

# Media, Public Opinion and Health Care in Canada: How the Media Affect “The Way Things Are”

KELLY BLIDOOK *Memorial University of Newfoundland*

In recent Canadian elections, and in Canadian politics generally, the issue of health care has been at the forefront of policy topics. In both the 2000 and the 2004 Canadian Election Studies, health care was clearly considered the most important issue by voters, with approximately three times as many responses as the next highest topic.<sup>1</sup>

The importance of health care on the policy agenda in Canada seems only obvious. It is indicated by the recent *Commission on the Future of Health Care in Canada*, headed by Roy Romanow in 2002, and the Senate report *The Health of Canadians: The Federal Role*, authored by Michael Kirby in 2002. Prime Minister Jean Chrétien made a point of having a First Ministers' conference to provide funding specifically for health just a month before calling the 2000 election (Greenspon, 2000) and Prime Minister Paul Martin followed suit after the 2004 election (Kennedy, 2004). More recently, the promise of a “wait times guarantee” was in the election platform that helped bring the current minority Conservative government to power (Gordon, 2005).

While it is not clear that single issues, health care or otherwise, can yet make or break elections in Canada (Blais et al., 2004; Blais et al., 2002b; though see Johnston et al., 1992), it is apparent that certain issues dominate the issue agenda in elections and spill over to dominate the

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**Acknowledgments:** An earlier version of this paper was presented at the Midwest Political Science Association annual meeting in Chicago in 2006. I would like to thank Stuart Soroka and Antonia Maioni for reviewing earlier versions of this article, and Osvaldo Croci for translation of the abstract. I would also like to thank the journal's anonymous reviewers for their insightful and helpful feedback. Any errors are solely my own responsibility.

Kelly Blidook, Department of Political Science, Memorial University of Newfoundland, St. John's, NL A1B 3X9, kblidook@mun.ca

*Canadian Journal of Political Science / Revue canadienne de science politique*  
41:2 (June/juin 2008) 355–374 doi:10.1017/S0008423908080426

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policy agenda beyond elections. The focus of this paper is upon the extent to which the media drive this agenda by affecting public perceptions of “the way things are” in the health care system, a highly salient issue for both the public and policy makers in Canada. Does the media’s attention—and type of attention—to this issue affect individuals’ perceptions of the actual state of health care services in Canada?

A number of components of recent scholarship place increasing importance on the role of public opinion and public perceptions of policy issues. Foremost is the emerging research on the opinion-policy nexus in Canada that builds on earlier, mostly US-based, research.<sup>2</sup> Opinion change is considered an important, though not sufficient, factor in policy change (Kingdon, 1995) which is one of the reasons to probe factors affecting public perceptions.

On the electoral front, there is also a growing interest in issue voting in Canada (Blais et al., 2004, 2002b; Fournier et al., 2003), which is related to notions of declining partisanship and post-materialist values (Nevitte, 1996; Dalton, 2001; Inglehart, 1997).<sup>3</sup> If “cognitive mobilization” (Dalton, 2001) is indeed changing the manner in which modern publics view politics, implying a more rational approach to electoral behaviour (Blais, 2000; Downs, 1957), then an increase in the electoral importance of issues should result. Thus, if issues have at least the potential to shape electoral outcomes, this is another reason that our understanding of factors affecting public perceptions about policy issues is of high importance.

This paper specifically probes the media’s role in affecting public perceptions. The following section discusses briefly the role of the media alongside other factors that shape public perceptions. This is followed by a brief look at the context for this particular study and an analysis using data from the 2000 Canadian Election Study.

## Media Effects

In order for the public’s perception of an issue to change, there should be some variance bearing on the nature of the issue itself. In the case of media effects, one should look for variance relating to coverage of the issue, both in terms of amount and style. First, an issue can gain perceived importance simply through the *priming* effect, the amount of attention paid by the news media. Priming makes particular cues accessible while inhibiting access to other issues that might also be worthy of attention (Dearing and Rogers, 1996; Iyengar and Simon, 1993). But while attention alone may increase the public awareness of a given issue, it may not get at why attention is deserved, and what is to be understood from it.

