

# Issue definition and the opinion-policy link: public preferences and health care spending in the US and UK

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## Abstract

This article explores the extent to which yearly changes in health spending reflect yearly changes in public preferences. Time series modelling suggests that health care spending is remarkably more responsive to yearly changes in public opinion in the US than in the UK. A content analysis of party manifestos suggests the significant role of 'issue definition' in accounting for this difference. Health care issues in the US have more often been viewed as problems of expenditure, while UK policy-makers have tended to focus on efficiency. Results suggest that the responsiveness of health care expenditures to public preferences in the US and UK is linked to the way in which health care issues are differently defined by policy-makers.

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The link between public preferences and public policy is at the heart of democratic theory. Robert Dahl (1971, 1) writes, for instance, that: '... a key characteristic of a democracy is the continuing responsiveness of the government to the preferences of its citizens, considered as political equals'. Indeed, there is a growing body of literature that seeks to measure democracy in terms of government responsiveness to public preferences, and this work has provided insights into both the nature of political representation and the responsiveness of the policy-making process.

Very little empirical research on this subject has been done outside the US, unfortunately, and no individual work has attempted to find directly comparable measures of both public opinion and policy.<sup>1</sup> As a consequence, while we *suspect* that the US system is particularly responsive, we have very few points of comparison. In addition we know almost nothing about the responsiveness of public policy to public preferences in other countries. Benjamin Page (1994, 25) asks: 'Under what circumstances is this impact larger or smaller? ... What kinds of political systems are more responsive to their citizens? ... What types of institutions are more or less responsive than others?' We are still unable to answer these questions.

The current article represents a first step in this direction, through an investigation of the relationship between public preferences and health care spending in the US and UK. Health care is a particularly interesting topic to compare across these two countries. From a health policy perspective, the US and UK represent opposite ends of the international spectrum. The UK National Health Service (NHS) is one of the oldest and most comprehensive publicly-funded health care systems; in the US, Medicare and Medicaid only provide health care for the elderly and poor (along with a number of smaller federal and state programmes), and the majority of the US population is either covered by private insurance or not covered at all. Whereas the UK is a predominantly public system, the US health care system is by and large a private one.

From the perspective of those interested in the opinion-policy link, Lawrence Jacobs' (1993) work provides a valuable starting point. Jacobs emphasises the importance of public opinion in the creation of the NHS and Medicare. Strong public support in the US and UK, Jacobs suggests, played a critical role in overcoming obstacles such as opposition by doctors, and—in the case of the US—a comparatively weak state. Jacobs' research has been fundamental to our understanding of the creation of the NHS and Medicare, and more generally of the role of public opinion in policy-making. It does not address the role opinion may have played in the evolution of health care systems over the past four decades, however. While the current research speaks to the more general health policy literature, then, it also represents an effort to add to previous work on the relationship between public opinion and health care policy in the US and UK.

We begin with a time series analysis, examining to what extent yearly changes in health spending reflect yearly changes in public preferences for spending. Results point to significant variation in the responsiveness of health spending to public preferences across the two countries. More specifically, it appears as though health spending in the US is remarkably

responsive to yearly changes in public opinion, while in the UK it is not.

Having identified significant differences in the nature of health care spending in the US and UK, we then ask what might account for these differences. There are several possible explanations, of course. Nevertheless, where health care is concerned it appears as though *problem definition* has played a critical role. Health care issues in the US have most often been viewed as problems of expenditure, while UK governments have tended to focus on considerations of efficiency. This difference in focus is illustrated below through a content analysis of party manifestos in both countries. These results, juxtaposed with the preceding time series analyses, suggest that problem definition significantly explains why the US is more responsive than the UK to public preferences on health care spending.

