of patients, and to mitigate the costs falling on those who can least afford them.

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

A. Do Nothing (maintaining current recommended concession principles)

B. Require hospitals with car parks to offer Free Car Parking (Bi) for all inpatients' visitors and (Bii) for selected OPs

C. Extend meanstested Healthcare Travel Cost Scheme to include IP visitors

D. Strengthen incentives for hospitals to reduce the costs of access, and to facilitate visitors.

Option Bii is favoured in the short term. Information needed to implement Option D is currently lacking. Option C would be subject to abuse without intrusive and costly administration.

When will the policy be reviewed to establish the actual costs and benefits and the achievement of the desired effects? Evaluation of the impact upon patient and family welfare will be commissioned over three years following implementation to assess scope for improvement and shifting to option D.

Ministerial Sign-off For Impact Assessments:

I have read the Impact Assessment and I am satisfied that, given the available evidence, it represents a reasonable view of the likely costs, benefits and impact of the leading options.

Signed by the responsible Minister:

.....Date:

Summary: Analysis & Evidence

Policy Option: Bi	Description: Require hospitals with car parks to offer Free Car Parking for inpatients' visitors after first night

COSTS

ANNUAL COSTS		Description and scale of **key monetised costs** by 'main affected groups' Exchequer Costs[1] (higher estimates)
One-off (Transition)	**Yrs**	£65m foregone from current users now entitled to free spaces, £45m from those crowded out. £6m administrative costs to run new system. Transition cost covers evaluation only.
£2m	3	
Average Annual Cost (excluding one-off)		
£90m-£115m		**Total Cost** (PV) — **£ Ev base Sect.i**

Other **key non-monetised costs** by 'main affected groups' Revenues foregone higher if more hospitals would have started to charge; lower if with new policy some withdraw from car park provision.

BENEFITS

ANNUAL BENEFITS		Description and scale of **key monetised benefits** by 'main affected groups' Illustrative £195m healthgain from 11m extra visitors at value (£17ea) required to justify this option. Other benefits: est £25m net utility gain from additional cp users (distribution adjusted); £65m saving for current users
One-off	**Yrs**	
£		
Average Annual Benefit (excluding one-off)		
£285m		**Total Benefit** (PV) — **£**

Other **key non-monetised benefits** by 'main affected groups' Environmental, congestion and health harms associated with greater car use for est 4m extra journeys.

Key Assumptions/Sensitivities/Risks Sub-options explored in evidence base, which lists numerous assumptions required. Health benefits highly speculative – figures show benefit level required to justify Option Bii (using higher cost estimates). See risk section regarding significant risk of supply restrictions over time.

Price Base Year	Time Period Years	**Net Benefit Range** (NPV) **£ See section k, Ev. Base**	**NET BENEFIT** (NPV Best estimate) **£ around zero**

What is the geographic coverage of the policy/option?			England	
On what date will the policy be implemented?			within 3 years	
Which organisation(s) will enforce the policy?			Car park managers	
What is the total annual cost of enforcement for these organisations?			£ n/a	
Does enforcement comply with Hampton principles?			Yes	
Will implementation go beyond minimum EU requirements?			No	
What is the value of the proposed offsetting measure per year?			£	
What is the value of changes in greenhouse gas emissions?			£	
Will the proposal have a significant impact on competition?			Yes	
Annual cost (£-£) per organisation (excluding one-off)	Micro	Small	Medium	Large
Are any of these organisations exempt?	No	No	N/A	N/A

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

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

Key:	**Annual costs and benefits: Constant Prices**	**(Net) Present Value**	

Summary: Analysis & Evidence

Policy Option: Bii	Description: As Bi plus require hospitals with car parks to offer Free Car Parking for OPs beyond 3rd Day/Follow-up

COSTS

ANNUAL COSTS	Description and scale of **key monetised costs** by 'main affected groups' Exchequer Costs (Higher estimates)
One-off (Transition) **Yrs**	£80m foregone from current users now entitled to free spaces, £50m from those crowded out. £9m administrative costs to run new system. Transition cost covers evaluation only.
£2m	
Average Annual Cost (excluding one-off)	
£110m-£140m	**Total Cost** (PV) — **£ Ev base Sect.i**

Other **key non-monetised costs** by 'main affected groups' Revenues foregone higher if more hospitals would have started to charge; lower if with new policy some withdraw from car park provision.

BENEFITS

ANNUAL BENEFITS	Description and scale of **key monetised benefits** by 'main affected groups' Illustrative £215m healthgain from 11m extra visitors (@c.£17 ea) and reduced stress for 6m outpatients (@ c. £1 ea) required to justify option Bi. Other benefits: est £30m net utility gain from additional cp users (distribution adjusted); £80m saving for current users.
One-off **Yrs**	
£	
Average Annual Benefit (excluding one-off)	
£325m	**Total Benefit** (PV) — **£**

Other **key non-monetised benefits** by 'main affected groups' Environmental, congestion and health harms associated with greater car use from estimated 4.8m extra journeys.

Key Assumptions/Sensitivities/Risks As for option Bi. Valuation assumptions consistent with Bi.

Price Base Year 2009	Time Period Years	**Net Benefit Range** (NPV) **£ See section k, Ev. Base**	**NET BENEFIT** (NPV Best estimate) **£ around minus £15m pa**

What is the geographic coverage of the policy/option?			England	
On what date will the policy be implemented?			within three years	
Which organisation(s) will enforce the policy?			car park managers	
What is the total annual cost of enforcement for these organisations?			£ n/a	
Does enforcement comply with Hampton principles?			Yes	
Will implementation go beyond minimum EU requirements?			No	
What is the value of the proposed offsetting measure per year?			£ 0	
What is the value of changes in greenhouse gas emissions?			£ under review	
Will the proposal have a significant impact on competition?			Yes/No	
Annual cost (£-£) per organisation (excluding one-off)	Micro **0**	Small **0**	Medium	Large
Are any of these organisations exempt?	No	No	N/A	N/A

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

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

Key:	**Annual costs and benefits: Constant Prices**	**(Net) Present Value**	

Summary: Analysis & Evidence

Policy Option: C	Description: Extend means-tested Healthcare Travel Cost Scheme to include inpatients' visitors

COSTS

ANNUAL COSTS	
One-off (Transition) **Yrs**	Description and scale of **key monetised costs** by 'main affected groups' Exchequer Costs[1].
£	£9 average reimbursement for estimated 12 million visitors plus £4 admin cost per claim to avoid fraudulent claims.
Average Annual Cost (excluding one-off)	
£160m	**Total Cost** (PV) **£**

Other **key non-monetised costs** by 'main affected groups' Additional administrative costs will be incurred for each visitor on their first claim when establishing entitlement. The cost may be in excess of £10, and some annual renewal would be involved, but no estimate is available for the number of visitors that would be involved (a fraction of the number of visits).

BENEFITS

ANNUAL BENEFITS	
One-off **Yrs**	Description and scale of **key monetised benefits** by 'main affected groups' £165m savings for 9m current visitors plus £25m consumer surplus from 3m extra visits, both incl distribution adjustment for lowest quintile (x2), plus £55m health benefit from extra visits (using critical value from Option Bi), less £25m admin burden to prove legitimacy of claims.
£	
Average Annual Benefit (excluding one-off)	
£220m	**Total Benefit** (PV) **£**

Other **key non-monetised benefits** by 'main affected groups' Environmental, congestion and health harms associated with perhaps 15m extra journeys (using variety of transport modes).

Key Assumptions/Sensitivities/Risks

Price Base Year	Time Period Years	**Net Benefit Range** (NPV) **£ See section k, Ev. Base**	**NET BENEFIT** (NPV Best estimate) **£ around -£160m pa**

What is the geographic coverage of the policy/option?			England	
On what date will the policy be implemented?			undecided	
Which organisation(s) will enforce the policy?			self-enforced	
What is the total annual cost of enforcement for these organisations?			£ n/a	
Does enforcement comply with Hampton principles?			Yes	
Will implementation go beyond minimum EU requirements?			No	
What is the value of the proposed offsetting measure per year?			£ n/a	
What is the value of changes in greenhouse gas emissions?			£ not calculated	
Will the proposal have a significant impact on competition?				
Annual cost (£-£) per organisation (excluding one-off)	Micro	Small	Medium	Large
Are any of these organisations exempt?	No	No	N/A	N/A

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

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

Key:	**Annual costs and benefits: Constant Prices**	**(Net) Present Value**	

1 The Exchequer Costs represent the total net impact on the Government's budget of an option.

Summary: Analysis & Evidence

Policy Option: D	Description: Strengthen incentives for hospitals to reduce the costs of access, and to facilitate visitors for more of their inpatients.

COSTS

ANNUAL COSTS		Description and scale of **key monetised costs** by 'main affected groups' Transition cost includes the initial research and investigation of impacts required to scope, fully to cost and to justify the proposal.
One-off (Transition)	**Yrs**	
£2m		
Average Annual Cost (excluding one-off)		
£		**Total Cost** (PV) **£**

Other **key non-monetised costs** by 'main affected groups' Information collection to establish numbers of inpatients with regular visits, and true costs of outpatient attendance, with a view to regular updating, benchmarking, and possible inclusion in contracts

BENEFITS

ANNUAL BENEFITS		Description and scale of **key monetised benefits** by 'main affected groups'
One-off	**Yrs**	
£		
Average Annual Benefit (excluding one-off)		
£		**Total Benefit** (PV) **£**

Other **key non-monetised benefits** by 'main affected groups' Reduced costs of access for patients and their visitors, and health benefits arising from increased visitor numbers and reduced stress; all as hospitals respond to incentives implicit in publication of comparative performance, and any explicit incentives introduced.

Key Assumptions/Sensitivities/Risks Data required to set up appropriate measures is currently lacking. It is assumed that an upfront investigation of the sensitivity of visiting and attendance to cost,and of health to these factors would be necessary and could be conducted within £2m.

Price Base Year	Time Period Years	**Net Benefit Range** (NPV) **£ positive**	**NET BENEFIT** (NPV Best estimate) **£**

What is the geographic coverage of the policy/option?				England	
On what date will the policy be implemented?				next three years	
Which organisation(s) will enforce the policy?				not required	
What is the total annual cost of enforcement for these organisations?				£ n/a	
Does enforcement comply with Hampton principles?				Yes	
Will implementation go beyond minimum EU requirements?				No	
What is the value of the proposed offsetting measure per year?				£ N/A	
What is the value of changes in greenhouse gas emissions?				£	
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?	No	No	N/A	N/A	

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

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

Key:	**Annual costs and benefits: Constant Prices**	**(Net) Present Value**	

Evidence Base (for summary sheets)

[Use this space (with a recommended maximum of 30 pages) to set out the evidence, analysis and detailed narrative from which you have generated your policy options or proposal. Ensure that the information is organised in such a way as to explain clearly the summary information on the preceding pages of this form.]

This Impact Assessment reviews what evidence is available to inform selection and appraisal of options to improve access to hospital by those wishing to visit patients and by those attending as outpatients. The more attractive options are subject to consultation in the consultation exercise that this IA accompanies. Comment is welcome on any aspect of the analysis herein as well as in direct response to the questions posed in the consultation paper.

The IA is set out following the standard DH structure, indicated by the blue section headings.

a) The Problem to be Addressed including Equality Concerns

i What suggests that outcomes are sub-optimal; and how bad is it?

ii Does the problem fall more heavily on certain disadvantaged groups?

There is a wealth of anecdotal evidence that hospital attendance by inpatients' visitors and by outpatients is often frustrated by the high cost of access, including car parking fees, and/or the lack of good public transport links. The frustration may actually deter attendance (especially by visitors) or it may impose a finanicial burden upon those who are already suffering from ill health (their own or that of loved ones whom they are visiting).