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**Abstract.** Health care has arguably been the most important issue in Canadian politics in the past decade. This paper focuses on the extent to which the media affect public perceptions of “the way things are” in the Canadian health care system. Individual perceptions of the state of health care are analyzed as being a function of personal experience with the system, loyalty or pre-formed opinions and the information that the individual receives through the media. Results indicate that media use has a significant effect on the likelihood of negative perceptions regarding the state of health care.

**Résumé.** Le système de soins de santé représente sans doute le thème dominant de la dernière décennie sur la scène politique canadienne. Cet article examine l’influence exercée par les médias sur les perceptions du public concernant «la situation courante» du système de soins de santé canadien. L’analyse présente les perceptions individuelles sur l’état du système comme étant le reflet de l’expérience personnelle, d’une loyauté ou d’une opinion préétablie et de l’information transmise par les médias. Les résultats indiquent que les médias ont une incidence importante sur d’éventuelles perceptions négatives concernant l’état du système de soins de santé.

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*Framing*, then, focuses on the style of issue coverage. Media framing of an issue may lead to a particular interpretation of the state of the issue or how the issue should be approached and therefore is significant in determining what people think the actual problem is (Perse, 2001; Rochefort and Cobb, 1994). While priming has the effect of placing an issue on the agenda, framing more particularly identifies the actual problem or reason for dealing with the issue, which can in turn lead to public engagement. With most political issues, the public remains relatively apathetic and uninterested, and therefore most individuals tend to experience only an abstract link to policy issues (Lemert, 1992). As the public becomes engaged in issues and takes a direct interest in problems and solutions, the learning process—or the effect on opinions and preferences—can become significant (Perse, 2001; Noelle-Neumann, 1999). There is evidence that public perceptions and preferences are altered based on media framing of issues, especially in the case of war coverage (Summers, 1994; Iyengar and Simon, 1993; Hammond, 1989).

The response of the public to particular issues can also be affected by individual experiences with individual issues or objects. Edelman notes that in cases of high-experience issues, “idiosyncratic agenda-setting effects”—effects based on each individual’s varying experience with the given object—can occur, while in cases of low-experience issues, audience responses “would correspond more to media cues” (1993: 87; see also Soroka, 2002: 16–17). The degree to which media information might affect perceptions that are based on direct experience may vary depending on a number of factors, such as the duration of media coverage of an issue, how abstract an issue appears to be to the general public, and how dramatic or surprising particular events are (Soroka, 2002).<sup>4</sup>

Finally, it is also important to note that when firmly held political beliefs or partisan loyalties play a role, the dynamic regarding

“acceptance” of media messages by the public can have a nonlinear relationship with media use (Zaller, 1992). Those having little or no exposure to media will not have the ability to accept the message, those with moderate use should be more likely to accept the media message and those with high use—who also tend to be more politically engaged and media savvy—select the messages that fit their own views and accept only messages that are congruent with pre-formed opinions and beliefs. Zaller shows that when people hold very strong political beliefs (who tend to also be high users of media) media usually play the role of simply reinforcing beliefs, and when media coverage contradicts firmly held beliefs by these individuals, it tends to not be accepted. However, this does not mean that high users of media are not at all susceptible to media messages. Miller and Krosnick, in their study of media impacts on presidential evaluations, note that even in the case of sophisticated, frequent users of media “some ... apparently rely on trusted media sources to determine which are the most nationally important issues and place special weight on them when evaluating the president” (2000: 312). The general story still seems to support the idea that there can be a greater media impact on perception when coverage is directed toward beliefs that are not deeply rooted or when the media user is not highly experienced with analyzing media messages—though there can still be some impact on high media users as well.

To summarize the above discussion for the purpose of building a model of the public’s issue perceptions, an individual’s perception of an issue should be a function of that person’s *personal experience* with the issue, *loyalty* or *pre-formed opinions* regarding the issue and the *information* that he/she receives about the issue.