### Exploring the opinion-policy link: time series analysis

The literature examining the link between public preferences and public opinion generally follows one of two methods. Opinion-policy ‘congruence’ analyses examine the degree to which changes in opinion and policy tend to be in the same direction across two points in time, and across various policy areas. Page and Robert Shapiro (1983) find, for instance, that changes in policy tend to be congruent with changes in opinion registered one year earlier about 66 per cent of the time (in the US, between 1935 and 1979, and in cases where policy change was evident). More recently, using a related methodology, Alan Monroe (1998) finds that opinion-policy ‘consistency’ in the US declined to about 55 per cent from 1980 to 1993, and explores the extent to which this consistency varies across policy domains.<sup>2</sup>

A second, more rigorous, method used to study the link between public policy and public opinion is time series modelling. Because time series models examine ongoing relationships between preferences and spending over extended periods, they present more persuasive evidence of the causal links that run between opinion and policy. And they also propose a more zealous definition of representation: yearly variations in opinion, these studies suggest, should be reflected in yearly variations in public spending. For example, Thomas Hartley and Bruce Russett (1992) explore the extent to which yearly changes in US defence spending in year  $t$  are related to public preferences for spending in year  $t - 1$  from 1965 to 1990.<sup>3</sup> Work by Christopher Wlezien (1995 and 1996) suggests not only that defence spending might be responsive to public opinion, but also that opinion may

react 'thermostatically' to changes in spending. In short, policy-makers increase defence spending (partly) in response to public preferences for more spending and in the subsequent year the public reacts to this change in spending: 'In effect, the public would behave like a thermostat, so that when policy differed from the favoured policy temperature (which could itself change) the public would send a signal to adjust policy accordingly and, once sufficiently adjusted, the signal would stop' (Wlezien 1996, 82).

Drawing in large part on these time series analyses, the current article uses a relatively simple autoregressive distributed lag model to examine the policy-opinion link in health care. First, however, Figure 1 illustrates the series of primary interest. Yearly changes in public spending on health care are shown in millions of National Currency Units (NCUs).<sup>4</sup> In both cases, the figures reflect total public health expenditures; in the US, this includes both federal and state health spending. The public preferences measure is based on questions similar to the following: 'Do you think the government is spending too much, too little or about the right amount on health care?' The proportion of 'too much' responses is subtracted from the proportion of 'too little' responses to create a measure of net support for health care spending (as in Wlezien 1995 and 1996). For the US, yearly results are based on data from the General Social Survey (GSS). Two years for which there is no GSS poll are filled in using results from other pollsters using similar questions at almost the same time of year. UK preferences are based on data from Gallup (in King 2001).<sup>5</sup>

Summarising the trends depicted in Figure 1, we see that public spending on health care in the US has generally increased from the late 1960s to the present. In contrast, spending on health care in the UK has both increased and decreased. The story for public preferences is almost the opposite. While a majority of the public always supports additional health care spending in both countries, the US net support measure moves back and forth between about 40 per cent and 70 per cent, dipping down briefly in 1994 (the time of the failure of the Clinton plan). In the UK, preferences move monotonically from being quite low in the late 1960s to remarkably high from the mid-1980s onwards. Indeed, by 1989, there is an 80-point gap between those saying they want more spending and those saying they want less.

These data suggest that varying public support for increased health spending in the US has met with increases in health expenditures, while steadily increasing public support for additional health spending in the UK has met with minimal changes in health expenditures. These are only preliminary observations, of course. Drawing directly from work on defence

