

## Summary: Intervention & Options

Department /Agency: Department of Health	Title: Impact Assessment for Implementing Personalised Care Planning for People with Long Term Conditions (including guidance to NHS and Social Care)	
Stage: <b>Final</b>	Version:	Date: <b>28 / 11 / 2008</b>
Related Publications:		

Available to view or download at:

<http://www.>

Contact for enquiries: **Tracy Morton**

Telephone: **(0113) 2545201**

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

Demand for long-term care in the NHS is significant and growing. People often are not involved in decisions about their programme of care and experience poor coordination of their services. There is some evidence that providing care planning to patients with long term conditions will improve their health, while reducing treatment costs to the NHS.

### What are the policy objectives and the intended effects?

The objectives are to ensure people with long-term conditions get the choice of and access to health services that best enable them to manage their condition. This should reduce health barriers to quality of life, reduce unnecessary and often unplanned health/care service use. This should increase the number of people with a long-term condition who feel supported to manage their condition(s) – a Government Public Service Agreement

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

This IA presents analysis of two options:

1. Do nothing.
2. Issue guidance encouraging PCTs to implement Care Planning, supplemented by guidance and an e-learning package to the relevant workforce on how best to implement care planning.

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

The impacts of the roll-out of the person-centred care planning process will be monitored throughout the CSR period (2008/9 to 2010/11) with a formal evaluation at the end of this period to inform further requirements. Research on the implementation of care planning will be undertaken during 2009/2010 and the results will inform the delivery models used to implement the process.

### Ministerial Sign-off For Final Impact Assessments:

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

**Signed by the responsible Minister:**

..... **Date:**

## Summary: Analysis & Evidence

Policy Option:	Description: Issuing guidance to PCTs for the provision of care plans to patients with long-term conditions
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<b>COSTS</b>	<b>ANNUAL COSTS</b>		<b>Description and scale of key monetised costs by ‘main affected groups’</b> Transitional costs for initial staff training in care planning and for evaluation  Cost of staff time providing care plans (~£200mill/yr), minus cost savings due to reduced hospital visits by patients with long term conditions, when provided with care plans
	One-off (Transition)	Yrs	
	£ 7 million	10	
	Average Annual Cost (excluding one-off)		
£ -460 million		Total Cost (PV) £ -3,243m	

**Other key non-monetised costs by ‘main affected groups’**  
 Possible additional cost savings due to reduced use of other health and care services such as GP appointments and A&E.

<b>BENEFITS</b>	<b>ANNUAL BENEFITS</b>		<b>Description and scale of key monetised benefits by ‘main affected groups’</b>
	One-off	Yrs	
	£ 0	10	
	Average Annual Benefit (excluding one-off)		
£ Will be positive		Total Benefit (PV) £ Positive	

**Other key non-monetised benefits by ‘main affected groups’**  
 Patients may gain health benefits from provision of care plans, for example through increased patient empowerment, quality of life and satisfaction with health and care services.

### Key Assumptions/Sensitivities/Risks

Estimates depend upon the realisation of significant cost savings from implementation of care plans; the evidence base for this is mixed, and hence outcomes will be subject to rigorous evaluation.

Price Base	Time Period	Net Benefit Range (NPV) £	NET BENEFIT (NPV Best estimate) £ Positive		
What is the geographic coverage of the policy/option?		England			
On what date will the policy be implemented?		Guidance in Dec 08			
Which organisation(s) will enforce the policy?		Primary Care			
What is the total annual cost of enforcement for these organisations?		£			
Does enforcement comply with Hampton principles?		Yes			
Will implementation go beyond minimum EU requirements?		N/A			
What is the value of the proposed offsetting measure per year?		£ N/A			
What is the value of changes in greenhouse gas emissions?		£ 0			
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	No	No

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

**Key:**

Annual costs and benefits: Constant Prices

(Net) Present Value

## Evidence Base (for summary sheets)

### Introduction

1. Despite a growing recognition of the importance of taking a person-centred and integrated approach to care planning and the existence of good practice in small pockets, the experience of people accessing services varies significantly. The approach is still not widespread enough and barriers persist. In particular, the cultural change needed to embed good practice in local organisations has often not had leadership and full support at senior management level.

### The Specific Targets

- The Long Term Conditions PSA Target (2004/05 to 2007/08):

*To improve health outcomes for people with long term conditions by offering a personalised care plan for vulnerable people most at risk, and to reduce emergency bed days by 5% by 2008 through improved care in primary care and community settings.*

- The *Our Health Our Care Our Say* White Paper commitment:

*By 2008 we would expect everyone with both long-term health and social care needs to have an integrated care plan if they want one. By 2010 we would expect everyone with a long term conditions to be offered a care plan.*

- High Quality Care for All: NHS Next Stage Review Final Report

*Over the next two years, every one of the 15 million people with one or more long term conditions should be offered a personalised care plan, developed, agreed and regularly reviewed with a named lead professional from among the team of staff who help manage their care.*

2. The care planning implementation programme, including guidance has resulted from feedback from *Your health, your care, your say* consultation on community services and feedback during the *NHS Next Stage Review* consultation. In addition it has been developed and shaped by an assessment and care planning policy collaborative made up of around 80 key stakeholders in health, social care, third sector and patient representative groups. Outside of this policy collaborative group, DH policy officials have worked with and listened to over a hundred other stakeholders to learn about the care planning process, the potential benefits and to shape the content of guidance and implementation programme. They have also consolidated learning from established good practice from areas such as the Care Programme Approach in Mental Health and Person Centred Planning for people with Learning Disabilities.