Finally, it is important to note that the direction of impact between the public and the media remains debatable. There does not appear to be much doubt in the recent literature about the influential role of the media upon the public. However, empirical studies have shown both a unidirectional impact, where the media alone appears to be impacting public opinion (Iyengar and Simon, 1993), and a bi-directional link, where public opinion also has an impact on what is covered in the media (Soroka, 2002). Often the agenda of the media reflects stimuli from either the public or the policy agenda, but it is difficult to take the next step and determine if the framing of issues by the media follows as a result of public opinion that was formed without the prior influence of the media. This study is not concerned primarily with where the media agenda has originated, but whether the frame placed on the issue by the media—along with increased attention to the issue generally—appears to have a clear impact on the public’s perception of reality. Regarding public opinion specifically, if greater attention to the media results in an increased likelihood of a perception that reflects the issue frame portrayed by the

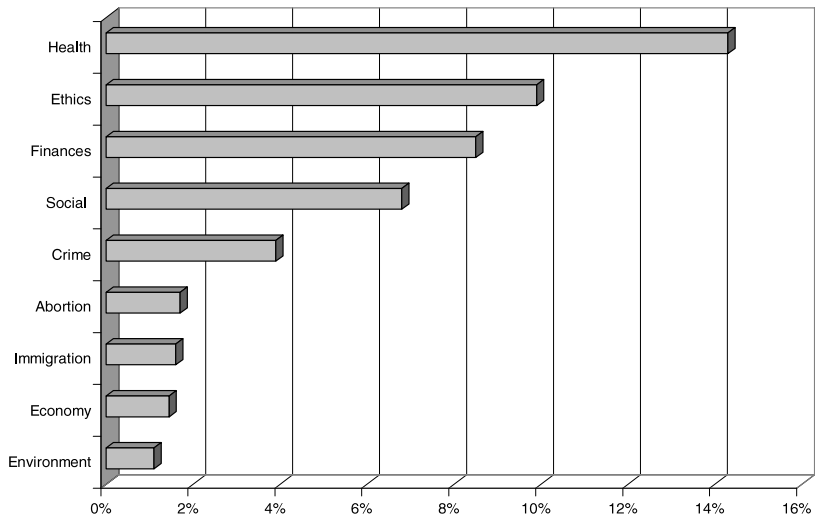
media, other things being equal, then it is acceptable to conclude that the media had an impact in such cases.

### Canada, Health Care and the 2000 Election

The 2000 Canadian election provides an excellent opportunity to observe the necessary components and assess the role of the media in shaping public perceptions. Blais and others note the dominance of health care as the main issue with the parties and the public during the election (2002a). While it is unlikely that one could refer to the 2000 election as a single issue election, it is clear that no issues received as much attention as health care did. The 2000 Canadian Election Study Television Content database tracks the primary issue topic in each election coverage story for two major English and two major French stations during the 2000 campaign.

The heavy emphasis on health care in media coverage suggests that priming of this issue certainly occurred and is one indication that there was likely a perceived problem with health care in media coverage. Was

FIGURE 1  
Issue Coverage as a Percentage of Total Coverage during the 2000 Campaign



Television sources: *CBC The National, CTV National Edition, SRC Le Téléjournal, TVA Le TVA Édition réseau*. N = 825

Note: 245 stories (29.7%) were coded as focusing on no issue.

there a tendency for the media to frame the health care issue in a manner that implied a “problem” with the health care system? The common sense response to this question is that obviously media attention would tend to focus on problems and that media attention would not be heavily weighted toward a focus on health care if no problem were apparent. However, while there is no way of knowing from this data whether the coverage itself actually reflected a negative view on the state of health care (issue coverage itself was not coded for tone), these stories focusing on health care were analyzed to see if parties were portrayed negatively more often than in non-health stories. Across all news stories where at least one of the five major political parties was mentioned, at least one or more parties was portrayed negatively more often in stories where the primary topic was health (health = 79%, non-health = 68%;  $n = 749$ ,  $p < .05$ ). What is more, while the relationship between negative and non-negative portrayals of opposition parties in health-related stories is not significantly different than that of non-health-related stories, the difference across stories mentioning the governing Liberal party is significant. The party, which had been in power for the previous seven years, was approximately 28 per cent more likely to be portrayed negatively in a health-related story than in a non-health-related story (health = 73%, non-health = 57%;  $n = 558$ ,  $p < .01$ ).

It is also notable that among the non-negative portrayals of any party, a strong majority was neutral. On balance, no party received more positive than negative coverage in health-related stories. In the case of the Liberals, negative coverage in health-related stories outpaced positive coverage by a ratio of more than 10:1. The combined fact that there was more coverage of health care than of any other issue by a wide margin and that negative portrayals of parties occurred significantly more often than positive portrayals in such coverage, especially regarding the governing party, indicates significant priming of the issue and strongly suggests that the frame of health care coverage portrayed a problem with the system. This is the nature of television coverage during the campaign period.