In addition, there is apparently a sense of grievance suffered by those who are excluded from a visible NHS facility (car parking) by their inability to pay for it and by others who resent paying a charge for an NHS facility – there is no comparable grievance or complaint associated with the costs of public transport to hospital. However, this grievance is not evaluated in this impact assessment, as it is not susceptible to measurement by the tools of cost-benefit analysis. Nevertheless, it should be borne in mind as one driver of policy.

The difficulties and costs of access for inpatients' visitors and outpatients impinge upon welfare in two dimensions:

- Time and money:
  - those who do attend as outpatients or who visit inpatients are faced either with the high fees for many car parks, or alternatively with paying for taxis or public transport
  - particularly for those forced to used public transport, if this is not convenient for their hospital, the journey may take much time, and may force them to take time off work (particularly for outpatient attendance) or to endure hazards.
- Health:
  - visitors may be deterred from attendance upon inpatients, which in turn may inhibit recovery by inpatients both through the psycho-somatic impact of loneliness and isolation, and more directly for want of the personal care and advocacy provided by the visit of those who care most deeply about their welfare (who may for example provide them with more help with eating properly, with exercise, with personal care, with washing, more frequently than nursing staff can)
  - outpatients may be deterred from attendance
  - visitors and outpatients may suffer from stress, if the public transport journey is strenuous or if timing is uncertain, or if they are forced to pay high fees for car-parking whilst they are already distressed by their own or their loved ones' medical predicament. (For outpatients this stress may be exacerbated by uncertainty with regard to duration of their clinic appointment.)

Hence, access problems compromise the amenity and perhaps the health of both inpatients and outpatients, particularly the less advantaged, and is in tension with the principle of equality of access to health services irrespective of ability to pay. (Against this, in some hospitals there is concern that visitors represent an infection risk.)

There is unfortunately no systematic evidence available regarding visitor frequency or the extent to which visits to inpatients or outpatient attendance are inhibited by access difficulties, nor of the hardship suffered as a consequence of charges and fares. It is clear, however, that the burden of access difficulties falls disproportionately upon disadvantaged groups, as solutions exist for those with less pressing budget constraints: high car parking fees can be paid, or taxis can be procured.

Access for the least advantaged to attend as outpatients or as inpatients is reimbursed by the Healthcare Travel Cost Scheme. Further, access for those who

have mobility difficuties is provided for by patient transport systems. However, neither of these schemes provide any coverage for inpatients' visitors, and the threshold for the schemes will leave many outside its scope who nonetheless are sensitive to the cost of attendance. Hence, cost of access remains an important concern particularly for the less well-off. A recent survey, covering patients attending hospitals in four PCTs, shows, unsurprisingly, that those in lower income groups, and in minority ethnic groups are disproportionately concerned about travel costs when choosing hospital:

Extract from survey asking *How important were each of the factors below in influencing which hospital you chose?*		Income band >	less than £9999	£10000 TO £19999	£20000 TO £39999	£40000 TO £74000	£75000 AND OVER	Total
Travel Costs	Essential	Count	61	46	16	4	1	128
		% in income band	27.4%	18.0%	8.5%	3.8%	4.2%	16.1%
	Very important	Count	56	47	24	7	0	134
		% in income band	25.1%	18.4%	12.7%	6.6%	.0%	16.8%
	Somewhat important	Count	46	43	57	14	5	165
		% in income band	20.6%	16.9%	30.2%	13.2%	20.8%	20.7%
	Not important	Count	60	119	92	81	18	370
		% in income band	26.9%	46.7%	48.7%	76.4%	75.0%	46.4%

Source: Choice at Point of Referral, Early Results of a Patient Survey, King's Fund, Anna Dixon, Ruth Robertson, King's Fund, additional data supplied by courtesy of Ruth Robertson

Similarly, travel costs are more important to those from non-White ethnic backgrounds:

Extract from survey asking *How important were each of the factors below in influencing which hospital you chose?*		Ethnic background >	White background	Mixed and Non white background	Total
Travel Costs	Essential	Count	141	24	165
		% within Ethnic Group	15.9%	28.6%	17.0%
	Very important	Count	147	24	171
		% within Ethnic Group	16.5%	28.6%	17.6%
	Somewhat important	Count	175	21	196
		% within Ethnic Group	19.7%	25.0%	20.1%
	Not important	Count	426	15	441
		% within Ethnic Group	47.9%	17.9%	45.3%
	Total	Count	889	84	973
		% within EthnicGroup	100.0%	100.0%	100.0%

The survey covered patients from four PCT sites:

- *One largely urban area situated on the edge of a large metropolitan area. Relatively young population with larger than average numbers of children 16 years and under. Approximately 14% of the population are from a black or ethnic minority group and 20% have a limiting long term illness. Pockets of deprivation.*
- *One situated in a large city. The population is slightly younger than average. Approximately 21% of the population are from a black or ethnic minority group. Pockets of deprivation.*
- *One situated in a mixed urban/rural area. The population has slightly more older people and fewer in younger age-bands than the national average. Pockets of deprivation.*
- *One situated in a mainly rural, coastal area. Approximately 30% of the population are above retiring age, and there are fewer young people than the national average. The region has the lowest birth-rate in the UK and is 98% ethnically indigenous.*

The survey was sent to patients referred for first outpatient appointment at the eight NHS trusts, three Foundation Trusts and 2 ISTCs that signed up to take part in the study. It was not sent solely to patients living in each PCT site. The providers were selected as they received over 5% of the referrals from each PCT site described above. So patients answering the questionnaire will not have necessarily lived within that PCT, but will have attended a hospital that was receiving patients from the PCT site.

This survey also provides evidence of particular dissatisfaction with carparking facilities.

The survey suggests that around one third of those attending hospital rate the car parking facilities as either poor or very poor, compared to less than an eighth giving those ratings to public transport access:

% of Total Sample: Rating of Local Hospital	Car Parking	Accessible on Public Transport
Very Good	11.7%	24.4%
Good	23.3%	26.2%
Fair	26.9%	18.0%
Poor	20.6%	7.0%
Very Poor	12.7%	4.3%
Don't Know	4.9%	20.1%
Total Sample (number)	1659 patients	1634 patients

Somewhat surprisingly, car-parking is an important concern for all income bands:

Extract from survey asking *How important were each of the factors below in influencing which hospital you chose?*		Income band >	less than £9999	£10000 TO £19999	£20000 TO £39999	£40000 TO £74000	£75000 AND OVER	Total
Car parking	Essential	Count	77	74	62	19	5	237
		% inc. band	31.4%	28.0%	30.2%	17.4%	20.8%	28.0%
	Very important	Count	86	90	61	33	6	276
		% inc. band	35.1%	34.1%	29.8%	30.3%	25.0%	32.6%
	Somewhat important	Count	37	55	52	32	8	184
		% inc. band	15.1%	20.8%	25.4%	29.4%	33.3%	21.7%
	Not important	Count	45	45	30	25	5	150
		% inc. band	18.4%	17.0%	14.6%	22.9%	20.8%	17.7%
	Total	Count	245	264	205	109	24	847
		% inc. band	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

b) Reason for Intervention

i Why aren't existing incentive structures sufficient to motivate and allow delivery of better outcomes? What are the obstacles to improvement?

Hospitals that are working at less than full capacity have a financial incentive to provide better access in so far as potential patients are able to exercise choice, and hospitals can thus attract more business.

However:

- there are many patients for many specialties, and particularly those entering the system as emergencies, do not have effective choice;
- many hospitals are already operating at full capacity and under budget constraints, so that sacrifice of revenue or incurring new expenditure in order to mitigate access may not seem a priority;

- those upon whom access costs weigh most heavily may not be amongst those most likely to be active in choice of hospital.

ii What market or government failures are involved?

In a state funded system, incentives to mitigate costs of access are determined by public sector contracts, guidance and regulations; hence it is for government to review levers available to affect such incentives. If there is a problem, it will reflect misalignment of incentives between the principal (the taxpayer seeking cost-effective policies to achieve government objectives) and the local agents (commissioners and providers) charged with this responsibility.

c) Policy Objectives

i What improvements are sought in the specific area of concern?

Objective of policy is to reduce the economic costs of hospital attendance for inpatients' visitors and for outpatients, without compromising access by staff and others who need to attend hospital, and without compromising the overall value secured from relevant budgets.

ii What ultimate benefits (to patients or taxpayers or the general public, or to disadvantaged groups) should determine the selection of options?

The measure of achievement of the objective should be sensitive to the ultimate intended effect: to improve the health and wellbeing of patients, particularly through facilitation of visits to inpatients, and to mitigate the costs falling on those who can least afford them.

Hence measures of success might include reduction in the following:

- the cost in time and money falling on patients and their families in consequence of illness. The objective should be phrased broadly to encompass not only transport costs per visit , but also the overall cost of seeking and obtaining adequate care. Responses to policy that involve, for example, reducing the need to attend hospital or the duration of stay should count as a success of the policy.
- Number of inpatient days (for stays in excess of two days duration) not enhanced by a visit from family or friend.

d) Problem Ætiology

What does social and medical science tell us about:

- **How things are going wrong?**
- **What are the causal mechanisms and what underlying incentives are responsible for these mechanisms?**

Whilst, as mentioned, choice and competition may create incentives for hospitals to ease access for patients, the underlying problem appears to be that such issues are deemed outside the core responsibilities of hospital service providers:

- Those responsible for provision of hospital services properly do not regard the financial and time burden imposed upon patients or their families as their responsibility. It seems that as a consequence opportunities to ease access and to encourage visits, including for example by exploiting options for giving priority access or discounted access to car-parking, are overlooked, notwithstanding existing encouragement of such concessions in the management of car parks (see Consultation Paper for details). Guidance for prioritisation appears to be implemented only patchily. From a broader social perspective, the welfare of patients and their families in this broad sense is a matter of concern.
- Even the health consequences of cost-hurdles to hospital attendance may be ignored. Some hospital service providers may take a narrow view of their responsibility for patients' health – not considering it within their ambit of responsibility for example to attempt to influence transport systems to provide better access to hospitals. Or they may despair of success in such an endeavour. And they may consider it improper to use hospital financial resources to subsidise attendance by outpatients or by inpatient visitors beyond the scope of mandatory and prescribed schemes. Nevertheless, as evidence gradually accumulates regarding the benign impact of involving patients in their own care and in decision making, it becomes plausible that an important medical rôle attaches also to patients' visitors.

- **How things might go better?**

Either by means of the interventions considered below, or others that influence their objective functions, decision makers might come to take full account of the health, welfare and inequality consequences of costs of visiting and attending hospital.

e) Identification of Options to Consider

i In the light of the evidence of the scale and nature of the problem, what might most plausibly be done to achieve policy objectives?

The problem as described above can be addressed in different ways:

- central regulation requiring service providers (finance allowing) to provide subsidised access for target groups of hospital visitors. On this approach local discretion is circumscribed, with a risk of cost-ineffectiveness and other problems arising from failure to be sensitive to local circumstances. However, regulation has the advantage of providing greater certainty that some effort will be made to address the problem identified. Within this prescriptive approach, the problem can be addressed with narrower or wider scope:
  - car-parking guidance and direction can be refined: a direct response to the anecdotal and survey evidence cited above that patients and their visitors find these costs particularly irksome. This would focus upon the principal means of transport to hospital, and effectively require prioritisation of car parking amongst that group of hospitals that have car-parking and that currently charge for it. Although narrow in scope, it would particularly address the sense of grievance felt by those charged for a facility provided by the NHS.
  - direction can be given for subsidy for travel costs across all transport modes for selected groups of patients and/or their visitors, with a view to expanding visitor numbers and mitigating access costs.
- provision of incentives, in the first instance through information collection and dissemination, to decision-markers in hospital service providers so that they more fully take into account the impact of access costs upon the welfare of patients. The idea would be to correct the underlying mis-alignment of incentives between Principal and Agent that gives rise to the problem.