3. Personalised and integrated care planning is essentially about addressing an individual's full range of needs, taking into account their personal, social, economic, educational, mental health ethnic and cultural background and circumstances. It is therefore a holistic process, seeing the person "in the round" with a strong focus on helping people to achieve the outcomes they want for themselves, for example to live independently or to return to work. Provision of quality, timely and relevant information is crucial, as is self care and self management advice. Risk management and crisis and contingency planning are integral to the process, in particular for people with complex needs.

4. For those with complex needs care planning requires a care coordinator who can navigate complex health and social care systems and ensure that the full range of services agreed in the care plan are provided, although the level of input from the care coordinator will vary according to the level of need that a person has.

5. Health and social care professionals need to support people in having their say and for them to be equal partners in the care planning discussion that is more empowering and less paternalistic. The workforce therefore needs the appropriate skills and behaviours that will cultivate these approaches..

6. Care planning requires integration of local partners at strategic and individual level. At strategic level this means making use of Joint Strategic Partnerships, Joint Commissioning Boards and Local Area Agreements to support planning and commissioning with shared goals. At individual level it means establishing multidisciplinary teams with the mix of skills to meet the needs that are being identified.

7. Personalised and integrated care planning fits with our vision for World Class Commissioning, emerging themes from *Our NHS, Our Future* by and transforming adult social care by:

- Embedding personalisation of care and services
- Promoting health, people staying healthier for longer “adding life to years”
- Reducing health inequalities – standardising care across the country
- Promoting integration and partnership working
- Stimulating genuine choices – those choices feeding into commissioning decisions
- Promotes a more planned, proactive approach to health and social care services

8. Personalised care planning is a priority because it underpins excellent long term conditions management and completely supports key themes described in Commissioning for Health and Well-being, our vision for World Class Commissioning and the NHS Next Stage Review High Quality Care for All including:

- more individualised services,
- more focus on prevention of disease and complications,
- greater choice – including supporting people to make healthier and more informed choices,
- reducing health inequalities
- providing care closer to home

9. This Impact Assessment focuses on the costs and benefits surrounding the offer and provision of care planning for all those with a long-term condition who want it.

### **Proposal and expected effects**

10. The aim is to offer personalised care planning to all those living with a long-term condition by 2010. This offer is for an annual meeting as a minimum between the individual and a health or social care professional. This meeting seeks information from the individual on their goals, needs and wishes and identifies a plan of care to attempt to move the individual towards their aspirations. There is an offer to put this into a plan, either written or electronically stored. Those with more complex needs may need more regular care planning review meetings. The care plan meeting itself and the use of the plan in subsequent interactions with health and social care services will then ensure the individual’s goals, needs and wishes are placed at the centre of

their care instead of them having to fit around existing services. This process is anticipated to have a range of benefits which can be seen from the point of view of the service user or from that of health and social care commissioners.

11. The introduction of care planning in the management of long-term conditions has several potential benefits for both the individual and the provider. Although evidence of the impact of care planning as a complete process is limited, several studies have been undertaken which evaluate the different components of the system. The existing evidence base for care planning and the various elements of the care planning process are summarised below.

## Costs

12. Evidence of cost impact is rather limited, but the literature that is available seems to come to the same conclusion that the impact will be favourable. An evaluation of a care-management model in Taiwan found that, although expenditure on medical care for elderly patients with disabilities increased during the year of study, the increase was significantly smaller for those whose care involved the inclusion of a care plan compared with patients in the control group<sup>10</sup>. The development of a custom care plan for patients with acute and chronic illnesses was found to decrease per patient per month expenses by 12% and have a net financial impact of a 6% decrease in total delivery system medical expenditures<sup>5</sup>. A study of the cost effectiveness of collaborative management of depression reported that collaborative care models had a lower cost per case successfully treated than usual care for patients with major depression, but that for patients with minor depression, the cost per case successfully treated was higher with the collaborative care models<sup>1</sup>. The Grampian Integrated Care Scheme for patients with asthma was found to save the hospital an average of £3.06 per patient per year, general practitioners £2.41 per patient per year, and patients themselves £39.52 per year (1991 prices)<sup>12</sup>.

## Fewer Emergency Attendances

13. Few studies evaluate the impact of care plans on emergency departments, and that which does exist is quite mixed. Emergency hospital attendances have been shown to decrease for children with asthma following the introduction of a care plan<sup>2</sup>, and the development of a collaborative care program, which included a personalised patient education plan and the development of a written action plan in the case of exacerbation<sup>3</sup>. In both cases, the number of Emergency department visits per child fell in the year following the introduction of the plan, whereas the visiting rate for children without a care plan did not change significantly. The evaluation of the Evercare case management approach for patients over the age of 65 did not find any significant effects on the rates of Emergency admissions or the number of Emergency bed days for those patients in the Evercare practices<sup>4</sup>. However, it acknowledged that there were difficulties in adopting a whole system approach to support effective integration of case managers with other parts of the health and social care system.