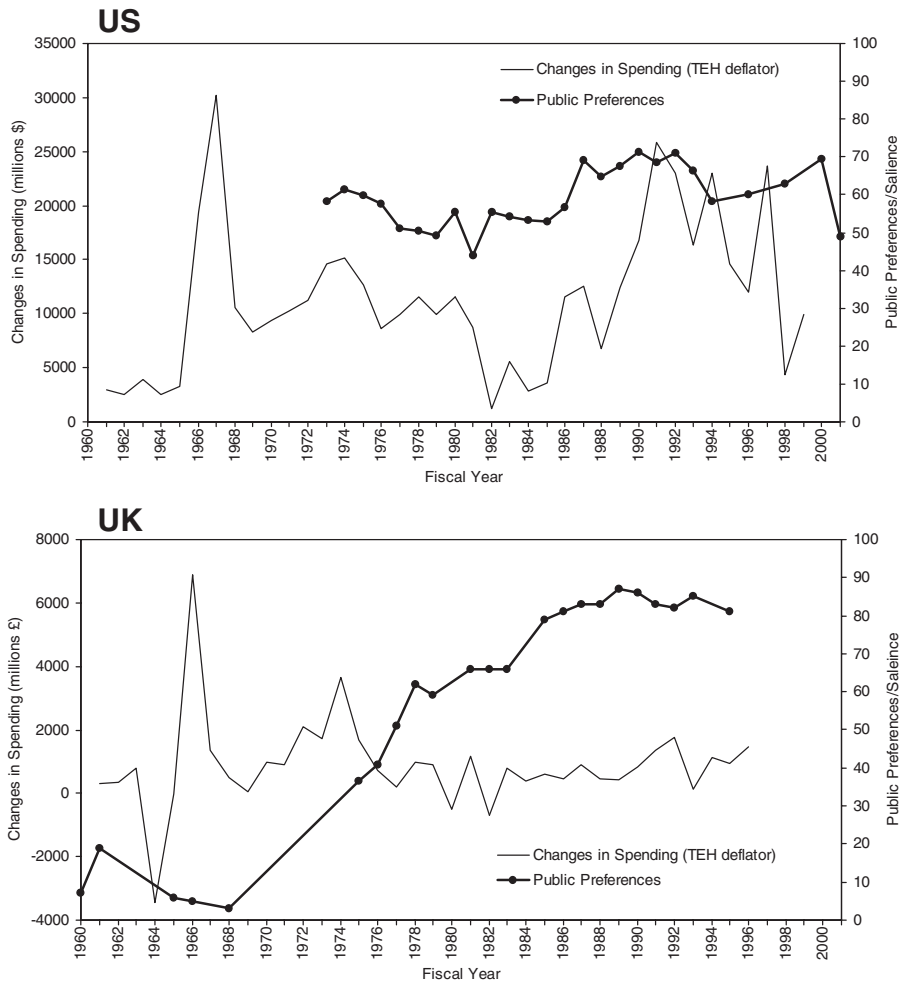


Figure 1: Health care expenditures and public opinion

spending in the US (outlined above), our more rigorous test of the relationship between the two series takes the form of a relatively simple autoregressive distributed lag (ADL) model:

$$\Delta Sp_t = \alpha + \beta_1 P^{Pref}_{t-1} + \beta_2 Govt_{t-1} [+ \beta_3 Pres_{t-1}]$$

$\Delta Sp_t$  is yearly changes in government spending on health care. We difference the spending series (subtract the previous year's value from the current

value), and use *changes in*, rather than *levels of*, spending for both (i) theoretical and (ii) methodological reasons. (i) Last year's spending is the common starting point when budgets are made for the current year. Accordingly, budgets are often made with changes in, rather than with levels of, spending in mind; in addition, the public probably reacts to changes *in* rather than levels *of* spending. (ii) Spending series are often integrated (the autocorrelation coefficient is not significantly different from 1.0), and this creates significant problems for statistical modelling. We avoid this integration problem by using differenced versions of these time series, and so a standard ADL model can be used.<sup>6</sup>

$P^{Pref}$  is the measure of public preferences for spending on health care, described above. *Govt* controls for the party in government. In the UK, it is a dummy variable equal to 1 when Labour is in power; in the US, it is a continuous variable representing the average proportion of Democrats in the House and Senate. The US model also includes *Pres*—a dummy variable equal to 1 when the president is a Democrat. The model thus allows for representation by two means: (1) yearly responsiveness to public opinion, and (2) changes in representation as a consequence of elections. It is during the previous fiscal year that spending plans are being made for the current year, so changes in health expenditures in the current fiscal year ( $t$ ) are modelled as a product of public preferences and the party in government in the previous fiscal year ( $t - 1$ ). The analysis is performed using data from fiscal years 1975 to 1995—the years for which public opinion data are regularly available in both countries.<sup>7</sup>

The results are presented in Table 1. A Democratic president appears to have a positive effect on health care spending (column 1), but the coefficient is significant only at  $p < .10$ . The proportion of Democrats in Congress has no significant effect. Most importantly for our purposes, US public preferences at  $t - 1$  have a positive and statistically significant effect on changes in US health spending at  $t$ . On average, a 1-point increase in net support for spending in year  $t - 1$  leads to an increase of 686 million (1995) dollars spent on health care in year  $t$ .