To explore these alternative approaches, three options are here developed from the above analysis in addition to the Do Nothing option, as follows:

A. Do Nothing (maintaining current recommended concession principles)

B. Require hospitals with car parks to offer Free Car Parking (Bi) for selected inpatients' visitors [and (Bii) for selected OPs]

C. Extend means-tested Healthcare Travel Cost Scheme to include IP visitors

D. Strengthen incentives for hospitals to reduce the costs of access, and to facilitate visitors.

The options are now described in more detail. The precise definition of the option is subject to change in the light of further research and response to consultation: details here illustrated should encourage consultees to consider and to suggest possible improvements.

Option B. Require hospitals with car parks to offer free car parking for selected inpatients' visitors and OPs

This option is designed to benefit only those who attend hospitals with car-parking facilities that currently levy a charge. (In theory, it would be possible to expand this option to require funding of car-parking by hospitals that do not currently provide car parks, but this would egregiously skew policy in favour of one mode of transport over others, creating environmental externalities.)

Eliminating car-park charges altogether would inevitably raise the demand for car parking space; for many hospitals the result will be that they become full – frustrating the aim of the policy, and creating frustration for other users.

To maintain the viability of the policy, it is therefore necessary to limit the concession of free car-parking to selected groups of inpatients' visitors and outpatients.

Even a concession limited to selected groups, will generate an increase in demand and a fall in revenues. Assuming that the option of creating additional car-parking space is not financially viable, many hospitals will be forced to respond to the new requirement by creating a privileged section of the car park for the favoured user group, notwithstanding overcrowding for other groups, or by imposing higher charges on other users so to deter utilisation, creating space for the favoured groups. (This latter option may also help to maintain hospitals' financial viability, and to mitigate environmental externalities; however, it would impose financial costs upon other users, including patients, some of whom may be little less entitled to consideration than the groups to be favoured under the policy. Hospitals may prefer to avoid imposing financial costs in this way, even if some such users end up without access to car-parking at all.)

Two specific options are explored, one focusing particularly on inpatient visitors (as the group whose attendance is most likely to be being deterred by charges); the other introducing a parallel minimum concession for regular outpatient visitors:

- Bi: Free Users: visitors of inpatients from their first night (i.e. all inpatients except day cases)

- Bii: Free Users:
  - visitor of inpatients from their first night in hospital (as Bi)
  - follow up outpatient attendances beyond the third follow-up attendance, for the duration of the attendance.

However, in the analysis that follows "Option B" *simpliciter* is used to refer to any of the possible options that involve prioritising use of existing car parks. These might, for example, include making car parks free for some groups of inpatients whilst imposing a cap on the cost of a visit, for specific groups of outpatients. Clearly, the number of such sub-options is too great to allow separate costing. Additional avenues to explore may emerge from consultation.

The mode of implementation of these differential policies would be for hospitals themselves to determine. For costing the administrative overhead, we assume for simplicity that some form of reimbursement scheme is employed, incurring costs of a few minutes clerical work and patient time for each reimbursement.

Even with benefits restricted to these limited classes of users, there may be some hospital car parks that become full under this option – that is, even were all other users excluded (by price or otherwise) from the car park at the periods of peak usage, demand might still exceed supply at certain times of day. Clearly, the outcome could be to frustrate these groups and indeed the aims of policy. However, if this circumstance applies to a small number of sites only, a fair solution may be to allocate spaces in advance, and on the basis of more restrictive criteria for other users. Such approaches would obviously best be devised locally.

Option C: Extend means-tested Healthcare Travel Cost Scheme to include selected inpatients' visitors.

Option C involves reimbursement or subsidy of all modes of transport to hospital. Most obviously this can be effected by extension of the Hospital Travel Cost scheme to additional groups, including visitors. This allows the concession to be means-tested and thus focused upon those most likely to be inhibited from visiting hospital by costs.

The Healthcare Travel Cost Scheme (HTCS) was set up in 1988, as part of the NHS Low Income Scheme, to provide financial assistance to those patients who do not have a medical need for ambulance transport, but nevertheless need help with their travel costs .

Under the Scheme, patients on low incomes or receiving specific qualifying benefits or allowances are reimbursed in part or in full for costs incurred in travelling to receive certain NHS services, where their journey meets certain criteria. Reimbursement can be made for travel by public transport and private car. Patients travelling by private car can reclaim the cost of parking charges. The scheme currently covers the lowest quintile of the income distribution identified by a range of means-related benefits.

In 2008-09 584,000 claims were made for help and a total of £6.6 million was paid out.

Currently, the scheme covers only patients meeting certain criteria. Visitors are currently outside the legislative scope of the scheme, so this option would require primary legislation.

For the sake of this exercise, it is assumed that the following categories are included, as in Option Bi:

- visitors of inpatients after their first night (i.e. all inpatients except day cases)

The option of extending HTCS only to visitors of inpatients who are themselves entitled to reimbursement under the HTCS has been considered. However, this option has been ruled out as a matter of natural justice: the beneficiaries of reimbursement would be the visitors, who would often not fall in the category of people who should receive means-tested benefits. Conversely, some visitors who would be so entitled might wish to visit patients who are not so entitled.

Hence, the option explored involves direct means-testing of visitors.

Option D: Strengthen Incentives for Hospitals to Reduce the Costs of Access, and to Facilitate Visitors for More of their Inpatients.

The underlying problem identified is that service providers have insufficient incentives to take account of the effect of transport costs upon the health and welfare of patients and their visitors. The solutions suggested at Options B (on any sub-option) and C address this problem effectively by mandating that providers, at least for certain of their patients, take full account of such costs, and address them in the ways specified. Other costs, which may be as important to visitors to hospitals, such as the costs in patient time and inconvenience that can be addressed by ergonomic hospital lay-out and by forceful engagement with local transport and planning authorities may be ignored.

A further drawback of such approaches is that they remove providers' ability and discretion to weigh the proportionate gains to patients from subsidy of transport costs against achievement of other outcomes that may be more valuable to patients.

An alternative route to addressing this issue might be to attempt to integrate the relevant outcomes into hospital-service providers decision procedures with appropriate weight.

The proposal here is therefore

- to develop appropriate metrics of success, including
  - the full economic cost of access for patients, in both time and money, and
  - the proportion of inpatients (according to their lengths of stay, and other criteria that may determine the importance of receiving visitors) who have adequate numbers of visitors during their stay,

and

- to introduce these measures into the set of quality indicators against which providers' performance is measured by commissioners and by patients exercising choice.

The first step in developing this option would be to undertake research to establish from a sample of patients:

- access costs:
  - the important categories of direct and opportunity costs incurred by different groups of patients (picking up equality aspects) in receiving health care services;
  - methodological options for collecting this information systematically for different healthcare providers, so as to monitor their performance for different patient groups
- visitors to inpatients:
  - visitor numbers to inpatients, and the extent to which this is associated:
    - differences in the cost of access to hospitals sites
    - differences in the experienced quality of healthcare
    - differences in health outcomes

– options for routine collection of such data and of routine assessment of associated outcomes.

ii Can these options be focused upon righting inequalities?

The problem identified will naturally fall more heavily on those of lesser means. Means-testing could in theory be adopted as in Option C – this is discussed below.

With regard to Option D, there would be merit in ensuring that relevant information is collected by protected equality characteristic (e.g. for different ethnic and age groups), so that providers can be made aware of any groups particularly disadvantaged with regard to visitor numbers and access costs

iii Should one option be to commission further research to narrow uncertainty?

Yes, possibly. At the consultation stage, the values of many of the parameters required to establish with reasonable certainty the costs and the benefits of different options remain unknown. Over the course of the consultation period, it is hoped that a survey of hospital trusts will remedy this – with more accurate information regarding current utilisation of hospital sites by different classes of users, expert evidence regarding elasticities of demand, and consequently a more accurate picture over all as to what is at stake in pursuing different options.

It will be particularly important to establish whether there is any evidence base relating to the health gain above attributed to visiting of patients, and or to the enhancement to the patient experience of care, as the justification of the proposals turns upon this issue.

Following consultation, the gains and opportunity costs of deferring implementation whilst further research is undertaken will be reviewed.

iv Amongst implementation options, what benefits would arise from piloting and evaluating the lead proposal(s) to decide whether and how to roll out?

It is unlikely that further research without piloting will remedy uncertainty regarding the sensitivity of visitor numbers to reduction in charges, nor the impact of enhanced visitor numbers on patient welfare generally and health outcomes in particular.

Following consultation, when considering implementation options, the optimum mode for gaining this knowledge will be an important consideration. Under all

three options, there will be a natural differentiation between groups of patients (for instance between those attending hospitals that have car parks and those that do not) that should facilitate evaluation even without formal piloting, but the latter remains an option.

f) The Do Nothing Option

i What is the prognosis for the outcomes of concern, for different groups, under current policies?

Problems with access to hospital currently are set out above.

The prognosis is for increased competition between providers for patients' choices, and hence increased motivation to take access concerns seriously. Over time, better measures of access are likely to be developed by media interested in supporting patient choice, as choice becomes better embedded in the healthcare system. Measures may also emerge regarding visiting access alongside other facets of the patient experience.

Any trend to improve access so as to attract patients who are able to choose where to attend hospital and to enhance reputation may in the short-run be offset by the advent of a less clement financial environment, one which will encourage providers to maximise income from such sources as car-parking, and to defer introduction of costly schemes to facilitate access. Hence, the do-nothing option might best assume that the current structure of charges remains in tact for the time being.

Another possibility is that evidence will accumulate regarding the impact upon patient outcomes of visits (assuming that infection risks are contained); this would create a broader constituency of pressures that would encourage the emergence of schemes to facilitate visits.

ii Are there injustices to certain groups that demand rectification?

There remains a likelihood that the importance of access to the less advantaged patients and their visitors will not by fully reflected in decisions by hospitals, given that access costs are a severe problem only for a subset of patients – broadly including the most disadvantaged groups.

g) Mapping Required Resources and Full Impacts of Each Option

i By what mechanism is each option expected work: who will do what differently to secure the achievement of the objectives of the policy?

ii What is the evidence for these impacts – and what is an unbiased estimate of their scale, and of their impact upon different social and equality groups?

ALL OPTIONS will have both transfer and expansion impacts:

- Transfer Impacts. For some attending hospital, the changes will not affect their behaviour, but they will face lower or higher costs.
- For others, behaviour will change – there will be more visits to hospitals by members of groups favoured by the proposals (inpatients' visitors and outpatients, depending upon the option), as a result of the drop in the marginal cost of attendance, whilst others may be deterred from using car parks whether by higher charges (if hospitals opt for this mode of demand management) or simply by over-crowding.

In this section, the magnitude of these impacts are traced out, together with consequential impact upon the environment and the welfare of those involved.

Option B. Require hospitals with car parks to offer free car parking for selected inpatients' visitors and OPs

The basis of analysis is the data available via ERIC returns relating to car-parking space, charges and revenues at different hospital sites. Unfortunately, little is known regarding the current utilisation of these facilities. Hence, analysis has had to employ plausible assumptions – as a result, there is good reason to attach caveats to this analysis, and to subject it to face credibility checks during the consultation period. This would need to be supplemented by monitoring of impact following implementation.

There is also uncertainty regarding behavioural response. Again, plausible assumptions have been made in order to generate first round costs; these should be subject to critique and further analysis during the consultation.

Current Situation

Since 2001-02 information on car parking provision and costs have been collected through the Estates Related Information Collection (ERIC).[1] From 2004-05 this has been a voluntary collection so it does not provide a full NHS figure. Moreover, at some hospitals, car parks may be operated through Private Finance Initiatives (PFIs) or other third party operators. Their revenue also needs to be accounted for in relation to any proposals to remove or limit future charges for NHS users.

Centrally collected returns indicate that there are some 148,000 beds at 867 hospital sites in England providing acute and mental health services. According to the ERIC data mentioned, some 81 percent of these beds are on sites that have car parks that charge; 14 per have free car parking (mostly Mental Health sites), and for the rest no car-parking is available at all.