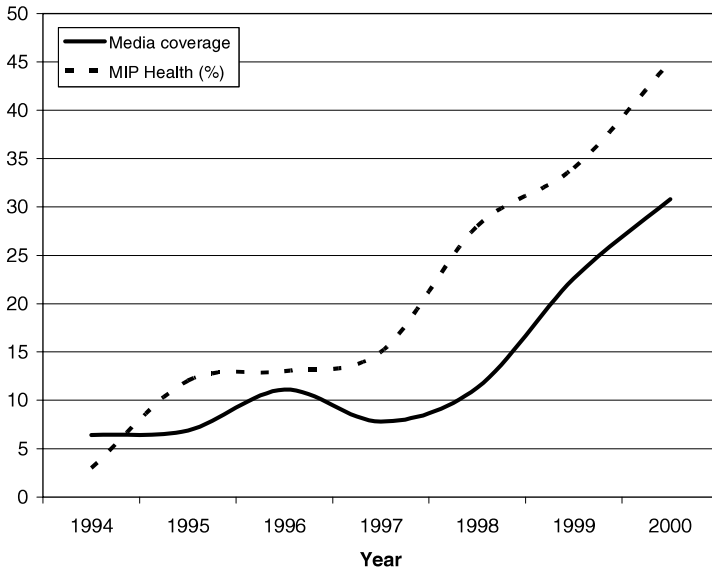
Could one go a step further and suggest that the health care system was portrayed as being in a state of “crisis” (Maioni and Martin, 2004)? While it is not clear that “crisis” was ever the dominant frame, this concept is one that helps to further probe the general nature of media framing on this issue. Using a sample of five English-language daily newspapers from major cities across Canada,<sup>5</sup> the number of stories mentioning both the terms “health care” and “crisis” were tracked from 1994 to 2000.<sup>6</sup> This is compared to a measure of public opinion in the same period.

Mentions of the two terms increased substantially, with the majority of the increase occurring in 1999 and 2000.<sup>7</sup> Coverage including both terms was approximately 3.5 and 4.8 times greater in the final two years respectively compared to the first year. While total coverage of health

care alone also increased over the same period, it only increased significantly in the last two years, and then the increase was only approximately 1.5 times that of the first year, meaning that while the amount of coverage increased, the proportion of negative coverage appears to have increased at a much greater rate.<sup>8</sup> Both the high level of priming and the negative frame of health care coverage that was evident in television coverage during the campaign period, then, also appear to be evident in the longer term when newspaper coverage is considered.<sup>9</sup>

Strikingly similar to this increase in media coverage is the number of poll respondents over the same period that indicated health care to be the most important issue for the government to deal with. The percentage increase from below 5 per cent of respondents in 1994 to almost 45 per cent just prior to the 2000 federal election campaign appears to be closely aligned with the change in media coverage (Figure 2). Mendelsohn also notes: “While 61 per cent of Canadians thought the system was excellent or very good in 1991 (and an additional 25 per cent thought

FIGURE 2  
Media Coverage and Public Opinion on Health Care (1994–2000)



Media coverage is measured in total number of stories per year divided by 10. Most Important Problem is measured in % of respondents.

MIP source is Ipsos-Reid. Respondents were asked “Thinking of the issues currently facing Canadians, which one do you feel should receive the greatest attention from Canada’s leaders?” Available at <http://www.ipsos.ca/pa/trendreport/trCanada.cfm> (accessed Aug. 1, 2006).

it was 'good'), only 29 per cent shared that view in 2000 (with an additional 34 per cent saying it was 'good')" (2002: 1). This longer term picture suggests that while media coverage of health care may have been both substantial and negative during the election campaign in 2000, and many CES respondents mirrored this in their negative perceptions of the state of health care (see next section), the 2000 election campaign may be a snapshot in time that is instructive of a longer term trend that is not simply about elections but also about media content and policy perceptions generally. This is how the context of the 2000 election, and the data collected during it, is viewed here—not as an opportunity to study media impact on vote choice or on the election itself (though it may be), but as an opportunity to observe media effects regarding public perceptions of the health care topic more generally.