The same cannot be said for the UK model (column 3). Neither party of government, nor public preferences, have a significant effect on health spending. To ensure that positive results in the US are not simply the product of a greater sample size, the US analysis is repeated in column 2 using only those dates for which UK preferences data are also available. The preferences variable remains positive and significant. Both US and UK models have also been re-estimated dropping individual cases from, and adding additional controls to, the analysis.<sup>8</sup> In every case, conclusions

**Table 1:** Modelling the opinion-policy relationship, 1975–1995

Independent Variables	Dependent Variable: Public Spending on Health Care (Differenced, billions)		
	US		UK
	All Data	Years w/UK Data only	All Data
Party of Pres <sup>t</sup> <sub>t-1</sub>	5.789 <sup>a</sup> (2.854)	3.789 (3.870)	—
Party of Gov <sup>t</sup> <sub>t-1</sub>	-.039 (.283)	.001 (.332)	.437 (.608)
Preferences <sub>t-1</sub>	.686 <sup>***</sup> (.138)	.631 <sup>**</sup> (.173)	.022 (.018)
Constant	-28.007 (15.389)	-26.647 (17.141)	-1.051 (1.406)
N	21	17	17
Rsquared/Adjusted Rsquared	.620/.553	.555/.452	.116/-.010
BG LMstat	.076	.157	.734

Note: Cells contain OLS regression coefficients with standard errors in parentheses

<sup>a</sup> p < .10, \* p < .05, \*\* p < .01, \*\*\* p < .001

remain the same. Public spending preferences appear to have much more significant year-to-year effect on health expenditures in the US than in the UK.

### Accounting for cross-country differences: content analysis of party manifestos

Why does health care spending in the US appear to be responsive to public preferences, while health care spending in the UK does not? The sheer size of the NHS may mean that the kind of responsiveness of the sort that we are measuring is simply impossible, while smaller, more flexible, US health care programmes may appear much more responsive in the short term. The characterisation of US programmes as small is not so convincing, however. US (federal and state) governments currently spend more on health care as a proportion of GDP than does the UK government, in spite of the fact that most individuals in the US receive few or no state benefits. Moreover, Medicaid and other programmes are wholly administered and partly funded by the states and it seems unlikely that such a decentralised programme—in a system of government built to be incremental and unre-

sponsive—would be more responsive at the national level in the short term than a centrally organised system in which the state is both purchaser and provider.

It may simply be true that US governments pay more attention to public preferences than do UK governments. Both Grant Jordan and Jeremy Richardson (1982) and Gary Freeman (1985) suggest that different countries will have different *policy styles*—prevailing methods or frameworks for making public policy.<sup>9</sup> Most relevant to the current line of inquiry, Richardson and Jordan note that policy-making in the UK tends to happen behind closed doors and with little concern for or attention to the public. This certainly fits with historical descriptions of health policy-making in the UK, particularly under Margaret Thatcher. In fact, accounts of health policy-making in the UK typically make no mention of the role of public opinion in the policy process (e.g. Ham 1999; Klien 1995; Webster 1998), while similar discussions of the US almost invariably make mention of the role of public opinion (e.g. Rushevsky and Patel 1998; Skocpol 1994; Weissert and Weissert 1996). Although our method of investigation is different, the preceding time series analysis supports the widespread—if not always explicitly acknowledged—belief that public opinion plays a much more powerful role in health policy-making in the US than in the UK.

As much as it might be the product of institutional differences, the comparative lack of responsiveness in UK health care expenditures might also be derivative of the way in which health care policies have been differently defined by UK and US policy-makers. A considerable body of literature suggests that *problem definition* can have a significant impact on policy-making (Cobb and Elder 1972; Rochefort and Cobb 1994). Scholars in this tradition argue that the ‘social construction’ of issues can affect policy via any of a variety of ways (Spector and Kitsuse 1977; Seidman and Rappaport 1986). Participants involved in policy-making can be affected by the redefinition of an issue (Baumgartner and Jones 1993); the active manipulation of images of conditions by competing political actors can affect how (and if) problems are dealt with by policy-makers (Stone, Deborah A. (1989) ‘Causal Stories and the Formation of Policy Agendas’. *Political Science Quarterly* 104 (2): 281:300); finally, and most pertinent to the current line of inquiry, the way in which a problem is defined by policy-makers is intimately linked to the means by which they deal with that problem.