Given that compelling providers to fund car parks where none are currently available is neither affordable nor environmentally sustainable, it is the sites with charging car parks that are of concern. Although central returns suggest that these car parks yield some £108m, these estimates required imputation of data to some forty sites. It is believed that these sites may have more aggressive than average pricing policies as they are likely to have contracted-out car-parking management. There may also be under-reporting of revenues more generally. On the assumption that these sites charge on average £3 per hour, and that other revenue not reported comprises another 15% of the total, **the overall revenue at stake may be as much as £180m (for 2010/11), with an average charge currently of £1.23 ph.**

The analysis that follows, for simplicity of presentation, is based upon this higher figure. A lower cost projection, assuming that car parks with missing data charge at £2 and that assumes no other unreported revenue, has been calculated: it forms the lower end of the cost range on the summary sheets. Benefits have been calculated only for the higher cost estimates.

In order to estimate the impact of different policy options, it is necessary to allocate utilisation of car parks to different types of user, and then to explore consequences of removing charges. This is only possible for acute and mental health providers – hence the analysis excludes car parking at PCT facilities and care trusts, which yield a further £4m pa revenue.

An estimate of the total hours charged can be derived by dividing total revenue by the average charge per hour. To get an idea of what this means relative to the scale of operations at individual hospital sites, the sum is divided by the number of

1 Historic data are available at www.hefs.ic.nhs.uk

occupied bed days. This provides an estimate of the ***charged car parking hours for each inpatient day (each filled bedday)***. This comes to about 4 hours (the point estimate in the table below being 3.92).

To assess the impact of making car-parking free for different categories of user, it is necessary to guess how this current usage of the car park is allocated across the different user groups. And to do that, requires a number of assumptions regarding utilisation. These are set out in the right hand column of the table below, which also provides an assessment of the percentage of utilisation by different users:

Total Acute and Mental Health	Volume of users	Of wh est. no. at sites with charging car parks, assuming charging for 330 days pa; all OPs take place on those days; IP bed days and A&E reduced pro rata	Car park hours per bed day assuming 60% use the car park; (A&E: 50%)	**Percentage of total Car Park utilisation**	ASSUMPTIONS Survey data for hospitals outside London tells us that some 80% get to their local hospital by car; hence for the whole country perhaps 60% use the car park
A&E attendances	11,776,000	10,021,713	0.37	**9%**	A&E attendances average 2.5 hours car park usage
First OutPatients	16,092,469	12,979,773	0.58	**15%**	First OutPatients average 2.5 hours car park usage
Follow Ups OPs	36,585,814	29,509,180	1.05	**27%**	Follow up attendances average 2 hours car park usage, taking account of allowance for extra time, and use of concessions currently in place
In- Patients' Visitors	IP Bed Days 46,315,696	33,774,870	1.44	**37%**	On average one visitor group per day per IP bed day for a visit lasting 2.4 hours
day cases	7,418,814	6,983,250	0.31	**8%**	Daycases average 2.5 hours car park usage
Non-patient users			0.18	**4%**	This is a residual figure.
TOTAL			3.92	**100%**	

Of the 274 individual sites which reported charging, 215 (78%) indicated that they provided some form of concessions to regular users. The Department does not collect information relating to the type and value of these concessions. Hence, some unknown proportion of current hospital users will have the benefit of concessions, following current guidance. These concessions are more likely to favour outpatients, particularly those who have to attend repeatedly. To that extent, the calculations shown below may overstate the cost of offering free parking to outpatients.

On the other hand, whilst generous allowance has been made for the revenue earned by hospital car-parks managed by PFI and other external contractors, for which they would have to be compensated by the NHS, no allowance has been made for the costs of this negotiation (nor the possibility that the outcome is disadvantageous to the NHS, which is in a position of varying an existing contract).

Clearly the more generous the policy is with regard to one group of users, the more risk there is that access to other users (and indeed to the favoured group) is compromised, and the more risk that other users will clamour for concessions.

Hence, with a view to costs and the risk of over-crowding, sub-options have been explored along two dimensions:

i. limiting free-parking to visits to inpatients who have been in hospital for more than a certain number of days

ii. limiting any free parking for outpatients to those who are obliged to have more than a certain number of follow-up attendances.

An option to provide free parking to all patient users has also been costed. However, this option is unlikely to be viable, not only because of its heavy cost, but also because in many cases the resultant overcrowding may vitiate the policy: hospital users are unlikely to welcome free access to a hospital car park that is permanently full. (It could be, however, that such a policy is viable for a number of hospitals that are endowed with large unused car-parking facilities; it is a separate question whether this is a good use of the capital resources involved.)

The data for these options have been derived from two separate sources:

- For inpatients, from Hospital Episode Statistics (HES) it is possible to estimate the number of bed-days that are accounted for people in hospital for more than a specified number of days.

- For outpatients, no such longitudinal data is collected: only the distinction between first and follow-up attendances is known. However, the proportion of outpatients' follow-up attendances accounted for by attendances beyond a certain number in the series has been modelled by estimating what fixed chance of being invited to come for a further follow-up explains the ratio of follow-up to first outpatient appointments (around 2:1). The ratio turns out to be .69.

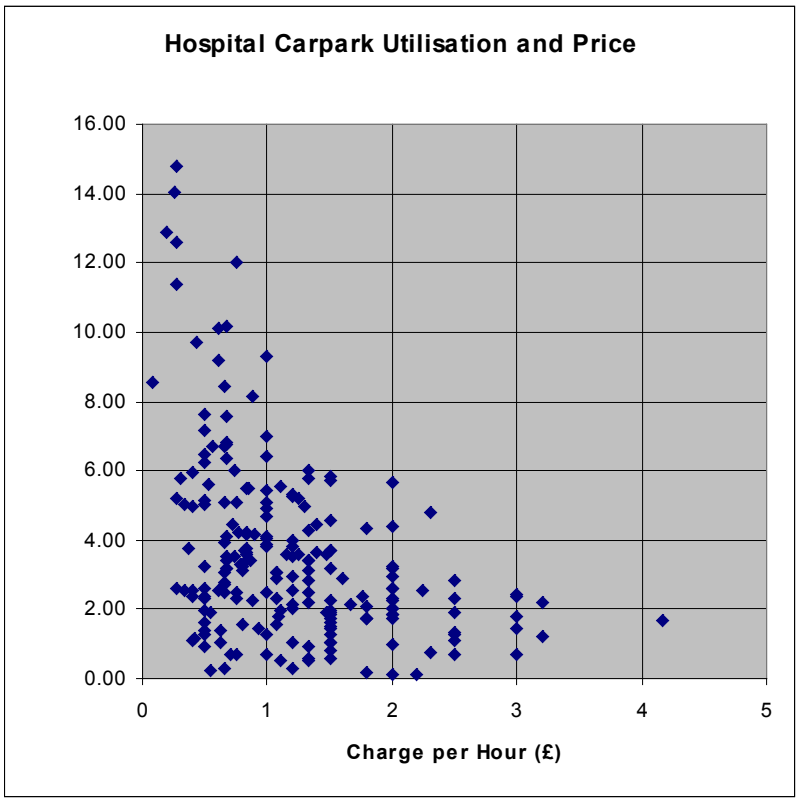
The consequential estimates of the volume of bed-days and outpatient appointments at hospital sites with charging car parks are shown in the table; the top figures correspond to those shown in the previous table.

ESTIMATE PATIENT NUMBERS AT CHARGING SITES	IP bed days beyond threshold at charging car parks (indicated no of days pa)	OPs est.follow-ups beyond threshold at charging sites
Beyond X days stay, X Follow-Up attendances	In Patient Bed-Days	Out Patient Attendances
X = 0 (i.e. from first follow up and from first night)	33,774,870	29,509,180
1	29,084,503	20,494,125
2	26,097,036	14,233,170
3	23,912,463	9,884,937
5	22,217,299	4,767,804
7	20,843,675	2,299,656
10	19,693,679	770,335
MEMO: All OPs, DayCases, A&E Attends		59,493,915

This data provides the basis for estimating the numbers in the relevant categories (visitors of inpatients who have been in hospital for more than a certain number of days, and outpatients who have been asked for more than a certain number of follow-up appointments) who would immediately benefit from the free car-parking proposal (on the basis of the estimates shown above regarding frequency of visit and proportion of current visits and attendances using the car park facilities; which are assumed invariant across the different sub-options).

Behavioural Response to Different Options and Consequential Impacts

Some evidence of the responsiveness of demand to changes in price (its price elasticity) can be derived from the relationship between hours charged and price per hour that can be observed at existing car parks. The relationship is not a pure demand effect – it is likely that it is distorted by supply effects if higher charges (relative to the cost of supply – which in further work might be estimated from land prices in the neighbourhood) induce greater space provision, lowering apparent utilisation. Perhaps more importantly, it is possible that there is large use by the general public of hospital car parks that are relatively cheap, and this element of demand would not experience a price reduction with the options under consideration. Nevertheless, the graph is suggestive of a potential for sizeable increases in demand.



On this basis, estimated response to price reduction is based upon the following assumptions:

- that provision of free spaces increases the proportion of those attending hospitals who use car parks by twenty percentage points (from 60% to 80% for most categories of visitor).
- that inpatients entitled to free carparking for their visitors would receive four visits every three days instead of one per day, and that average duration would rise from 2.4 hours to 3.2 hours.

Overall, this represents an overall increase in demand for car-parking from the inpatients' visitors of some 140% for the relevant group of inpatients' visitors (a response to a 100% drop in the price).

The chart also suggests that a large number of carparks have significant available space. Hence, it is likely that a certain proportion of additional demand may be accommodated without significantly affecting other users, but that this proportion will decline as the increase in demand rises (with options of greater scope). Given that there will be some car parks that can accommodate vastly increased demand without difficulty, and others that are already very often full, even the broadest options will be partially accommodated, and even the narrowest will require some accommodation.

The impact upon other users depends upon the extent of available space in the car park, and upon the generosity of the prevailing and new charging policy. Although there is no firm evidence regarding the charging policies in place in different Trusts at different sites, it is plausible, *a priori* and from casual inspection of the level of charges, that some Trusts are operating charging policies that set charges at less than revenue-maximising levels. Such a policy would be motivated by the same concern for the plight of patients and their visitors that motivates the current policy review at a national level. Whilst sub-commercial charging would have been tempered by pressures to maximise revenue, in many hospital Trusts, particularly non-Foundation Trusts and those with surpluses, such incentives have been weak. Where charging has been less than commercial, the introduction of the present proposals would weaken a major reason for restraint in charging, and will thus allow some Trusts to manage demand for car-parking space by increasing the charges of the remaining group towards the revenue maximising level; however, given that on many options many patients would still be charged, many hospitals might well continue to resist full commercial charging.