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<sup>1</sup> Von Korff M, Katon W, Bush T, Lin EH, Simon GE, Saunders K, Ludman E, Walker E, Unutzer J. 1998. "Treatment costs, cost offset, and cost-effectiveness of collaborative management of depression", *Psychosomatic Medicine* Vol 60(2) pp143-149 <http://www.psychosomaticmedicine.org/cgi/content/abstract/60/2/143>

<sup>2</sup> Chen SH, Yeh KW, Chen SH, Yen DC, Yin T, Huang JL. 2004. "The development and establishment of a care map in children with asthma in Taiwan", *Journal of Asthma* Vol.41 No.8 pp855-861

<sup>3</sup> Kelly C, Morrow A, Shults J, Nakas N, Strobe G, Adelman R. 2000. "Outcomes evaluation of a comprehensive intervention program for asthmatic children enrolled in Medicaid", *Pediatrics* Vol. 105 No. 5 May 2000, pp. 1029-1035 <http://pediatrics.aappublications.org/cgi/reprint/105/5/1029>

<sup>4</sup> Gravelle H, Dusheiko M, Sheaff R, Sargent P, Boaden R, Pickard S, Parker S, Roland M. 2006. "Impact of case management (Evercare) on frail elderly patients: controlled before and after analysis of quantitative outcome data", *BMJ* 15 November 2006, doi: 10.1136/bmj.39020.413310.55 <http://bmj.bmjournals.com/cgi/rapidpdf/bmj.39020.413310.55v1.pdf>

## Fewer Inpatient Days

14. Evidence of the impact of treatment interventions on hospital days is quite strong, and it has been shown that the development of a custom care plan for patients with acute and chronic illness can have an impact on inpatient visits. In a managed care setting in the USA, nurses formulated a custom care plan in consultation with the primary care physician and involved specialists. Inpatient admissions decreased 20%, with inpatient days falling by 28%. The impact on more senior patients was even greater<sup>5</sup>.

15. Self-management and a patient-centred approach to care, both vital components of the care planning process, has also been shown to have an impact on hospital visits for patients with bowel disease. The introduction of a written self-management plan for patients with chronic inflammatory bowel disease, combined with a more patient oriented approach to consultations resulted in fewer hospital visits, without a subsequent increase in the number of primary care visits<sup>6</sup>. Similarly, after consultation with a clinician to develop a mutually acceptable treatment plan to follow in the case of a relapse, patients with ulcerative colitis made significantly fewer visits to hospital and to the primary-care physician<sup>7</sup>

## Quality-of-Life

16. Several studies evaluate the change in quality-of-life for the patients, but the evidence in this area is mixed. The use of a care plan for patients with chronic obstructive pulmonary disease had no significant impact on quality-of-life scores<sup>5</sup>. A controlled trial of the provision of care plans for patients with chronic obstructive pulmonary disease found there was no significant effect on the quality of life<sup>8</sup>. However, a study on the effect of guided self-management for the treatment of asthma found that the introduction of disease education sessions and self-measurement of peak expiratory flow led to significantly improved quality-of-life scores for those in the self-management group<sup>9</sup>. Wellbeing scores were also improved for patients with diabetes whose clinicians had received training in a patient-centred approach to care<sup>10</sup>.

## Greater confidence in being able to cope with condition

17. Only a few evaluations consider the impact of treatment interventions on patient and carer confidence. However, the evidence does show a positive effect. The introduction of a care map for children with asthma in Taiwan resulted in parents having a more positive attitude to their children's asthma<sup>2</sup>. Similarly, studies in patients with chronic inflammatory bowel disease have

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<sup>5</sup> Forman SA, Kelliher M, Wood G. 1997. "Clinical improvement with bottom-line impact: Custom care planning for patients with acute and chronic illnesses in a managed care setting", *The American Journal of Managed Care* Vol 3(7) pp1039-1048 [http://www.ajmc.com/files/articlefiles/AJMC1997JulyForman1039\\_1048.pdf](http://www.ajmc.com/files/articlefiles/AJMC1997JulyForman1039_1048.pdf)

<sup>6</sup> Kennedy AP, Nelson E, Reeves D, Richardson G, Roberts C, Robinson A, Rogers AE, Sculpher M, Thompson DG, the North-West Regional Gastrointestinal Research Group. 2004. "A randomised controlled trial to assess the effectiveness and cost of a patient orientated self management approach to chronic inflammatory bowel disease", *Gut* Vol 53 pp1639-1645 <http://gut.bmj.com/cgi/content/full/53/11/1639>

<sup>7</sup> Robinson A, Thompson DG, Wilkin D, Roberts C, the North-West Regional Gastrointestinal Research Group. 2001. "Guided self management and patient-directed follow-up of ulcerative colitis: a randomised trial", *Lancet* Vol 358 pp976-981

<sup>8</sup> Martin IR, McNamara D, Sutherland FR, Tilyard MW, Taylor DR. 2004. "Care plans for acutely deteriorating COPD: A randomized controlled trial", *Chronic Respiratory Disease* Vol 1 pp191-195 <http://crd.sagepub.com/cgi/content/abstract/1/4/191>

<sup>9</sup> Lahdensuo A, Haahtela T, Herrala J, Kava T, Kiviranta K, Kuusisto P, Peramaki E, Poussa T, Saarelainen S, Svahn T. 1996. "Randomised comparison of guided self management and traditional treatment of asthma over one year", *BMJ* Vol 312 pp748-752 <http://bmj.bmjournals.com/cgi/content/abstract/312/7033/748>

<sup>10</sup> Kinmonth AL, Woodcock A, Griffin S, Spiegel N, Campbell MJ. 1998. "Randomised controlled trial of patient centred care of diabetes in general practice: impact on current wellbeing and future disease risk", *BMJ* Vol 317 pp1202-1208 <http://bmj.bmjournals.com/cgi/content/abstract/317/7167/1202?ck=nck>

shown that when patients undergo self-management training, they report greater confidence in being able to cope with their condition<sup>6</sup>.