The way in which health care issues could have been differently defined in the US and UK can be explored empirically through a content analysis of major party manifestos (or party platforms as they are called in the



US).<sup>10</sup> The content analytic approach of using textual evidence as a proxy for measuring latent 'reality' is not new and has been described and defended by Bernard Berelson (1952), Harold Lasswell (1965), Ole Holsti (1969) and others.<sup>11</sup> Recent work has used content analysis to explore a wide variety of issues, including legislators' political ideologies, the effects of campaign advertising on voter turnout and the effects of *stare decisis* on Supreme Court justices' decisions (Hill et al. 1997; Finkel and Geer 1988; Segal and Spaeth 1996). As in all these cases, the aim of content analysis is to extract data from political texts. In this case, its purpose is to discern, on a quantitative metric, the ways in which health care policy is discussed by political actors in the US and UK.

The content analysis is applied to American and British party manifestos from 1964 to 2001. We use party manifestos since they are significant and readily comparable texts that express the publicly professed goals of political actors.<sup>12</sup> We take manifestos as a readily available indication of the nature of, and debate about, political issues over time. We assume, accordingly, that the way in which health policy is defined in manifestos is similar to the way in which it is defined in the political arena. More precisely, we assume that the way in which health care policies are framed in party manifestos is roughly reflective of the terms by which those policies are discussed by governments.

Using a keyword-in-context programme, we identified 1187 references to health and extracted a *uniform context* of about 15 words before and after the occurrence of the word. Of these text *tokens*, 37 made metaphorical reference to health (e.g. 'the health of our nation'). These were dropped from the analysis, leaving 1150 text tokens that were then manually coded into one of five possible categories:

1. **General policy references:** tokens making an indirect or general reference to health or to health policy, without making reference to particular policies, and without making explicit reference to items 3, 4, or 5 (below).

*During the last eight years of Democratic administrations, this nation has taken giant steps forward in assuring life and health for its citizens.* (Democratic, 1968)

2. **Specific policy references:** tokens referring to a specific health policy or recommendation, but without making explicit reference to items 3, 4, or 5 (below).

*To fight AIDS, the government has undertaken the biggest health education campaign ever seen in this country, one much admired abroad,*

*and is fully supporting the Medical Research Council in a special programme of research towards treatments and vaccines.'* (Conservative, 1987)

3. **Non-monetary resources:** tokens reflecting a concern for non-monetary resources, such as human resources or research and development.

*Particular emphasis should be given to programs which educate nurses and other health professionals and related personnel ...* (Democrat, 1980)

4. **Expenditure (monetary resources):** tokens explicitly referring to government health spending.

*Labour will reverse the Tory cuts, improve and expand services so that they can complement the much better community health services we shall provide. This will involve increasing spending by at least 4 per cent a year in real terms.* (Labour, 1983)

5. **Efficiency:** tokens explicitly referring to the management, organisation and efficacy of health services.

*The new unitary structure of the health service and its close co-operation with the new local authorities will help to ensure more effective joint planning of hostels and homes and a better deployment of nurses and other staffs.* (Labour, 1970)

Results of the content analysis are shown in Table 2. Significant differences appear to occur across countries rather than across parties, suggesting that the language used in manifestos does indeed reflect cross-country differences in the definition of health care policies. The fact that US party manifestos appear to make many more references to health care is largely the product of manifesto length—US manifestos during this period are on average 1.7 times longer than UK manifestos. If the number of tokens is weighted by the length of manifestos, where 1 UK word/token is equal to 1.7 US word/tokens, the difference is much less pronounced. The total number of tokens in the US is 466, versus 357 in the UK.