Hence, the following three categories of hospital sites emerge:

- **a. Hospital sites whose car parks levy revenue maximising charges currently, and which have no space constraints even following the introduction of a Free User group.** For these hospitals, as they had already set charges at the point at which marginal revenue from a further rise would be negative (as demand would be choked off more than outweighing the increased revenue from those who continue to use the car park), there is no possibility of recouping ANY revenue from the other users, even if they wished to do so. The following consequences apply:
  - BENEFITS (see further discussion in Benefits section below)
    - Visitors and Outpatients who no longer have to pay the car parking charge on their visits, benefit by the existing charge being removed
    - overall utilisation increases according to the elasticity of demand . Benefits accrue:
      - to the additional patients visited where these visits would not have taken place otherwise, and to the visitors themselves; these groups are likely to be from disadvantaged backgrounds as they were deterred from visiting by current charges, and thus of disproportionate social value (see Benefits section below), and
      - to the visitors/attendants who would have come anyway but who now enjoy cheaper or more convenient access.
    - there are corresponding environmental and wider social harms to that portion of increased demand constituting extra journeys or journeys switched from public transport).
  - EXCHEQUER COSTS
    - Trust revenues drop by the current charges levied on the group now benefiting from free parking.
- **b. Hospital sites whose car parks levy revenue maximising charges currently, but which suffer space constraints following the introduction of a Free User group.** The scale of expansion may be the same or it may be capped by the physical capacity of the car park, if other users are crowded out. If the expansion in the Free group crowds out some but not all of the other users, the consequence is a loss of some of the revenues that had been realised from this group, which may be offset by some increase in charges to crowd them out, if this option is adopted by local trust management. Impacts are as follows:

- BENEFITS
  - AS FOR GROUP a., plus:
  - Some proportion of increased demand must be accommodated by crowding out some of the other users. This group lose whatever consumer surplus they enjoyed from parking, likely to be around half the rise in price that crowded them out.
  - Those who continue to use the car park lose simply the increased charge.
  - Environmental impacts are in this case limited to the overall increase in utilisation, plus those crowded out who now attend hospital using some equally environmentally unfriendly mode – such as taxis.
- EXCHEQUER COSTS
  - as for group a, Trust revenues drop by lost revenues from current users
  - Revenues drop additionally by the contraction in the group of other users.
  - This loss is mitigated by the additional fees that are now charged to the remaining group.
  - Given that charges were already set at the revenue maximising point, there will be some overall loss in revenue; its scale depends upon the extent to which elasticity of demand rises as charges are increased.

- **c. Hospital sites whose car parks levy less than revenue maximising charges currently.** For these hospitals, there is scope to recoup some or all lost revenue by increasing charges on other users. For some of these hospitals, there is no space constraint, so they are not forced to raise charges. However, as argued above, the rationale for maintaining charges below the commercially optimal rate would in part be removed were the proposals under review adopted. Furthermore, commercial pressures are increasing over time in the NHS. Hence, it is reasonable to assume that all hospitals in this position take the opportunity to levy more commercial car parking charges on other users. Hence impacts would be expected to be as follows, at least for option that do not leave all other users crowded out:
  - BENEFITS
    - as for group b
  - EXCHEQUER COSTS
    - As for groups a and b, revenues drop by loss of current revenues

> Revenues drop additionally by the contraction in the other users group.

> This loss could more or less be offset by the additional fees that are could be charged to the remaining group, were car-park managers allowed to exact a revenue maximising charge on other users Given that charges were previously set below the revenue maximising point, and will now be set at, or possibly above, the revenue maximising point, there may be an overall gain in revenue; if there is a gain, its scale will depend inversely upon the extent to which elasticity of demand rises as charges are increased. Overall, it may or may not be sufficient to compensate for the loss in revenue from the Free Group. Effectively, for this group of hospitals, relative to the "do nothing" option, other users could (if policy allows this approach) – more or less – fund the new policy.

Further analysis is possible at site level, which may be undertaken during the consultation period. This may enable allocation of hospital sites to the different groups indicated, and more precise estimation of the likely capacity of sites to cope with demand expansion (as well, perhaps, of a better estimate of demand elasticity).

For all options, if instead of charging other users to recoup revenue, hospitals leave charges as currently, there will obviously be a revenue shortfall; there may also be over-crowding for various user groups.

For the time being, the following assumptions have been made:

- Whatever the proportionate increase in demand, that is also the proportion of that increase that cannot be accommodated without squeezing out existing users. (Thus, under option Bi, demand for car-parking increases by 50% and 50% of this increase is accommodated without compromising other users; under option Bii, demand for car-parking expands by 53%, and 53% of the increase is accommodated without compromising other users.)
- In order to cope with the extra demand without crowding out the groups being targeted, it will be necessary to discourage other users. One obvious mechanism is by increasing charges as far as is necessary to reduce demand. This might not be done immediately, and perhaps not deliberately, but even if it is not pre-emptive it is likely to be a reactive response by car park managers to any over-crowding, particularly to the extent that the policy options themselves, together with the Hospital Travel Costs Scheme, protects the most vulnerable users. In assessing how much charges would have to rise to offset the increase in demand, we assume that on average every percent increase

in price cuts demand from other users by two percent.[2] The necessary price increases under options Bi and Bii are respectively 20% and 26%.

- However, the costs included in the summary table assume that car park managers are deliberately restrained from increasing prices, that favoured groups of users are given priority (for example in separate sections of the car park) and that other users can use the remaining space on a first come first serve basis They may also attempt to siphon off car-park utilisation by other users by working with local transport planning to improve public transport links.

Longer Term Effects

For hospital in groups a and b identified above, the introduction of the policy clearly and necessarily imposes costs upon providers. The risk that this leads over time to withdrawal of car parking space is addressed in the risks section below.

There may also be second round effects on hospital behaviour that tend over time to mitigate costs without compromising access for other users:

- hospitals may seek to minimise the time and the frequency of attendance required of patients, so as to leave more of their car-parking space available for charging
- hospitals with free Car Parks may be attracted by the prospect of introducing a scheme such as that adopted by other hospitals, whereby vulnerable groups are protected and other groups are charged commercial rates.

The former policy in particular would have wide-ranging benefits for the patients affected, as not only their time and convenience would be better served – effectively more of the patient costs of treatment would be internalised into hospitals' decision-making.

Option C: Extend Healthcare Travel Cost Scheme to include selected inpatients' visitors and a less restricted group of Outpatients.

Extension of the HTCS scheme would have a direct impact upon those currently travelling to hospital who benefit from the scheme, with a corresponding dent in exchequer funding.

2 Given that if car park charges are set to maximise revenue, the price elasticity of demand at the margin will be unity (if it were less than unity, revenue could have been increased by raising charges), it is likely that the elasticity will be more than one. In practice, the elasticity will rise as larger cuts are made, but 2 is a plausible average.

Visitor numbers from groups that qualify under means-testing are likely to expand substantially, in line with the projected demand increase under Option B, but applying to all those in the favoured group, not just those attending sites with charging car parks.

It is estimated that there are currently some 46 million visits to inpatients (one visit per inpatient bed day). Roughly one fifth of these, some 9 million visits, would be entitled to HTCS. (Although visiting may currently be discouraged particularly in the less advantaged sections of the community; there is probably a higher prevalence of hospitalisation in this segment, so overall HTCS-entitlement is assumed to be similarly common in the visiting population as in the whole population.)

This number is projected to expand to 12 million were the HTCS extended to cover all visitors to inpatients. Although a higher rate of expansion might be expected than under Option B, given that this group is less well off, and HTCS reimburses all costs; nevertheless, there are offsetting deterrents to visiting and reclaiming expenses under HTCS:

- the administrative process is likely to be more onerous as it is necessary to establish that the visit was genuine (the risk of fraud is much greater where cash is being reclaimed
- many visitors will be reluctant to subject themselves to means-testing
- at least for the first visit, means-testing may be quite onerous and verification will lead to delays in repayment.

As with Option B, some of the costs of the expansion of HSTC might be covered by imposing more commercial charges on existing car-park users. However, demand management is not an integral part of the proposal, as even if existing car parking facilities become full under the reimbursement option, the favoured group would be able to park outside or use other transport options, seeking reimbursement for these. Hence, the option is costed without exploring this complication.

In the long term, as discussed under Option B, hospitals will be motivated to streamline systems so as to reduce length of stay and repeat outpatient attendances, so to economise on the transport costs falling on patients, part of which fall upon hospitals.

iii What resources, including labour, capital, IT, etc., would have to be deployed, and what activities would be displaced?

Some mechanism would be required to allow reimbursement to those entitled under Options B or C of the costs incurred, respectively in car parking in the site car park or otherwise in reaching the hospital.

Administrative costs under Option B are likely to be straightforward, in that the costs are incurred at a hospital facility.

Under option C, administrative costs are likely to be more extensive as claims of costs incurred on other modes have to be substantiated. Current costs for HTCS are estimated to be around 10 minutes per claim. These are assumed to double for visitors, as it is necessary to verify the legitimacy of the claim for someone who is not otherwise connected to the hospital.

Under both options, some safeguards against fraud will be necessary, to ensure that those claiming are in the entitled group. Under Option C, where the claims may be for more substantial sums and the incentives for fraud are more severe, the administrative safeguards required would be more onerous.

In addition, under Option C, additional administrative costs will be incurred for each visitor on their first claim when establishing entitlement.

iv What unintended impacts (good or bad) might be expected, e.g. by virtue of its effects on the wider determinants of health (education, employment, &c.) or upon lifestyle variables (physical activity, diet)?

NHS generates a million patient journeys each day, around 5% of trips. Hospitals are the largest generators of traffic outside peak hours. (DoT 1996). (See references in Consultation Document.)

The consequences of increasing the number of trips to hospital are discussed in section h).

h) Valuing Impacts: Benefits

i What is the value of the impacts of the policy to those affected? What would people on average be willing to pay for net benefits or to accept in compensation for net harms?

ii What is the value of any information created by evaluation of piloting?

Options B & C

The core justification of the policy proposals depends upon the extent of any health or patient experience benefit arising from additional visits to inpatients.

That visiting the sick ameliorates an illness is a long stand normative precept.[3] However, evidence is lacking regarding the extent and duration of consequential benefit. No studies of health benefits arising from hospital visits have been found to date, (though there is evidence from the United States that some aspects of long term illness are mitigated by visits by dogs, see http://news.nationalgeographic.com/news/2002/08/0808_020808_therapydogs_2.html).

Studies of the benefits of visits by friends and relatives could not be conducted in a randomised fashion, as it would be unethical to prevent visits. However, observational evidence may have been collected, and will be sought further in the consultation period. Furthermore, if it is decided to extend support to hospital visiting, it may be possible to evaluate its impact upon health. Piloting would allow such an approach in a systematic way.

For outpatients, also, it is possible that the burden of increased travel times is borne not only by patients but also by the wider economy, and that these costs are reflected neither in the revealed willingness of outpatients to pay for faster access (e.g. by incurring car-parking or tax fees) or in the preferences derived from surveys.

More specifically, and taking account of the transfer benefits listed above, the success of the options in meeting the overall objectives may be measured by attention to the following factors:

1. **The number of visits per inpatient**, and the average duration of each visit, with particular attention to inpatients in hospital for the longest period, who

3 R. Abba son of R. Hanina said: He who visits an invalid takes away a sixtieth of his illness. (Babylonian Talmud Tractate Nedarim 39b)

are likely to be in more severe health states. Each additional visit brings the following benefits:

a. **a health benefit for the patient**, likely to be greatest proportionally for those options that focus upon the longest staying inpatients. The critical value of health benefit, needed to render Option Bi net beneficial (without increasing charges on other users), is tentatively estimated at around £10 per visit to someone in hospital for a couple of days rising to over £20 for a visit to someone in hospital for eight days or more. The average would be around £17 per visit.

b. **an amenity to the family member or friend** who was previously unable to visit on account of its cost. This group of beneficiaries is likely to be from the lowest income segment in the population. As modelled, these benefits arise pro rata with the number of extra visitors induced by the introduction of free parking. It cannot exceed the existing charge. Half that charge is assumed, enhanced by a distributional adjustment of 2 (see H M Treasury Green Book, Annex 5)

2. **The number of outpatients benefiting from free parking**, with particular attention to those who were previously suffering from the need to pay parking charges, or to suffer onerous public transport journeys (but who now travel by car), during a single prolonged episode of care. Clearly, these more worthy groups benefit disproportionately for those options limited to the groups with the most outpatient appointments in a care episode. These outpatients enjoy:

   a. **a health benefit due to the reduction in stress** associated with concern that prolongation of appointment may incur penalty charges. This benefit cannot plausibly much exceed the charge for an extra hour – given that it would be avoidable by incurring such a charge. £1 pence is assumed.

   b. **a pecuniary benefit** as charges need not be paid, this is equal to the revenue loss.