### **Improved knowledge about the condition**

18. Evidence of improved knowledge following treatment intervention is fairly weak. Parents of children with asthma in Taiwan demonstrated significantly higher knowledge scores when they participated in the care map program. However, the evaluation of a patient-centred care approach for patients with diabetes found that knowledge scores were actually lower for those patients in the intervention group<sup>10</sup>. Further evaluation of the components of the two processes and the impact on patients' knowledge is recommended.

### **Greater treatment satisfaction**

19. There is strong evidence to suggest that treatment satisfaction will be improved following the introduction of care planning to treatment of long-term conditions. Patient centred care is an important part of care planning, as it enables a partnership to form between health professionals and patients – allowing the clinician to integrate the patients' perspectives with the consultation. In an evaluation of elderly disabled patients in Taiwan, it was found that the development of a care management model – including the introduction of a care plan – resulted in greater satisfaction for both the patient and the caregiver at a statistically significant level<sup>11</sup>. Also, additional training of practitioners in a patient centred approach to consultations have been shown to create greater treatment satisfaction in patients with diabetes<sup>10</sup>, although a study of patients with chronic inflammatory bowel disease suggests that satisfaction with consultations remains unchanged when a patient centred approach is taken<sup>5</sup>.

### **Improved health outcomes**

20. Evidence for the improvement of health outcomes following the introduction of care planning is quite mixed, with varying results from the completed studies. Collaborative care is an important factor in the development of a care plan for patients with a long-term condition. In two studies on the impact of collaborative care for patients with depression, one study reported a higher number of depression-free days for patients<sup>12</sup>, and the other found a significantly greater decrease in the severity of depressive symptoms over time, and patients were more likely to have recovered at three and six months<sup>13</sup>. An evaluation of structured personal care for patients with type 2 diabetes also found that risk factor levels were significantly improved<sup>14</sup>. However, not all studies have found a change in health outcomes for patients who have care plans as a part of their treatment history – a study on elderly disabled patients in Taiwan found that self-rated health was no different for patients in the care management model<sup>9</sup>. Furthermore, an integrated care approach to the treatment of asthma was found to have no significant effect on clinical outcomes – including pulmonary functions, prescriptions and morbidity<sup>15</sup>.

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<sup>11</sup> Chi YC, Chuang KY, Wu SC, Huang KC, Wu CL. 2004. "The assessment of a hospital-based care management model for long-term care services", *Journal of Nursing Research* Vol 12 (4)

<sup>12</sup> Liu CF, Hedrick SC, Chaney EF, Heagerty P, Felker B, Hasenberg N, Fihn S, Katon W. 2003. "Cost-effectiveness of collaborative care for depression in a primary care veteran population", *Psychiatric Services* Vol 54 698-704  
<http://www.psychservices.psychiatryonline.org/cgi/content/abstract/54/5/698>

<sup>13</sup> Katon W, Von Korff M, Lin E, Simon G, Walker E, Unützer J, Bush T, Russo J, Ludman E. 1999. "Stepped collaborative care for primary care patients with persistent symptoms of depression", *Archives of General Psychiatry* Vol 56 pp1109-1115  
<http://archpsyc.ama-assn.org/cgi/content/abstract/56/12/1109>

<sup>14</sup> Olivarius NF, Beck-Nielsen H, Andreasen AH, Hørder M, Pedersen PA. 2001. "Randomised controlled trial of structured personal care of type 2 diabetes mellitus", *BMJ* Vol 323(7319) p970 <http://www.bmj.com/cgi/content/abstract/323/7319/970>

<sup>15</sup> Drummond N, Abdalla M, Buckingham JK, Beattie JAG, Lindsay T, Osman LM, Ross SJ, Roy-Chaudhury A, Russell I, Turner M, Douglass JG, Legge JS, Friend JAR. 1994. "Integrated care for asthma: A clinical, social, and economic evaluation" *BMJ* Vol 308 pp 559-564 <http://www.bmj.com/cgi/content/abstract/308/6928/559>



## Use of medication

21. The impact on use of medication has not been evaluated by many studies, and the evidence is therefore somewhat limited. However, the evaluation of a care map for children with asthma in Taiwan reported a lower use of inhaled  $\beta_2$ -agonist for children with a care map<sup>1</sup>. Also, a collaborative care approach for patients with depression also found a significantly greater adherence to an adequate dosage of medication for 90 days or more for patients who received enhanced education and increased frequency of visits by a psychiatrist working with the primary care physician to improve pharmacologic treatment<sup>12</sup>.

## The views of patients and health professionals

22. Few studies have evaluated the qualitative effects of care plans on patients and clinicians, and the evidence that does exist is mixed. However, an appraisal of care planning in South Australia considered the views of five stakeholder types about their satisfaction with care planning and a self-management approach to care. The report found that all informant types valued the care planning and self-management approach as they perceived that clients were better equipped to accept and cope with their condition<sup>16</sup>. Another qualitative study, this time completed on health professionals and patients with asthma, found that neither health professionals nor patients were enthusiastic about guided self-management plans. They were found to be uncertain about the usefulness or relevance of the approach, and concluded that attempts to introduce guided self-management plans in primary care were unlikely to be successful<sup>17</sup>. However, the report concludes that a more patient-centred, patient-negotiated plan is needed – which are both components of the care planning approach in its entirety.

## Potential Risks

### *Risk*

23. The national commitment that everyone with a long term condition should be offered a care plan aims to embed the **process** of care **planning** rather than creating a bureaucratic system of form filling. This is not about simply filling out a form that schedules a list of treatments. There is a risk that professionals may not understand this and create an additional layer of bureaucracy with no real changes for patients.