The manifestos are roughly even in the proportion of text tokens dealing with specific policies and non-monetary resources, while US manifestos are more prone to making general statements about health policy. The crucial results emerge from the analysis of statements on expenditures and efficiency, however. American party manifestos are more prone to discussing health care issues in terms of expenditures than in terms of efficiency; the opposite is true for UK manifestos. Our content analysis—consistent with histories of health care policy in the UK (see Ham 1999; Webster 1998)—

**Table 2:** Content analysis of party manifestos

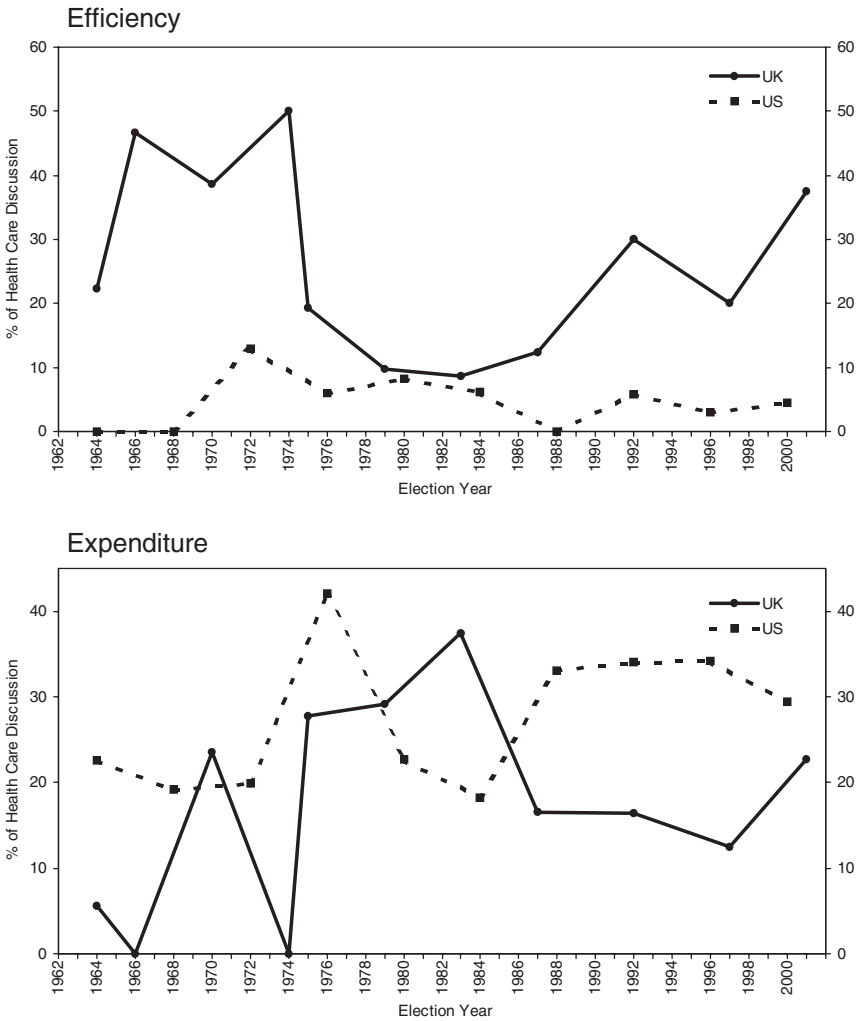
Health Care Topic	Country					
	US			UK		
	Party		Both	Party		Both
	Dem	Rep		Lab	Con	
1. General policy ref.	23%	31%	27%	18%	16%	17%
	(91)	(121)	(212)	(36)	(24)	(60)
2. Specific policy ref.	26%	33%	30%	31%	32%	32%
	(106)	(128)	(234)	(64)	(49)	(113)
3. Non-monetary resources	10%	6%	8%	8%	7%	8%
	(39)	(24)	(63)	(17)	(10)	(27)
4. Expenditures	33%	19%	26%	17%	20%	18%
	(133)	(73)	(206)	(35)	(31)	(66)
5. Efficiency	5%	7%	6%	25%	22%	24%
	(21)	(26)	(47)	(51)	(34)	(85)
# Tokens	404	389	793	205	152	357
# Manifestos	10	10	10	11	11	11
Ave # words/ manifesto	21,278	25,083	23,189	13,294	13,855	13,574

*Note:* Cells contain column percentages with raw figures in parentheses. Percentages may not add to 100% due to rounding. Results are based on content analyses of all party manifestos from 1964 to 2001.

suggests that efficiency considerations and arguments have occupied a pre-eminent position in the discussion of health policy in the UK. Indeed, the percentage of UK parties' statements on the efficiency of health care services is four times that of US parties.