HEALTH BENEFITS TO PATIENTS UNDER OPTION B			
free use for Inpatients beyond xth day, for outpatients beyond xth follow up	**new IP Visitors**	**value of health benefit at c. £17 per visit, depending upon patient health severity**	**value of stress reduction for Outpatients at £1 per visit**
0, INCLUDING A&E, First OP and Day Cases (in OP figures)	4,797,516	£70,845,514	£34,614,529
0 (i.e. from first follow up and from first night , excluding A&E, 1st OPs, DCs)	11,280,807	£195,138,414	£17,705,508
1	9,714,224	£181,919,031	£12,296,475
2	8,716,410	£171,394,145	£8,539,902
3	7,986,763	£162,158,609	£5,930,962
5	6,961,787	£153,797,689	£2,860,682
7	6,251,317	£146,054,813	£1,379,794
10	5,519,092	£138,762,199	£462,201

Side Benefits to Inpatient Visitors

Alongside these benefits, there are other side benefits arising from the scheme:

- **pecuniary benefit for the visitors who would have visited anyway**, and who now need not pay; these directly offset the costs of the scheme in revenues foregone – except that opportunity costs of exchequer funds are much higher.[4] For Option C, the pecuniary benefit falls upon the poorest quintile in the population and is thus subject to a Distribution Adjustment of a factor of two (see HM Treasury Green Book Annex 5)
- **consumer surplus for those switching to car usage**. Those who choose to travel by car and to make use of the car park obviously do so because they gain some advantage. The advantage per switcher cannot exceed the existing charge plus some allowance for the stress avoided given that the car park is now free less some allowance for the additional time involved in reclaiming the cost.

4 As the DH budget is constrained, at the margin it is estimated to confer benefit valued at 2.4 times the cost of the marginal intervention: QALYs , estimated by NICE to be purchasable at £25k each, are estimated to be valued by the public at £60k each. This is the opportunity cost of expenditure that eats into the DH budget.

Harms

Disbenefits arise in the following ways:

1. **Environmental harms**. These are created by the extra inpatient visits, and the fact that a greater proportion of inpatients and outpatients (for the options in which they are included) now travel by car. (The proportion is assumed to rise, as noted above, from 70% to 80%.) However, there is an offsetting decline in travel by car for those squeezed out to accommodate the extra utilisation, especially in the more expansive schemes. Four elements are therefore involved:
   - **Extra visitors to inpatients:** visits are assumed to rise by one third,
   - **Visitors to inpatients who formerly travelled by public transport and have switched to car:** it is assumed that currently 70% travel by car (compared to 60% of the total who use the car park), and that this will rise to 80%
   - **Outpatients who switch from public transport to car utilisation:** similarly, it is assumed that 70% travel by car (compared to 60% of the total who use the car park), and that this will rise to 80%
   - **Other Users deterred from using car parks,** some of whom (assumed to be one half) will no longer travel by car.

During consultation we will seek to incorporate rough estimates, for inclusion in option appraisal, of the wider impacts of:

- each person switching from public transport to car as a result of Option B
- each additional visitor resulting from Option C.

These wider impacts should include:

- carbon
- congestion
- health of those who might otherwise have a more energetic journey to hospital.

Overall, the environmental impact will be proportionate to the number of journeys; it does not vary much with the scope of the option, except for the most inclusive option:

ENVIRONMENTAL IMPACT				
OPTION: free parking beyond x OP Follow Ups and x IP beddays	Additional Inpatient visitors' journeys	Additional outpatient journeys	Other patients and other users' journeys squeezed out	Estimated net impact upon journey numbers
0, INCLUDING A&E, First OP and Day Cases (in OP figures)	7,215,500	3,230,031	-1,480,854	8,964,677
0 (i.e. from first follow up and from first night , excluding A&E, 1st OPs, DCs)	12,402,132	2,950,918	-11,635,065	3,717,985
1	10,679,829	2,049,413	-8,133,192	4,596,050
2	9,582,832	1,423,317	-6,183,758	4,822,391
3	8,780,656	988,494	-4,944,812	4,824,338
5	7,653,797	476,780	-3,502,267	4,628,311
7	6,872,705	229,966	-2,709,355	4,393,316
10	6,067,696	77,034	-2,048,665	4,096,065

2. **Pecuniary Loss to those paying enhanced charges.** This matches precisely the extra revenues noted above – but again the opportunity cost is lower for the private payers.

3. **Car Park Overcrowding cost.** This represents a loss of consumer surplus from those squeezed out of car usage by enhanced charges or by overcrowding: this is assumed to be equal to half the fee enhancement thought would squeeze them out, reflecting the potential cost of alternative parking or travel or of foregoing hospital attendance. (They also have a pecuniary benefit as they do not have to pay the charge any more, but that is part of what they were willing to pay for the service of which they are now deprived.)

- Note that the numbers here rise disproportionately with the scope of the option, as it is increasingly unlikely that all the increase in demand can be accommodated within existing parking facilities.

4. **Patient time in reclaiming costs**. This, like the administrative costs of the system, is proportional to the number of individuals involved – though in designing the administrative arrangements there may be trade-offs between patient and administrator costs.

Option D

Were appropriate incentives embedded within hospital providers to minimise the economic costs of accessing healthcare, benefits might arise in the following ways:

- hospitals would make direct efforts to encourage local planning authorities and transport authorities to improve access, eg by ensuring that bus stops are located near hospitals (there are a number of positive examples of such planning arrangements)
- additional effort would be made to schedule appointments at convenient times, to minimise time off work and travel costs
- additional effort would be made to minimise length of stay, so as to minimise the need for visits and to reduce the time off work
- visitors would be encouraged and accommodated to the extent that this was desired by patients.

However, it would not be easy to structure incentives so that hospitals were motivated to adapt these practices just to the extent that it is cost-effective to do so. Because many aspects of hospital care quality are opaque there would be a danger that access issues would receive disproportionate attention – particularly for those services most subject to patient choice.

Yet indicators of other aspects of quality of outcome and patient experience are being developed, so there is a rationale to including access costs and benefits in the suite.

i) Costs and Cost-savings and Opportunity Costs

i What would be the cost in monetary terms of each option?

Option B

The table below sets out

- the costs for providing free car parking for all patients who have been in hospital respectively for one night, for more than one, two, three, five, seven and ten nights.
- costs for options that marry these concessions with provision of free parking for people attending for follow-up outpatient attendances respectively beyond the first, second, third, fifth, seventh or tenth follow-up attendance.

The table shows costs on two different assumptions:

- demand management as demand for car-parking increases for the Free Group is addressed by increasing car-parking charges for other users
- where overcrowding threatens, the Free Group is given privileged access (e.g. to designated bays), whilst other users pay current charges on a first-come-first-serve basis.

It might be possible to limit the cost of this latter option by limiting the concession to three month periods – this has not been costed (for lack of relevant data).

TOTAL EXCHEQUER COSTS PER ANNUM FROM 2010/112 INCLUDING ADMINISTRATION COSTS				
free use for Inpatients beyond xth day, for outpatients beyond xth follow up	**inpatients only including admin costs**	**inpatients and outpatients**	**inpatients only including admin costs without increased charges on other users**	**Inpatients and outpatients without increased charges on other users**
0, INCLUDING A&E, First OP and Day Cases (in OP figures)	£103,591,993	£250,784,164		£250,784,164
0 (i.e. from first follow up and from first night , excluding A&E, 1st OPs, DCs)	£103,591,993	£191,531,340	£117,242,393	£192,741,005
1	£81,984,201	£133,625,484	£94,231,864	£144,807,526
2	£70,107,913	£103,685,377	£80,834,696	£115,125,445
3	£62,149,736	£84,669,602	£71,608,297	£95,003,377
5	£51,870,978	£62,347,924	£64,510,375	£75,623,776
7	£45,245,460	£50,204,648	£59,074,268	£64,374,184
10	£38,832,366	£40,467,540	£54,658,403	£56,417,495

These costs comprise three different elements, with one offset, illustrated here for ***Option Bi (inpatients from the first night)*** and for ***Option Bii (inpatients as Bi and outpatients beyond the third follow-up)***:

- Direct revenue loss consequent upon cessation of charging for the favoured groups. The direct revenue costs rise steadily (from the bottom of the table upwards) as the free-parking concession increases in scope.
  - ***For Option Bi,*** *the loss of revenue from inpatients' visitors is* ***£66.0m p.a.***
  - ***For Option Bii,*** *the additional loss of revenue from outpatients is* ***£16.1m p.a.****, giving a total revenue loss of* ***£82.1m pa****.*
- Revenue lost through the squeezing out of other users, consequent upon the rise in demand. It is certain that eliminating charges for car parking will lead to some increase in demand. It is much more difficult to know how great this will be, nor how much of this extra demand would squeeze out other users. Nevertheless, on the basis of plausible assumptions, estimates are the effect for different options can be made:
  - ***For Option Bi,*** *the loss of revenue from crowding out of other users, given the assumptions about the squeeze factor mentioned above, would be* ***£45.6m p.a.***
  - ***For Option Bii,*** *the loss of revenue from crowding out other users, given the squeeze assumptions above, would be* ***£51.1m pa.***
- Higher revenues from remaining other users (were this to be adopted as a demand management strategy).[5] Under this scenario, increased demand is accommodated by increasing prices for other users. On the assumptions set out above, this yields:
  - ***For Option Bi,*** *offsetting revenue increase of* ***£13.6m p.a.***
  - ***For Option Bii,*** *offsetting revenue increase of* ***£12.2m p.a. (****The price increase would be greater, but there would be fewer residual users to pay it.)*

  However, it is assumed in overall calculations that this option is not taken up; other modes of demand management are preferred that give preferential car-park access to the favoured groups whilst letting other groups use remaining space at current prices, notwithstanding any potential over-crowding.
- Administration costs. All options will incur set up and administration costs. Even for the most expansive option, it would be necessary to find some way to

5 Given that if car park charges are set to maximise revenue, the price elasticity of demand at the margin will be unity (if it were less than unity, revenue could have been increased by raising charges), it is likely that the elasticity will be more than one. In practice, the elasticity will rise as larger cuts are made, but 2 is a plausible average.

prevent members of the general public from exploiting the availability of free parking spaces. More sophisticated electronic schemes may be developed – but there will be capital and development costs for these. The cost assumption is of a flat cost of £1.1 per user episode: a single cost for an inpatient that covers all visitors from the moment of entitlement, and a single cost per outpatient that covers all subsequent follow-ups (within that care episode, or up to the scheme cut-off). On assumption,

  - ***For Option Bi,*** *for an estimated* ***5.2 million inpatients*** *with visitor car-parking rights (at car-park charging hospitals) administrative costs amount to* ***£5.7m***
  - ***For Option Bii,*** *includes an additional* ***3.7 million outpatients*** *with free parking rights at these hospitals, generating total administration costs of some* ***£9.0m.***

- Overall exchequer costs therefore sum to:
  - ***For Option Bi, £117.2m (rounded to £115m for summary sheet)***
  - ***For Option Bii, £142.2m (rounded to £140m for summary sheet).***
- These figures make no allowance in Option B for any offsetting savings in HTCS if any of those who come to avail themselves of free car parking were previously claiming car parking or travel expenses from HTCS. Total claims under the scheme are around £6.6m. Some modest reduction in the cost of Option Bii is likely.
- Overall, options that include more outpatients and more inpatient visitors become disproportionately more expensive: not only are direct revenues increasingly foregone, but more and more other users have to be excluded in order to allow for increased utilisation from the free-users, as existing car parking space is exhausted.

All projections are based upon the assumptions set out above. What is not here modelled is the different position of different car parks. It is likely that for more expansive options a significant number of car parks will find themselves unable to accommodate the increase in demand, even if charges are raised for other users (of whom, of course, there are few in the more expansive options). There is scope for some of these hospitals to make inroads into staff car-parking space: there are on average five other car parking spaces for every three visitor spaces at NHS car parks. However, this option has not been investigated: to the extent that staff receive subsidised parking rights, they are unlikely lightly to give them up.