### *Mitigation*

24. The implementation programme includes guidance for commissioners and separate guidance for the workforce, which makes it very clear that the policy objective is to embed the **process** of care planning. It explains how care planning should be proportionate to need with case study examples. Policy officials are drawing on learning from the implementation of other care planning programmes such as the Care Programme Approach in Mental Health to reduce the risk of this becoming just a new system of form filling and 'one size fits all' approach. In addition, the Department plans to procure external support for PCTs to implement care planning which will also help them to manage this risk.

### *Risk*

25. The workforce not having the skills to deliver care planning. Health and social care professionals need to support people and their carers in having their say and for them to be equal partners in the care planning discussion. A more empowering and less paternalistic approach is required.

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<sup>16</sup> Fuller J, Harvey P, Misan G. 2004. "Is client-centred care planning for chronic disease sustainable? Experience from rural South Australia", Health and Social Care in the Community Vol 12(4), pp318-326

<sup>17</sup> Jones A, Pill R, Adams S. 2000. "Qualitative study of views of health professionals and patients on guided self-management plans for asthma", BMJ Vol 321 pp1507-1510 <http://www.bmj.com/cgi/content/abstract/321/7275/1507>

### *Mitigation*

26. The implementation programme includes guidance for the workforce around what care planning means for them, the skills, approaches and behaviours required to do it, benefits for patients and what they need to do with case study examples. The culture change required to deliver care planning sits within a wider Departmental aim to embed more personalised services. It fits with other DH commitments for people with long term conditions such as Personal Health Budgets, *Your health, your way (the Patients' Prospectus)* and the *Information Prescription*, both of which aim to embed timely, relevant and accredited information and support for self care. These are both crucial elements of the care planning process and the DH programmes for delivery of these all inter-link.

### *Risk*

27. Care planning is sporadic throughout the country creating inequities of services.

### *Mitigation*

28. The Department's plans for implementation, which include guidance for commissioners and workforce, procuring external support for PCTs and development of e-learning tool shows a commitment to spread good practice throughout the country and to reduce the risk of creating inequalities. In addition there will be a professional communications campaign aimed at service providers and public and patients to embed care planning nationally.

### *Risk*

29. A lack of evidence of impact and benefits will hinder implementation

### *Mitigation*

30. Care planning will be monitored through patient experience surveys with questions included in the annual GP Practice Survey, the Ipsos-MORI GP Quarterly Tracker Survey and the Health Survey for England. In addition, a formal evaluation of the implementation of care planning will be undertaken during 2009/2010 and the results will inform the delivery models used to implement the process.

### *Risk*

31. Initial funding for care planning is not provided to GP practices or other organisations delivering.

### *Mitigation*

**The Department is using a number of levers and incentives to ensure any early investment required for care planning is given to providers. Policy officials are developing a Primary Care Service Framework that will allow PCTs to commission a Locally Enhanced Service for care planning from their local GP practices. The Department is also seeking to include care planning in the Community Services Contract and care planning will be signalled as a priority by its inclusion in the NHS Operating Framework for 2009/10 [DN: to include only if OF is published]. Information about these will be included in the care planning guidance for commissioners which will also show the links between personalised care planning and world class commissioning.**

# Economic evaluation of care planning guidance proposal

## Overview of economic impacts and evaluation

32. Care plans will incur direct **costs** that result from the time spent by nurses developing the plan with patients, and nurse training costs. People with care plans will be better informed about their conditions, and are expected to use the NHS less frequently when they are uncertain about their condition and the action they should take. This is expected to reduce use of NHS resources, providing savings that more than compensate for the costs of providing care plans.

33. Provision of care plans may **benefit** the patients receiving them, as described in the introduction. However, they have not been monetised.

34. There may be an indirect negative effect on patient benefits, if GPs provide care plans as substitutes for some other service, which is withdrawn. This will lead to a loss of health for those patients affected. It will also enable GPs to gain financially from the reimbursement for care plans. However, this is not expected.

35. The overall impact calculated is a net benefit, arising from cost savings due to patients using fewer hospital appointments.

36. It is important to note that this analysis consistently uses conservative assumptions. That is (with the exception of uptake rates – for which multiple scenarios are modelled), the calculations use the highest reasonable expectations of costs, but the lowest reasonable expectations of cost savings. The outcome is therefore an estimate of the minimum expected net benefit.

37. Note that the care planning guidance will not be prescriptive and the delivery model described here is not mandatory. The evaluation of care planning implementation in 2009/2010 and beyond will assess the delivery of care planning and will identify and disseminate best practice. In particular, this will aim to identify the delivery systems that work best in the NHS context and the differential effect of care planning on different disease groups (or combinations).

## Costs

### *Costs of provision per care plan*

38. The average cost of providing a care plan has been calculated as £18.61. This is comprised mainly of the labour costs of nurses providing the plans. Detailed calculations of costs and other impacts are provided in Annex A.

### *Cost savings per care plan*

39. This section describes how care plans are expected to reduce unnecessary use of NHS resources by patients with LTCs, resulting in cost savings.