All this is not to suggest that perceptions of health care are entirely media-driven, or that the negative coverage of the health care system is necessarily unwarranted. Mendelsohn also indicates that from 1989 to 2000, the number of poll respondents who indicated having been unable to access a health care service when they needed it jumped from 2 per cent to 12 per cent (2002). Further, those who indicated difficulty obtaining services they needed jumped from 18 per cent to 34 per cent over the same period. What this suggests then is that, regardless of whether there was real or perceived change in the actual state of the health care system, the mass media can still be expected to have played some role in people's perceptions of health care services independent of the actual state of affairs.

Having set the context of media coverage and the high public awareness of the health care issue, and using information provided in the previous section which dealt with the expected effects of media on public perceptions, it is possible to test the hypothesis that gets at the focus of this paper: *An increase in media use will increase the likelihood of a negative perception of the quality of health care services.* The methods used to test this hypothesis will be described in the next section, followed by the results of the analysis.

## Data and Methods

To analyze the relationship between media attention and public perception, data from the 2000 CES will be used.<sup>10</sup> The dependent variable is measured by the respondent's answer to the question, "Has the quality of health care in Canada over the past five years?" Those responding "gotten worse" are coded 1, while those stating "gotten better," "stayed about the same" and "don't know" are coded zero. Seventy-two per cent of respondents chose the "gotten worse" response.



In order to adequately control for factors affecting these responses, it is important to capture, to the greatest extent possible, the three factors that should contribute to perceptions of health care: experience, loyalty and information. The independent variable of focus, information from the media, is measured using the respondent's self-reported media use. Respondents are asked "How much attention have you paid to news about the federal election ... over the past few days?" and must provide a score from zero (low) to 10 (high) on their use of television, radio, and newspaper. The measure of media use employed here counts only the single score for the medium that is rated highest.<sup>11</sup> As this measure is based entirely on self-reported media use, scores are subjective. Nevertheless, the measure was compared to a knowledge measure that uses a four-point score based on responses to questions about party promises in the election campaign.<sup>12</sup> Because this second measure is based on topics specific to the campaign, it is less effectively a measure of general political knowledge than a measure of information about the campaign itself, and the most likely source of gleaning this sort of information would be through media use during the campaign. These two measures are moderately correlated with a pairwise correlation coefficient of .31 ( $p < .001$ ).

The dependent variable (health care perception), and the independent variable (media use) are correlated in a statistically significant manner before adding controls to the model, though the relationship is quite weak ( $\gamma = 0.07$ ,  $p < 0.001$ ). The simple bivariate relationship indicates that a higher score on the media use variable correlates with a higher likelihood of a "worse" response.

In the multivariate analysis, the measure of media attention is used to test for a simple (increasing or decreasing) relationship with the dependent variable, as well as a quadratic relationship (the media variable is squared). Including both forms in the model provides evidence not only of whether a simple positive or negative relationship exists between media use and perception, but also whether that relationship has a non-linear quality, such as increasing at a greater or slower rate, or even reversing direction.

The control variables used for testing the hypothesis include socio-demographic and party loyalty characteristics that are expected to affect one's perception of the state of health care. Both sex and age tend to affect one's personal experience with the health care system, where being female or of greater age should increase experience.<sup>13</sup> Further, while the number of Canadians who see a doctor at least once within a given year is relatively high (approximately 81 per cent in 2000–01), the frequency of such visits is expected to increase with age.<sup>14</sup> If indeed health care services had gotten worse in the previous five years, then experience should increase the likelihood of a negative response. While Mendel-

sohn (2002) does suggest some deterioration, however, there is little solid evidence of a substantial decrease in the quality of service, meaning that it is not entirely clear that greater experience should lead to a greater likelihood of a negative perception.

Geographic location may affect perceptions because health care systems vary somewhat by province and may also vary based on regional economic dependency upon the federal government. Where the number of respondents permits, a provincial dummy variable is used; otherwise a combined provincial or regional dummy is used. While these proxy variables likely do not capture all of the factors that cause variance in experience with the health system, they nevertheless should aid in isolating the media variable from experience factors.