The relative importance of efficiency considerations in the UK is highlighted in Figure 2, which illustrates the percentage of health policy tokens concerned with efficiency and expenditures in the US and UK from 1964 to the present. With the exception of the late 1970s and early 1980s, expenditure considerations always figure more prominently in US manifestos; and conversely, although the percentage of health tokens dealing with efficiency in both countries is comparable in the late 1970s and early 1980s, the UK percentage is consistently greater than the US percentage throughout the time period. The data here reveal a stark difference in the way health care policies are framed and discussed in the UK and US, and they even suggest the possibility of two distinct national policy styles as regards health care.

It might be said that problem definition is a correlated, rather than a genuine explanatory, variable. One might argue that an emphasis on effi-



**Figure 2:** Health care discussion in party manifestos

ciency in the UK is the product of having an established, comprehensive health care system, since the potential for increasing expenditures is presumably going to be greater in less comprehensive health care systems (such as the US). This institutional-size argument is implausible or at least incomplete in light of the fact that the UK has spent comparatively little on its health care system, however. There has certainly been scope for

increased expenditures: in 1998, the UK was ranked 18th out of 28 OECD countries in terms of health expenditure per capita and 23rd in terms of expenditures on health as a percentage of GDP.<sup>13</sup> The interesting fact that remains, therefore, is that, in spite of comparatively low spending levels *and* public support for increased spending in the UK, spending increases did not materialise.<sup>14</sup> Institutional differences between the US and UK cannot be the primary cause of differences in either trends in expenditures or issue definition in the two countries.

Figure 2 further corroborates our problem-definition explanation for differences in health care spending in the US and UK by illustrating the trade-off between discussion of efficiency or expenditures, at least in the UK. For most of the time period studied here, the percentage of efficiency tokens tends to be higher when expenditure tokens are lower. Crucially, this rather strong relationship need not exist, since there are three other categories of tokens rising and falling over the time period. But the fact that a link exists suggests that efficiency and expenditure are in direct competition as themes for health care discussion in the UK.

We believe that it is telling that, despite clear public preferences for more health care expenditure in the UK, such desired increases in expenditures have not materialised *at the same time* that political actors in the UK continue to think of and frame health care policies increasingly in terms of efficiency (organisation, management and efficacy). Indeed (as Figure 1 shows), as public preferences for increased health spending have soared in the recent periods, so have (as Figure 2 shows) the salience of efficiency arguments. It is as if these preferences repeatedly fail to register in the minds of political actors because these cannot (or refuse to) get away from viewing health care in efficiency terms. We suggest that the relative unresponsiveness of health care policy to opinion in the UK is due, at least in some part, to the lack of congruence between public preferences and the way in which the issue is defined (and understood) by governmental elites.

## Discussion and conclusions

The aim of this article has been to examine and then account for differences in the strength of the relationship between public spending preferences and public health expenditures in the US and UK. An examination of the opinion and spending series demonstrates that the link between preferences and health expenditures is stronger in the US than in the UK. Time

series analysis suggests that, from 1975 to 1995, public preferences for health spending had a much more significant effect on health spending in the US than in the UK.

In order to account for this difference in policy responsiveness, we have examined the way in which health policy issues have been defined in the two countries. There appears to be a prevalent and cross-party sentiment among American policy-makers that health policy decisions are firmly linked to spending decisions. Indeed, when discussing policy, US policy-makers are four times as likely to highlight expenditure considerations rather than efficiency considerations.

Conversely, British policy-makers view health policy both in monetary and especially in efficiency terms. We contend that there is a non-accidental link between this finding and the fact that UK health spending in the last three decades has been relatively unresponsive to public spending preferences. Differences in issue definition do not provide the only explanation for differences in responsiveness; nevertheless, we believe that the ways in which health policy is defined and discussed in the US and UK help us to account for their different trajectories. Issue definition is minimally a critical mediating variable in the relationship between public spending preferences and actual government spending on health care.