40. People with LTCs have frequent relapses (particularly those with the more limiting<sup>18</sup> conditions). Uninformed patients will often access NHS services unnecessarily following a relapse. Provision of care plans is expected to reduce this unnecessary use of NHS services, as patients are better informed about their condition, through the provision of risk management and crisis and contingency plans. The care planning process will also enable access to appropriate self-management information and training

41. There is a range of evidence internationally about the impact of person-centred care and care plans on hospital visits – see paragraphs 13-15 above. This suggests expected reductions

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<sup>18</sup> For the context of this Impact Assessment those with ‘limiting’ long term conditions have been defined as in the general Household Survey.

in service use. For this analysis, we have used a 2004 study of UK patients with chronic inflammatory bowel disease<sup>6</sup>. This study found that patients with care plans reduced their hospital visits by 35%. See Annex A for more detailed discussion of the study's design and its findings.

42. Given this study only relates to a specific condition and a slightly different model of providing care planning, to mitigate risks that this won't be realised across other long-term conditions in England context, it is assumed that only those LTC patients whose conditions are "limiting" will make fewer hospital visits. Applying the results of the study described above to patients with limiting LTCs implies a reduction of 0.53 hospital appointments per care plan, with a resulting cost saving of £64.

43. It is also likely that patients will use other NHS resources less frequently, notably GP services, attendances at A&E and emergency admissions into acute care. However evidence is lacking for these effects, so they have not been monetised.

### *Projected uptake of care plans*

44. There are 14.8m patients with long term conditions who would be eligible for care plans. However it is not likely that all these patients will receive them. Evidence from the 2006 Healthcare Commission survey of diabetes service provision<sup>19</sup> showed that 47% of eligible patients were currently being provided with care plans<sup>20</sup>. Figures from October 2008 show 44 per cent of people with a long-term condition have agreed a care plan, however, 36 per cent said they didn't want a plan or care planning discussion<sup>21</sup>. This analysis models three scenarios with different degrees of uptake: low, medium and high.

45. The low uptake scenario assumes that 50% of eligible patients will receive care plans, once guidance has been fully implemented across a broad range of conditions. This suggests a very small increase from the current position.

46. Some SHA plans for implementing the long-term conditions elements of the NHS Next Stage Review project that 90% of patients are given a care plan (for example, South East Coast SHA). This figure is used to model the high-uptake scenario.

47. A medium uptake scenario simply takes the average of these two values: 70%.

### *Training costs*

48. Additional costs of nurse training are estimated to be £5.9m. While these costs are likely to decrease with time, they are conservatively estimated to be a constant annual expense. It is also assumed, conservatively, that they will not be reduced in the case of uptake below 100%.

49. To support the NHS in implementing care planning, the Department will provide guidance to commissioners and the workforce, and develop an e-learning tool. DH will also be look into developing support packages for PCTs. Embedding personalised care planning will be achieved through building on the existing skills of the workforce.

### *Costs to the private and voluntary sector*

50. This policy may impact on those in the third sector – that is private and voluntary organisations providing care commissioned by PCTs. The impact on these organisations should be the same as for NHS organisations and therefore should be cost neutral.

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<sup>19</sup> Healthcare Commission 2006 National survey of People with Diabetes:

<http://www.healthcarecommission.org.uk/healthcareproviders/nationalfindings/surveys/healthcareproviders/surveysofpatients/longtermco/resultsofthe2006diabetessurvey.cfm>

<sup>20</sup> This is following initiatives such as the Diabetes Year of Care.

<sup>21</sup> DH household survey, October 2008

### Net annual impacts on costs

Uptake Scenario	Care plans provided (m)	Total cost (£m)	Cost savings (£m)	Net annual cost impact (£m)
<b>Low</b>	<b>7.4</b>	<b>143</b>	<b>470</b>	<b>327</b>
<b>Medium</b>	<b>10.3</b>	<b>198</b>	<b>658</b>	<b>460</b>
<b>High</b>	<b>13.3</b>	<b>253</b>	<b>846</b>	<b>593</b>

### Benefits of care plans

#### Health benefits to patients receiving care plans

51. From the evidence in paragraphs 13-22 above, it seems likely that patients will gain health and other benefits from care plans. However, due to limited evidence at this stage of the care planning process in its entirety, these benefits have not been monetised.

### Calculating the NPV of net costs

52. The valuations of costs and benefits shown above relate to the annual impacts when uptake of care plans is at the expected level implied by the particular scenario. However it is anticipated that uptake will not reach these levels in the first year of guidance.

53. To reflect this expected gradual implementation, it is assumed that 18% of the final level is achieved after one year, 50% after two years, and 100% after three years.

54. Allowing for this gradual uptake, the net present values of impacts calculated over a ten year period are shown below.

	<i>Low uptake</i>	<i>Medium uptake</i>	<i>High uptake</i>
<b>Cost impacts (£m)</b>			
Providing care plans	143	198	253
Hospital appointments saved	-470	-658	-846
→Total annual cost impact	-327	-460	-593
→NPV	-2,306	-3,245	-4,184
<b>Benefit impacts (£m)</b>			
	Will be +ve	Will be +ve	Will be +ve
<b>Annual net benefit (£m)</b>			
→NPV	At least 2,306	At least 3,245	At least 4,184

### Sensitivities around the unit cost

55. The unit cost of £18.61 is based on the delivery of care planning by practice nurses. If we consider replacing the time spent by practice nurses, in the above costing, with General Practitioner or medical consultant time, we obtain the following:

56. If the care planning process is led by a GP, the average unit cost would rise to £52.30 and would require around 2,800 whole time equivalent (wte) GPs.

57. Medical consultant-led care planning would have an average unit cost of around £59.40 and would require around 3,200 wte consultants.

58. These options have been discounted, as the staff required to do this work are not available over the period that the number of people with agreed care plans is expected to rise.