As mentioned above, a more refined analysis, capturing the very different space constraints at different hospitals (represented by the vertical spread of points on the chart above) would be possible – and may be undertaken during the consultation period, and with assistance from the consultation responses. There will, however, remain great uncertainty regarding demand response, and the work will be handicapped by the absence of reliable hospital activity at site level.

This uncertainty in itself commends an approach that starts with the more modest options so as to test response and financial cost, before proceeding, if affordable, to more expansive options – perhaps complemented with wider incentives to improve access for visitors and for outpatients.

Phasing and Total PV Costs of Option B

The proposals for consultation allowing phasing in of the favoured option to accommodate losses against projected efficiency gains as these arise. Phasing in could take the form of progressively more generous criteria for entitlement, effectively progressing up the cost table illustrated above.

As a consequence, it is not sensible to estimate a present value for the proposals.

Note, however, that over time car parking charges forgone are likely to rise more quickly than inflation (as land prices rise more quickly than inflation, and as commercial pressures increase).

Option C

The estimated £159m costs of Option C (rounded to £160m) for 12.3m visitors to inpatients (a rise of one third over the estimated number currently in the eligible group), assume:

- an average reclaim of £8.84. The Information Centre for Health and Social Care did a survey in October 2007 getting details of all claims made against the Healthcare Travel Cost Scheme. The average cost figure of £8.04 arose from that survey. This is likely to have risen by around 10 per cent by 20010/11.

- an average administrative cost of £4. This is calculated as follows:

There are two types of claim: one where patients resolve at the time of appointment (over the counter) and ones where people complete a form at a later date		
claims sorted over counter at trust		
proportion of all HTCS claims	75%	Assumption
minutes clerical time/claim	20	Assumption based on current processes plus 10 minutes for additional anti-fraud measures
cost of clerical time/hour	£8.84	Secretarial occupations (code SOC=42). Source: Annual Survey of Hours and Earnings (2008), Office for National Statistics uprated to 2010/11.
cost of priniting/storing form	£0.05	Assumption
marginal cost	£3.00	
claims where completed form posted		
proportion of all HTCS claims	25%	Assumption
minutes NHS business services clerical time/claim	15	Assumption
mins Trust clerical time/claim	14	As above
cost of clerical time/hour	£8.84	As above
cost of priniting/storing form	£0.05	Assumption
cost of postage (patient to business services + business services to trust + trust to patient)	£0.45	Assumption
Cost per claim	£5.66	
Weighted average admin cost	£3.66	
Uprated to 2010/11	£4.03	

In addition, under Option C, additional administrative costs will be incurred for each visitor on their first claim when establishing entitlement. The cost may be in excess of £10, and some annual renewal would be involved, but no estimate is

available for the number of visitors that would be involved (though it would clearly be a fraction of the total number of visits).

Option D

The proposal here is

- to develop appropriate metrics of success, including
  - the full economic cost of access for patients, in both time and money, and
  - the proportion of inpatients (according to their lengths of stay, and other criteria that may determine the importance of receiving visitors) who have adequate numbers of visitors during their stay,

and

- to introduce these measures into the set of quality indicators against which providers' performance is measured by commissioners and by patients exercising choice.

The first step mentioned above would be to conduct the research outlined above. This is estimated to cost around £2m – given the complexity of the issues and the need to use a sample large enough to cover different groups of inpatients and outpatients in different parts of the country, and to pilot routine collection of relevant data.

It is not possible at this stage to estimate the full costs were a scheme eventually adopted for routine collection of this data, for the costs would depends greatly on precisely what data is required, and most importantly upon the extent to which existing data collection mechanisms can be utilised.

For instance data on average outpatient times and duration of inpatient stays are collected implicitly and explicitly in hospital administration systems. Journey times and costs are not routinely collected, but could be included in other surveys of patient experience at relatively low cost.

ii Do the prices used reflect procurement options that motivate suppliers to innovate and to economise, and, on the other hand, any supply bottlenecks?

Not for administrative costs: it is quite possible that economies can be made, particularly for Options Bi and Bii.

iii Would government tax receipts be affected?

Unlikely to be a major consideration.

iv What would be the opportunity cost of net government funding required (what benefits would be foregone)?

Costs are assumed to incur opportunity costs of patient care foregone at a marginal rate of a QALY per £25,000. Were costs concentrated in particular regions or hospitals however, the marginal opportunity costs could be higher.

For more generous options, it would be important to ensure that resource allocation mechanisms were adapted to ensure that the proposals are funded at minimal opportunity cost. This may mean adjusting the Tariff for HRGs for whom longer stays are likely, and including the additional costs of transport and car-parking in the calculation of the Market Forces Formula adjustment.

j) Specific Impact Tests;

ENVIRONMENTAL IMPACT (Carbon, Other Environmental)

The NHS is estimated to account for 5% of all road traffic in England and travel is responsible for 18% of the NHS carbon footprint.[6] Travel by patients or their visitors to and from NHS facilities contributes to these carbon emissions. Their reduction needs to be considered as part of the ongoing improvements in sustainable development in the NHS, but without compromising quality of care.

NHS Carbon Reduction Strategy, NHS Sustainable Development Unit, 2009. See http://www.sdu.nhs.uk/page.php?area_id=2

As set out above in section h, the environmental costs of the different sub-options under Option B are likely to be commensurate with the number of extra journeys incurred. No substantial difference emerges between the sub-options.

Option C as currently represented is likely to have environmental externalities somewhat less than those under option B: although option C is neutral between transport modes, it nevertheless shields hospital visitors from all the pecuniary costs of travel, including those parts (fuel duty for example) that are designed to internalise environmental externalities. As Option C is means tested, however, it will not encourage travel amongst the more advantaged groups.

6 NHS Carbon Reduction Strategy, NHS Sustainable Development Unit, 2009. See http://www.sdu.nhs.uk/page.php?area_id=2

Option D is much more attractive from this perspective.

Precise costs of environmental externalities will be developed during the consultation period if option B or C is pursued.

HEALTH IMPACT

Car use tends to involve less exercise than other modes of travel. Option B is on this basis less attractive than other options. The extent of this relative impact will be assessed before taking forward this option.

ii Do proposals improve the lot of protected groups and to minimise health inequalities?

Yes, to the extent this is appropriate (which is limited).

Overall, ERIC returns suggest that most a significant proportion (some 11%) of carparking is designated for the disabled. Disabled spaces would be covered by the proposals under review.

The equity issue is not that the proposal would disadvantage disadvantaged groups directly; on the contrary, as indicated above, lower income groups also reach hospital by car more than by other transport mode, and rate car-parking as important when considering hospital choice.

Rather the worry is that a more significant sub-group of the less advantaged use other transport modes, and are concerned with public transport access. Hence, addressing the underlying problems set out above solely with reference to car park access ignores the problems of access to hospital for patients and visitors of a substantial part of the least advantaged groups.

How would you normally travel to your local hospital?		Income Band					
		less than £9999	£10000 to £19999	£20000 to £39999	£40000 to £74000	£75000 and over	Total
Walk	Count	15	20	24	9	1	69
	% inc. band	3.6%	4.6%	5.9%	4.3%	2.2%	4.6%
Car	Count	262	346	350	190	43	1191
	% inc. band	63.1%	79.7%	86.6%	90.9%	95.6%	79.0%
Public transport	Count	107	57	26	10	1	201
	% inc. band	25.8%	13.1%	6.4%	4.8%	2.2%	13.3%
Taxi	Count	31	11	4	0	0	46
	% inc. band	7.5%	2.5%	1.0%	.0%	.0%	3.1%
Total	Count	415	434	404	209	45	1507
	% inc. band	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

King's Fund survey sourced above.

Nevertheless, these issues are to some extent already addressed by the HTCS.

A deeper problem may not be cost but access upon public transport, see table below. Furthermore, a survey in 1997/8 found that 38% of householders without a car found it difficult to get to a hospital (compared to 16% who found it difficult to travel to a doctor). NHS Estates 2001. Source: Managing Energy Demand, Godfrey Boyle, Open University T206 2003

All the options considered will provide indirect incentives for hospitals to improve public transport access in order to minimise reliance on car-parking – as the latter will no longer be a source of revenue from the relevant groups.

Extract from survey asking *How important were each of the factors below in influencing which hospital you chose?*		Income band >	less than £9999	£10000 TO 19999	20000 TO 39999	40000 TO 74000	75000 AND OVER	Total
Accessible on public transport –	Essential	Count	100	72	23	7	1	203
		% within income band	40.8%	27.7%	12.0%	6.5%	4.2%	24.5%
	Very important	Count	57	50	28	10	1	146
		% within income band	23.3%	19.2%	14.6%	9.3%	4.2%	17.6%
	Somewhat important	Count	31	35	28	11	4	109
		% within income band	12.7%	13.5%	14.6%	10.3%	16.7%	13.2%
	Not important	Count	57	103	113	79	18	370
		% within income band	23.3%	39.6%	58.9%	73.8%	75.0%	44.7%
	Total	Count	245	260	192	107	24	828
		% within income band	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

An Equality Impact Assessment screening is annexed.

k) Summary Measure of Net Benefit and Equality Impact

i What is the best estimate of the overall net benefit of each option (deducting the expected opportunity cost of the intervention from the expected benefit)?

It is not possible to calculate a net benefit for these options given the absence of evidence underpinning attribution of a value for any health or patient experience benefit from increasing visitor numbers for inpatients.

Estimates of other benefits have been made (and are available in a detailed spreadsheet on request, based upon the assumptions set out in the benefits section above). However, most of these secondary benefits are either simple monetary savings and costs as some groups are granted free car parking and others are

displaced, or gains in consumer surplus by those changing their behaviour. Given the opportunity costs of using the Health Budget (a QALY foregone per £25,000 is the standard DH assumption, against a social value of some £60,000), and that the policies under consideration (aside from Option C) are not focused upon the least advantaged, substantial health and amenity gain from visiting is required to justify the options.

In the absence of data, critical-value estimates of health and patient experience benefit have been generated to assess the required value of benefit to render option Bi neutral in cost-benefit terms, using the presumption that £1 of DH budgetary cost displaces £2.40 of benefit. The same assumptions were used to value Options Bii and C, and included in the Summary tables for this Impact Assessment.

Option Bi on these assumptions is slightly more valuable than Option Bii – but the margin is relatively small and not large enough in itself to discriminate between the options. It is assumed that outpatient costs do not discourage attendance, whilst visiting the inpatients may be so discouraged. Unfortunately, the evidence for the assumption is lacking.

Less generous inpatient sub-options (not shown) provide greater net benefit under these assumptions. The difference is attributable to the assumption that those who have been in hospital longer get proportionately greater health and amenity benefit from visits. This is plausible in itself but hard to quantify with the requisite precision to discriminate between the options.

What is much clearer is that Option C is considerably more costly without generating additional benefits, notwithstanding that it is focused upon the least well off (to whom is attributed a distributional gain reflecting the greater marginal value of consumption for the least well off). This assessment again is crucially dependent on assumptions. Most important is the assumption that Option C will not generate disproportionately more visitors than Option Bi, notwithstanding that it is more generous. This is however fairly plausible:

- part of the additional cost of Option C is associated with the greater administrative costs required – partly to cope with counter-fraud measures, partly with the need to allow for postal claims. This bureaucracy is likely to deter visits.
- the marginal costs of petrol for those accessing hospital by car (which are reclaimable under Option C but not Option Bi) are unlikely to provide substantial deterrence to access over and above car parking charges

- there is a limit to how many visitors are frustrated by costs – it is plausible that Option Bi removes most of this deterrent for those wishing to visit inpatients at least at car-park-charging hospitals. Only those facing heavy access costs to hospitals lacking car parks (around 5% of acute sites) are likely to be drawn in by Option C, together with non-car users elsewhere.
- although Option C is focused upon the most disadvantaged group, who are most likely to have been deterred by cost; yet the necessity of an embarrassing and time consuming means-test to get reimbursement may deter many from using an extended HTCS.