Finally, party identification—a long-term loyalty to a particular political party—is likely to affect one's perception of political issues (Zaller, 1992; Bartels, 1993).<sup>15</sup> If loyalty is playing a role in perception of policy accomplishments, then those expressing loyalty to the Liberal party are less likely to feel the system has gotten worse (and vice versa for opposition party identifiers) because the Liberals, as the governing party, were partly responsible for health care over the period. There are two types of evidence suggesting that the public at least partially blamed the federal government—and by extension the Liberal party—for perceived deterioration in the health care system. The first is that the number of poll respondents indicating that the federal government was doing an “excellent” or “good” job on ensuring Canadians get good health care dropped from 62 per cent in 1994 to 34 per cent in 1999. The second is that approximately 45 per cent of poll respondents in 2000 attributed system deterioration to the federal government as opposed to the provincial government (Mendelsohn, 2002).

Nevertheless, because the topic is not directly related to partisanship or ideological beliefs (as a particular policy proposal regarding health care might be—see Maioni and Martin, 2004), it is expected that loyalty effects will not be particularly strong. Rather, while certain policy proposals may strike at different ideological or partisan chords, health care is a “valence” issue (Butler and Stokes, 1976), in that everyone desires good health care generally.

The effects of these variables on perceptions of health care service are analyzed using logistic regression, which is appropriate for the dichotomous dependent variable.<sup>16</sup>

## Results

The result in Table 1 indicates that indeed media use has a significant impact on perceptions of the state of the health care system.<sup>17</sup> An increase

TABLE 1  
Media Impact on Perception of the State of Health Care

	Odds	Coeff.	SE
Medium	1.19**	<i>0.17</i>	<i>(.04)</i>
Medium <sup>2</sup>	0.99**	<i>-0.01</i>	<i>(.00)</i>
Male	0.63**	<i>-0.46</i>	<i>(.08)</i>
Age	1.00	<i>0.00</i>	<i>(.00)</i>
BC	1.58**	<i>0.46</i>	<i>(.14)</i>
Alta	0.73*	<i>-0.32</i>	<i>(.14)</i>
SaskMan	1.03	<i>0.03</i>	<i>(.16)</i>
Quebec	1.51**	<i>0.41</i>	<i>(.10)</i>
East	1.58**	<i>0.45</i>	<i>(.13)</i>
PID Liberal	0.80*	<i>-0.22</i>	<i>(.10)</i>
PID Other	1.06	<i>0.06</i>	<i>(.10)</i>
Constant		<i>0.37</i>	<i>(.17)</i>

*N* = 3522  
 Log likelihood = -2029.63  
 Likelihood ratio  $\chi^2 = 111.52$  (*prob* >  $\chi^2 = 0.000$ )  
 Pseudo  $R^2 = .027$

\*P < .05, \*\*P < .01  
 Cells contain odds ratios, followed by logistic regression coefficients in italics and standard errors for the coefficients in parentheses.

of one point on the 11-point media-use scale increases the odds of seeing the system as having gotten worse by approximately 19 per cent.<sup>18</sup> Further, the quadratic measure is negative and statistically significant. This suggests that the relationship between media use and perception of health care is not one that increases in a linear fashion, but one that initially increases and then either plateaus or even reverses at higher levels of media use. Table 1 does not give enough information to explain exactly what the relationship between perception and media use is across all levels of use, but the result suggests that it warrants further investigation, so this specific relationship will be looked at in more detail shortly.

In terms of the experience control variables, it is interesting that sex appears to have a significant impact while age does not. The result with sex may reflect the fact that women are more likely to have experience with the health care system, though they also tend to be disproportionately more concerned with social welfare issues than males (Gidengil et al., 2003).<sup>19</sup> It is not clear that this result indicates a difference in experience with health services between males and females alone. The fact that age is not significant—given that the difference in probability of visiting a health professional is similar between the oldest and youngest categories as it is for females and males respectively—is surprising.

This result casts doubt on the likelihood that experience alone is what drives the relationship with regard to the sex variable. It also calls into question the likelihood that experience generally drives perceptions regarding the deterioration of health care services, though again it bears noting that these proxies for experience should be analyzed with caution as they are not direct measures of health care experience.