## Monitoring

59. Questions on whether someone has a long-term condition, whether they have had a care planning discussion and then whether they have agreed a care plan are included in the GP patient survey from 2008-09. This will provide robust figures for primary care trusts each quarter (from Q1 2009-10) and for individual GP practices each year.

## Evaluation

60. Subject to securing funding, below is a high level description of the planned evaluation of care planning.

### *Expected outcomes of Care Planning Implementation*

- 1) Improved Patient Experience
- 2) Improved health outcomes
  - a) Link to Patient Reported Outcome Measures (PROMS)
- 3) Reduction in the levels of avoidable use of primary and secondary health care services through contingency planning, including
  - a) Accident and Emergency attendances
  - b) Hospital inpatient emergency bed days
  - c) Hospital outpatient appointments
  - d) GP appointments
  - e) Practice nurse appointments
- 4) Workforce delivering better care to people with a long term condition (LTC)
  - a) Developing new skills
  - b) New ways of working

### *Aims of Evaluation*

- 1) To determine the baseline data for the outcomes stated above
- 2) To identify different models of commissioning and delivery of care planning
- 3) To investigate whether the expected outcomes as stated above are being delivered by care planning in comparison with baseline
- 4) To investigate the causes of improvement/deterioration in the outcomes described above
- 5) To disseminate learning from the research to further improve implementation of care planning to better achieve outcomes

### *Research Evaluation Programme (Draft proposal)*

- 1) To review the literature on care coordination and to build on the literature review on care planning carried out by the Department
- 2) To draw links with other evaluation programmes funded by the department
  - a) Information Prescriptions pilot and evaluation
  - b) Expert Carers
  - c) Whole System Demonstrators (WSD) evaluation
- 3) To develop robust, comparable, measures for each of the outcomes outlined above, using a range of qualitative and quantitative data. To obtain data where not already available
- 4) To develop baseline data and synthesise data sources, covering
  - a) Current practice in the NHS
  - b) Patient experience measures for people with an LTC
  - c) Utilisation of services
- 5) To quantify the impact of care planning and the regular review process
  - a) Comparison of outcomes for people with a care plan and
    - i) People who want a care plan but do not have one
    - ii) People who neither have nor want a care plan
  - b) Comparison of outcomes for people with a care plan by

- i) Which condition(s) they have
  - ii) The number of conditions they have
  - iii) The severity of their LTC(s) [i.e. do they have a limiting LTC]
  - iv) The regularity with which their care plan is reviewed/whether such a review is taking place
- c) Comparison of outcomes for different methods of service delivery
- i) the amount of time spent by each of the professionals involved,
  - ii) their skill base,
  - iii) the frequency of intervention,
  - iv) the nature of the plan agreed
- d) Impact of implementation on NHS workforce
- i) Review of impact on practitioners

## 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	<i>Results in Evidence Base?</i>	<i>Results annexed?</i>
<b>Competition Assessment</b>	<b>Yes – see below</b>	<b>No</b>
<b>Small Firms Impact Test</b>	<b>Yes – see below</b>	<b>No</b>
<b>Legal Aid</b>	<b>Yes – see below</b>	<b>No</b>
<b>Sustainable Development</b>	<b>Yes – see below</b>	<b>No</b>
<b>Carbon Assessment</b>	<b>Yes – see below</b>	<b>No</b>
<b>Other Environment</b>	<b>Yes – see below</b>	<b>No</b>
<b>Health Impact Assessment</b>	<b>Yes – see below</b>	<b>No</b>
<b>Race Equality</b>	<b>No</b>	<b>Yes – see annexed Equality Impact Assessment</b>
<b>Disability Equality</b>		
<b>Gender Equality</b>		
<b>Human Rights</b>	<b>Yes – see below</b>	<b>No</b>
<b>Rural Proofing</b>	<b>Yes – see below</b>	<b>No</b>

### Competition Assessment

61. As no private firms are affected by these proposals, there is no expected impact on competition.

### Small Firms Impact Test

62. As no private firms are affected by these proposals, there is no expected impact on small firms.

### Legal Aid



63. There is no reason to expect any impact on legal aid.

### **Sustainable Development**

64. There is no reason to expect any impact on the sustainability of development.

### **Carbon Assessment**

65. There is no reason to expect a significant impact on carbon emissions.

### **Other Environment**

66. No other environmental impact is expected.

### **Health Impact**

67. The health impacts of this policy have been considered in the main analysis.

### **Human Rights**

68. There is no reason to expect any negative impact on human rights.

### **Rural-proofing**

69. It is possible that rural GP practices, with fewer practice nurses, will be more likely to substitute existing services with care plans. However any differential effect is not thought likely to be significant.

## Annexes

## Annex A - Calculations

### Costs of providing care plans

It is calculated from Quality and Outcomes Framework (QOF) registers for disease prevalence and the General Household Survey 2005 that there are 14.6 million people eligible for the offer of a care plan. These will have a range of (often multiple) conditions such as asthma, heart disease, hypertension, COPD and chronic kidney disease.

Costs of care planning have been identified to be different for three distinct strands of individual within this 14.6 million people.

#### Low Cost Strand:

These are individuals who are on QOF registers, where contact with primary care is regular and the annual care planning meeting can be incorporated into existing scheduled meetings. There are estimated to be 4.1 million people in this group. The care planning costs for this group will be £14.09 annually. This comprises of £1.50 administrative costs, 25 minutes Healthcare Assistant (HCA) time for preparation, and 20 minutes Practice Nurse time<sup>22</sup>.