For Option D, if incentives can be well designed, it is possible to be much more confident that benefits will exceed costs of any measures taken by hospitals, subject to the incentives, to improve access for visitors and to reduce the economic costs of those accessing hospital care. However, it is not possible immediately to embark upon this option. Furthermore, overheads would be incurred: the research base needed to design the scheme and the continuing costs of additional data collection (to the extent that data required cannot be derived from existing sources).

ii What is the expected impact upon equality promotion and inequality mitigation, stratified and quantified?

To the extent that all options would allow those currently deterred from visiting friends and relatives in hospital by the cost of access, they will help to reduce inequalities associated with healthcare.

For patients, such concerns are already addressed by the Healthcare Travel Cost Scheme.

l) Risks, Sensitivities and Assumptions

i What might go wrong to interrupt the realisation of benefits, to inflate costs, or to precipitate perverse outcomes? Can options, including the evaluation programme, be altered to mitigate risks of adverse outcomes?

Principal risks, and corresponding mitigation strategies, for each option, are as follows:

OPTION B ONLY

RISK At some or many car parks, **the expansion in demand from the groups designated to have free access is such that many other users are crowded out**. Access for some other patient groups (first outpatients, day cases, A&E attendances) may also be compromised.

MITIGATION STRATEGY It is against this risk to costs and to benefits that a limited group of users has been proposed to allowed free access to car-parking facilities. Over time, if space allows, trusts might be encouraged progressively to relax criteria for free charges. Views of the scale of the risk with the proposed free groupings are sought during consultation.

RISK Compromise to the commercial viability of car parking facilities, coupled with the increase in incentives upon providers to act commercially (under the FT regime, and in view of a tighter fiscal environment), may lead some providers of hospital services to sell their car-parking space, in order to save the associated operating cost.

MITIGATION STRATEGY Some move in the direction of Option D, creation of information and other incentives for hospitals to take full account of the benefits to hospital patients of easy access for relevant groups. This is not costed, but may emerge under the Do Nothing option as a side benefit of other policies, particularly those associated with Choice and World Class Commissioning. Views are sought during consultation of the extent and imminence of this risk and the extent to which it will be mitigated over time in this way.

m) Weighing the Options

i Preferred option

Option Bi. However, other sub-options, particularly those that make some concessions for outpatients (perhaps including a cap upon costs borne by regular users) is thought worth investigation. Option D has attractions in principle, and might be reviewed following evaluation of implementation of other options.

ii Why?

This review generates some clear indications for option selection:

- The net benefit of Option C is likely to be negative.

- Within the Option B sub-options, both the exchequer costs and some of the harms of the options increase at an increasing rate as the options to include outpatients expand in scope, due to the increasingly likelihood of car parks reaching physical capacity limits, which ensure that:
  - more revenue from existing users is crowded out
  - more existing users face the inconvenience of finding alternative access modes.
- Uncertainty is high relating to most of the parameters that will determine the costs and benefits of the scheme – again creating advantages for narrower options, which create opportunities for research and evaluation before incurring greater expense.

Option D is hard to compare directly with the other options, given that research is required to assess its scope. However, conducting the initial research is an attractive fall-back option, and may in any case be justified in any case so to aid in the assessment of Option B. See evaluation section below. Yet Option D on its own will not provide immediately relief for the problem identified.

n) Evaluation Strategy

i How will the impacts of policy be monitored, to ensure that benefits are realised, problems addressed, and lessons learned?

Evaluation would not be straightforward given the absence of data. It is therefore proposed that research be commissioned to remedy this lack. The research would be similar to that required for Option D (see in section e above).

£2m has therefore been added as a transitional cost for Option Bi and Bii as well as Option D.

ii Should a formal evaluation be initiated with policy implementation to ensure that the relevant information is not lost?

Yes

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	Yes	No
Small Firms Impact Test	No	No
Legal Aid	No	No
Sustainable Development	No	No
Carbon Assessment	Yes	No
Other Environment	Yes	No
Health Impact Assessment	Yes	No
Race Equality	Yes	Yes
Disability Equality	Yes	Yes
Gender Equality	No	Yes
Human Rights	Yes	No
Rural Proofing	No	No

Annexes

Equality Impact Assessment (EqIA)
Abolishment of NHS parking charges for inpatients

PART 1 – EQUALITY SCREENING

Equality impact assessment (EqIA) is the process by which the DH seeks to meet its legal requirements in conjunction with the DH Single Equality Scheme (SES) and to narrow the health inequalities that exist in England between people from different **ethnic** backgrounds, people with **disabilities**, **men and women** (including **transgendered** people), people with different **sexual orientations**, people in different **age** groups, and people with different **religions or beliefs**. Policymakers must screen all new (and eventually, all existing) policies for their impact on people from each of these groups.

CONTEXT

The objective of the EqIA screening

The aim of the Equality Impact Assessment (EqIA) screening was to determine whether a full EqIA was required. The Department has a legal duty to conduct equality impact screening of all its policies and programmes in relation to disability, ethnicity and gender. Where it is determined that a full EqIA is required, these must be approved at director level and published. The Department has taken the initiative and enhanced the scope of equality issues to include age, sexual orientation and religion or belief.

The objective of an Equality impact assessment considers what effect the Department's activities have on:

- Eliminating unlawful/unjustifiable discrimination and harassment
- Promoting equality
- Fostering positive relationships between different groups of people
- Promoting positive attitudes towards disabled people
- Involving people in decisions regarding their health and social care, and their access to services.

Undertaking an Equality impact assessment screening is an integral and essential element of the policy making and management processes and this screening informed and influenced the decisions and actions taken during the development of the Strategic Health Asset Planning Evaluation.

Abolishment of NHS parking charges for inpatients

A consultation process has been launched to gauge the opinion of the public and the NHS family. Please see the section of stakeholder involvement below for further details.

SCREENING ASSESSMENT

Will this Notice have an EQUALITY IMPACT? Yes

✔ Age

✔ Disability

Will this policy/publication have a POSITIVE IMPACT? Yes

Positive impact

✔ Age

✔ Disability

This policy will reduce costs for disabled patients at Trusts that presently levy a fee for them.

Older people may also find their ease of access is improved by the new policy. However there is a potential flipside to this that is dealt with below.

Will this Notice have a NEGATIVE IMPACT? Potentially

Negative impact on:

✔ disability

X ethnicity

X gender

X gender identity

X sexual orientation

✔ age

X religion or belief

Increased demand for parking due to the removal of fees could result in a situation where allocated disabled bays are fully occupied. This would lead to the disabled visitor having to park off site or in a space further away from the facility.

Similarly older people / parent and child may face the same problem whereby the carpark is full due to increased demand and they are forced to park off-site

Increased usage of car parks by visitors to inpatients may have a detrimental knock-on effect to outpatients (including patients receiving long-term frequent care such as chemotherapy and dialysis), as they may be unable to park for their appointment.

Evidence summary

Discussion of the three person screening team coupled with the survey evidence in the main part of the IA has informed this assessment. Upon finalisation of the delivery mechanism for this policy, the EqIA will be revisited and other stakeholders may be consulted as necessary.

Overall impact

The policy is designed to increase the equality of access as a whole and remove what is widely perceived to be a 'tax on the sick'. However, in the context of the seven categories of equality this policy does have some potential negative impact.

It is for each organisation to decide how to implement changes locally. We therefore recognise that it is incumbent on each NHS organisation to undertake an EqIA on any plans before they implement them, including seeking the views of patients, services users and the local community.

ASSESSMENT BY EQUALITY CHARACTERISTIC

1. Gender and gender identity

There are no specific issues on gender/gender identity.

2. Disability

There is a potential for people with a disability to be affected by this policy both positively and negatively. See full descriptions above.

3. Age

- ***Older people***
  The design of car parks and operation of access protocols should ensure adequate access to and within health estates, particularly for older people with limited mobility and sensory impairment.
- ***Children and young people***
  No age specific adaptations are required.

4. Sexual orientation

Equality issues in relation to sexual orientation are not considered relevant to this policy, no relevant evidence is available. Evidence available does not demonstrate sexual orientation will be subject to either a positive or negative impact.

5. Ethnicity

Equality issues in relation to ethnicity are not considered relevant to this policy.

However, it recognized that ethnicity may have a bearing at a local level hence the fact that we advocate an EqIA being undertaken by each NHS organisation as and when they implement their revised parking policy (see End user EqIA section below).

INVOLVEMENT AND ENGAGEMENT OF STAKEHOLDERS

Approach to assessment

A three person team from Gateway Review Estates and Facilities (GREFD) directorate met on 19th November 2009 to carry out an EqIA screening of the new car-parking policy and its suggested options for implementation. This paper outlines a list of actions to be completed following the screening meeting.

Public consultation

The subject of car parking for NHS patients and their visitors has been the subject of much public debate. Therefore, a consultation exercise will be launched in December 2009 to identify how the NHS can best implement the Secretary of State's announcement and how the public want this change to be implemented.

Aim of Consultation

The purposes of this Consultation are;

- To identify how the NHS can best implement the Secretary of State's announcement, and;
- To provide the public with the opportunity to indicate how they want this change to be implemented.

Staff car parking is not the subject of this Consultation, however we would welcome any comments on it as it relates to patient related parking. It is important to note that there is no intention that NHS Trusts should change their staff car parking or any charges for it as a result of this exercise.

OTHER IMPACTS

Related policies

The Healthcare Travel Cost Scheme (HTCS) was set up in 1988, as part of the NHS Low Income Scheme, to provide financial assistance to those patients who do not have a medical need for ambulance transport, but who require assistance with their travel costs.

Under the Scheme, patients on low incomes or receiving specific qualifying benefits or allowances are reimbursed in part or in full for costs incurred in travelling to receive certain NHS services, where their journey meets certain criteria.

This means that low-income families and people receiving certain qualifying benefits are already reimbursed for parking charges incurred when attending healthcare appointments.

This policy has its own EqIA which can be found at http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_097374

End user EqIAs

It is our intention to include within re-issued or new car parking guidance a section to not only alert local NHS organisations to the fact that we have undertaken a EqIA screening ourselves but to also advocate that they also undertake one.

We consider that the implementation of car parking guidance and concessions locally would probably necessitate an EqIA on their part. This would need to consider, among other things:

- Disability Discrimination Act 1995
- The Building Regulations 2000 (SI 2000 No. 2531)
- Access to and use of buildings 2004 (Approved Document M) www.planningportal.gov.uk/uploads/br/BR_PDF_ADM_2004.pdf
- BS8300, 2009 Design of buildings and their approaches to meet the needs of disabled people: code of practice
- Care Closer to Home, DH 2008
- High Quality Care for All (Next Stage Review), DH 2008
- NHS Constitution, DH 2009

NEXT STEPS

Revisit EqIA once preferred delivery method is established

Once the overall opinion of the general public and the NHS have been gauged through consultation, a preferred method of delivering the commitment will be reached.

At that stage we propose to revisit the EqIA to ascertain whether our initial views on the equality impact of the policy are valid and whether further work is required.

Responding to the evidence

Disability emerged as a consistent theme during this screening. Depending on which delivery option is chosen, people with disability will be affected to a greater or lesser degree both positively and potentially negatively. See screening assessment above.

DECLARATION

On the available evidence there is scope for this policy to have both a positive and negative impact, both for older people and the disabled. This EqIA screening will be revisited when the mechanism for delivering the pledge to make inpatient car parking free is decided upon. At that stage it will be possible to re-assess the likely equality impacts and decide whether to proceed with a full EqIA

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November 2009

300143b 1p 0k Dec 09 (Web only)
Produced by COI for the Department of Health
www.dh.gov.uk/publications