Clearly provincial and regional differences affect perceptions. It is notable that some of the strongest effects are in Quebec and the Eastern provinces, which have generally been more dependent upon the federal government for funding and which may have been the biggest losers in this area based on federal budget cuts in the mid-1990s (Ontario is the control province). This explanation seems weak, however, when BC is factored into the equation, but BC may be unique among the provinces in that the result might be more a factor of provincial politics, where an extremely unpopular NDP government was decimated to only two of 79 seats in the provincial election in the spring of 2001 and where government programs may have been viewed negatively in light of the provincial government's role.<sup>20</sup> The result in Alberta, where provincial funding of health care is likely the most stable based on the province's economic position relative to other provinces, seems to fit the explanation related to federal economic dependence.

What is also striking is that party identification appears to play a weak role in the judgment of respondents toward health care. Identifying with the governing party appears to have a statistically significant effect in leading respondents to give a positive judgment, though for identifiers of opposition parties, the odds ratio, while pointing in the predicted direction, is not statistically significant. This means that the media effect is not likely to have the same level of barriers as those described by Zaller in relation to political loyalties or beliefs.

A notable concern with the model is endogeneity regarding the independent variable of focus and its perceived effect on the dependent variable. Self-reported media use is likely correlated with other relevant factors that affect perceptions of health care. There is, then, the possibility that a spurious relationship exists, where a single factor leads someone to have both a high level of media use and a corresponding negative perception of health care services. To be clear, variation in media exposure may be driven by particular factors that also affect the dependent variable (see for example, Huber and Arceneaux, 2007)—perhaps even by concern about health care itself.<sup>21</sup> To aid in partially alleviating this concern, independent variables used to predict health care perception were separately used to predict media use score; the results suggest that while there is certainly a correlation between certain relevant factors and media use, the patterns of relationship do not indicate any spurious relationships.<sup>22</sup> In short, the relationships observed between control variables and the

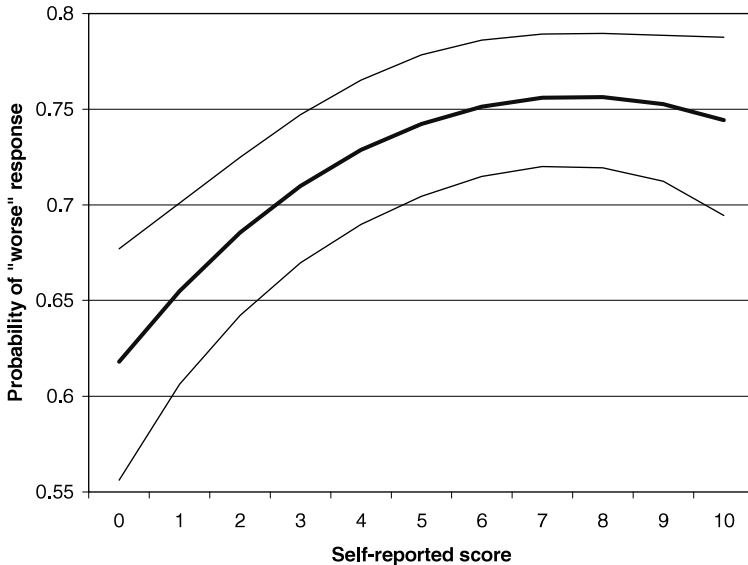
media use variable do not suggest that these control variables drive a relationship between both media use and perception of health care. Further, the coefficients and statistical significance observed in Table 1 do not change in any significant manner when the media variable is dropped from the model, with the exception of the Liberal party ID variable, which is no longer significant at the .05 level ( $p < 0.14$ ).<sup>23</sup>

In order to better describe the non-linear effect of media attention on perceptions of health care, simulations using the range of values on the measure of media attention are included below.<sup>24</sup>

Figure 3 indicates that those at the highest level of media attention may have slightly lower probability values than the peak, which occurs near 7 on the scale. However, statistically speaking, the result should be viewed as “level” for about the last five values on the scale, as the difference is within the confidence intervals. The increase from about 61.8 per cent at the lowest level to just over 75.6 per cent at the highest level implies that medium-to-high media users are approximately 22 per cent more likely to see the health care system as having deteriorated as those with no media use.

It is possible to compare this impact to the impact of other controls. The likelihood of a negative perception of healthcare is approximately

FIGURE 3  
Media effect on view of health care in past five years



Thin lines indicate 95 per cent confidence intervals.