We do not suggest that health care spending in the US and UK will necessarily continue to reflect the relationship (or lack thereof) with public opinion identified here. The UK electorate is not necessarily doomed to health care expenditures that are perpetually unreflective of public sentiment. Indeed, in line with the increased emphasis on expenditures in 2001 election manifestos, the most recent Labour budget (April 2002) indicates a major increase in health care expenditures. The budget introduces a 7.4 per cent average annual real terms growth in NHS spending for five years and a 48 per cent real terms increase in NHS cash spending per household. The result may be a rise in health care expenditures dramatic enough to match the overwhelming public desire for increased investment in the NHS. So an analysis of the responsiveness of UK health policy to public opinion in 10 years' time may suggest quite a different story from the one we have observed thus far.

For now, our analysis adds to the relatively scarce literature comparing the opinion-policy link across countries and suggests one way in which different results might be accounted for. We cannot determine whether problem definition *caused* the differences in policy responsiveness. Nevertheless, the preceding analysis points to an important difference in health care policy-making in the US and UK and the data indicate a remarkably

strong link between the definition of health policy issues in the US and UK and the responsiveness of health expenditures to public spending preferences.

## Notes

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1. There are two exceptions to this rule (Miller et al. 1999; Budge et al. 2001), although neither addresses both public opinion and public policy per se. There is, however, ongoing comparative work by Soroka and Wlezien (e.g. 2002).
2. For similar work outside the US, see Brooks (1987 and 1990) and Petry (1999).
3. For similar work on defence spending, see Jones (1994). For related work on relationships between spending and the public's 'policy mood', see Stimson et al. (1995) and Erikson et al. (2002).
4. Both spending series were transformed into constant NCUs using Total Expenditures on Health (TEH) deflators. All spending data were drawn from OECD Health Data 2001. Since measures of spending can have significant effects on the results of these models (given the comparatively small number of observations), we tested a wide variety of other spending measures, using a GDP deflator, for instance, or measuring health spending as a proportion of total government outlays or GDP. Results did not change substantively in any case.
5. Gaps in GSS data are filled in using results from Yankelovich in April 1981 and from the CBS News Poll in January 1992. There are no data available to fill gaps in the Gallup (UK) series. For the time period used in forthcoming time series analysis (1975 to 1995), then, US opinion data remain missing for 1995, and UK preferences data remain missing for 1980, 1984 and 1994.
6. Differencing is a common method for avoiding the problems of integrated time series. For more information, see Hendry, David, 1995. *Dynamic Econometrics* (Oxford: Oxford University Press).
7. The model used here is a relatively simple one, and by no means exhausts the possibilities for additional independent variables.
8. Additional controls included a number of demographic and economic variables which might contribute to changes in health care spending, such as GDP per capita, and the proportion of the population less than 15 years and more than 65 years old. The relatively small sample size precludes adding too many variables to the model, of course, and it is likely that these trends are at least in part captured by the preferences variable. In the US model, for instance, demographic variables are statistically significant and reduce the power of the preferences variable somewhat. Complete results are available upon request from the authors.
9. Others have drawn on the concept of *policy styles*. See Kitschelt (1986a and 1986b) and Randall (1995).

10. These are readily available in electronic format from various sites on the Internet. The British manifestos were taken from <<http://www.psr.keele.ac.uk/area/uk/man.htm>>, and the American manifestos were extracted from the *American Reference Library* (CD-ROM released by *World Book*).
11. For a recent description of the implementation and use of content analysis in the social sciences, see Roberts (1997). For a recent study that uses party manifestos, see Laver and Garry (2000).
12. For certain analyses, one might be concerned that many governments do not adhere to—or are not held accountable for—policies described in their election manifesto. This concern is lessened somewhat by the growing body of work demonstrating relatively powerful links between manifesto statements and government policy-making (Klingemann et al. 1994; Budge et al. 2001). In any case, this is not an issue in the current analysis since we do not need to assume that governments are held accountable for their manifesto promises to hold that the way health care policies are framed in manifestos essentially reflect the terms by which those policies are generally discussed.
13. OECD, *Health at a Glance* (2001).
14. This is truer before 1990, however. In the past three elections, UK party manifestos appear to have been more balanced in their discussion of both expenditures and efficiency. The increase in both categories in 2001 is reflective of the importance of health care issues in that election, and of the increasing attempts by parties to find solutions—both delivery- and spending-related—to problems currently facing the NHS.

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