#### Medium Cost Strand:

These are individuals who appear on QOF registers, where contact with primary care is generally on an 'annual check-up' basis. Hence, no recall costs are assumed, but a full 30 minute meeting time is accounted for, specifically for the care planning process. There are estimated to be 6.4 million people in this group. The care planning costs for this group will be £18.42 annually. This comprises of £1.50 administrative costs, 25 HCA time for preparation and 30 minutes practice nurse time.

#### High Cost Strand:

These are individuals who do not appear on a QOF register, where contact with primary care may be regular but a specific care planning meeting will need to be organised. There are estimated to be 4.3 million people in this group. The care planning costs for this group will be £23.17 annually. This comprises of £3.00 administrative costs, 40 minutes HCA time for preparation and 30 minutes practice nurse time.

#### Weighted average cost:

Averaging the above costs, and weighting according to prevalence of different strands, results in a weighted average cost per care plan of £18.61.

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<sup>22</sup> Costs for staff time are taken from the PSSRU Unit Costs of Health and Social Care 2007 – <http://www.pssru.ac.uk/uc/uc2007contents.htm#contents>. The amount for workforce time required and administrative costs have been developed from the experience of those piloting diabetes care planning in Northumbria.

## Training Costs

Evidence from the provision of person-centred care planning for those with learning difficulties has suggested that the cost of training to facilitate effective person-centred care planning costs £600 per member of staff trained<sup>23</sup>. It has therefore been assumed that all the 8,372 GP practices expected to provide care plans will need to train one member of staff annually. This results in a total one-off training cost of £5.0m.

## Cost savings

There is a range of evidence presented that care plans reduce hospital visits, though little in the context of the health and social care system in England. Therefore, we have used the study below as the basis of the cost savings. There is a risk that some of these savings will not be realised, but that is mitigated by not monetising other expected cost savings (e.g. GP appointments and A&E attendances).

In a study published in 2004, Kennedy et al., conducted a randomised controlled trial of a “patient-centred approach to chronic disease self-management by providing information designed to promote patient choice”<sup>24</sup>, applied to patients with inflammatory bowel disease.

The intervention used in this study was considered highly comparable to the care plans proposed in the current policy, consisting of a single interview with a health worker trained in “patient-centred consultations”. Patients were provided with a guidebook to their condition, contact information for appropriate health workers, and a record of the self-management plan agreed during the interview.

The study measured the number of hospital appointments used by 365 patients who received care plans, who were compared to a control sample of 270 patients that did not receive the intervention. The average number of appointments per patient in the trial group were reduced from 3.0 in the year before administration of the care plan, to 1.9 in the following year. Over the same period, appointments per patient in the control group reduced from 3.1 to 3.0. Overall, this corresponds to a reduction of 35% ( $p < 0.001$ ).

Expected reduction in hospital visits due to Care Plans

All patients with LTCs will be offered care plans. However the greatest benefits are considered most likely to be gained by those patients whose condition is “limiting” – that is, it has an impact on their ability to lead a normal life. Importantly, inflammatory bowel disease – the subject of the study described above – is typical of limiting LTCs.

In the 2005 General Household Survey<sup>25</sup>, more than 60% of LTC patients defined their condition as “limiting”. In order to generate a conservative estimate, it is assumed that the true proportion of LTC patients whose condition is limiting, and who will benefit from care plans, is only 50%.

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<sup>23</sup> The Institute for Health Research, Lancaster University ‘The Impact of Person-Centred Care Planning’. 2005 – <http://www.helensandersonassociates.co.uk/PDFs/TheImpactofPersonCentredPlanning-FinalReport.pdf>. The figure of £658 in 2005 has been uplifted to £700, to reflect inflation.

<sup>24</sup> Kennedy AP, Nelson E, Reeves D, Richardson G, Roberts C, Robinson A, Rogers AE, Sculpher M, Thompson DG, the North-West Regional Gastrointestinal Research Group. 2004. “A randomised controlled trial to assess the effectiveness and cost of a patient orientated self management approach to chronic inflammatory bowel disease”, Gut Vol 53 pp1639-1645

<sup>25</sup> [http://www.statistics.gov.uk/ssd/surveys/general\\_household\\_survey.asp](http://www.statistics.gov.uk/ssd/surveys/general_household_survey.asp)

*Patients with non-limiting LTCs are also expected to have benefits from care plans, but these are disregarded in order to generate a conservative estimate of the net benefit from the policy.*

*According to the General Household Survey, patients with limiting LTCs used an average of 3.03 hospital outpatient appointments in 2005.*

*Applying the reduction observed by Kennedy et al., and assuming that only 50% of patients receiving care plans will benefit, gives an overall reduction of 0.53 hospital appointments per care plan administered.*

*Calculating the cost savings resulting from reduced hospital visits*

*Reduced hospital visits will lead to a saving in the NHS that corresponds to costs which would have been otherwise incurred.*

*The tariffs for hospital outpatient appointments vary from £80 to £200<sup>26</sup>, depending on the nature of the visit, and the clinical specialty. For the purposes of this calculation, it is therefore assumed that each appointment has a cost of £120.*

*Therefore, each care plan administered is expected to result in savings of £64 to the NHS, through reduced hospital appointments alone.*

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<sup>26</sup> [http://www.dh.gov.uk/en/Managingyourorganisation/Financeandplanning/NHSFinancialReforms/DH\\_077279](http://www.dh.gov.uk/en/Managingyourorganisation/Financeandplanning/NHSFinancialReforms/DH_077279)