74.2 per cent with all control variables held at the mode (medium = 5, medium<sup>2</sup> = 25). The probability drops to approximately 64.5 per cent if the individual is male (all other variables held at the mode), the probability increases to approximately 81.9 per cent if the individual is from BC or an eastern province and decreases to approximately 67.6 per cent if the individual is from Alberta (all other variables held at the mode). Finally, the probability decreases to approximately 69.7 per cent if the individual identifies herself with the Liberal party (all other variables held at the mode). While substantial, none of these variables has an independent effect with a magnitude greater than that of the difference between the lowest and highest levels of media use.

The leveling off of the curve without any significant decline suggests rather convincingly that neither firmly held beliefs (to the extent that they may be more prevalent with high media users and with party ID controlled for) nor media savvy, play a strong role in the overall media effect on this issue. Rather, the result indicates that while the media impact is significant, that effect appears to reach a saturation point for higher users, as opposed to reaching a level where acceptance of the message actually decreases.

The overall result of these findings is that political loyalty appears to have rather limited effects on perceptions of health care with the public, while results with regard to experience are at best mixed. The mass media appear to have a relatively strong and quite reliable impact. The findings tell us with reasonable certainty that no level of use has a negligible effect when compared to non-use, and that the accepted message is one that increases the likelihood of a negative perception of the state of health care in Canada.

## Conclusion

The results in the previous section provide evidence of some interesting dynamics that may have important electoral and policy implications. First, it appears that health care is one issue where the media may have a significant impact upon perceptions, perhaps in part because system performance itself does not appear to be viewed in highly partisan terms. The notable result is that media effects appear to reach a saturation point where there is little movement in either direction for the highest levels media use. This may be true of other issues as well, and a comparison across issues would be a welcome addition to these findings. This is not to say that policy preferences are not strongly divided on partisan lines, but that the “perception of reality” of the state of the health care system is less clearly divided. This result suggests that the media have a greater degree of influence in such matters than in the more direct, partisan game of

positive and negative views of parties specifically or of particular policy proposals (such as increasing public spending on health versus increasing private delivery). This makes sense in terms of Miller and Krosnick's findings that there is little reason to expect declining trust among high media users on issues that are generally nonpartisan (2000). Whether this, in turn, affects assessments of parties themselves is another story that requires further research. There is no way to suggest at this point that media users change vote intentions to a significant degree based on their perception of this issue. What is clear, however, is that concern for the policy area is heightened, which may affect what policy topics get dealt with (either symbolically or substantively) beyond elections.<sup>25</sup>

Another question of importance to both those who study health policy and those who study the role of the media is whether the media are indeed framing the health care issue as one of "crisis" and if the term "crisis" can accurately be applied to the state of health care during the period in question (1996–2000). Maioni and Martin's account does not appear to give justification for the notion of "crisis" being applied to health care in Canada (2004). Rather, they imply that the message of crisis is media-driven and popularly accepted—the crisis is one of public confidence, not of deteriorating service necessarily. As health care is indeed a policy area with which a wide range of people have little direct experience, the media role is likely more important than with other issues, such as inflation or taxes where more accurate measures and direct personal experience may leave less room for media manipulation. Among those who suggest that the media may act not as a *conduit* but as a *filter* of information (see Taras, 2001; Hackett et al., 2000; Winter, 1997), the idea that the media's portrayal of a particular issue may not reflect the "true" state of affairs is nothing new. This concern regarding media accuracy takes on greater importance if, in fact, a "cognitively mobilized" electorate is increasingly weighing the role of information in its electoral choices and policy demands.

Finally, it is notable that these results should not be seen as reflecting the dynamics of the 2000 election campaign alone, but as a snapshot of a longer term dynamic. High media users during election periods are likely to be high media users generally, and their responses on perception questions are expected to show greater stability over time than those with less media use. This means that while there may be real effects on perceptions during the campaign on middle-level users of media, the impact on high users is likely more stable across time with the broader media agenda. Thus, changing the perception of high users likely requires a longer and more concentrated media effort than is necessary among middle users. In cases such as the one studied here, where there was both an increase in media coverage of the issue and a rather drastic increase in the negative frame placed upon the issue, it is possible that

the longer term nature of media coverage leads to the increased incidence of negative perceptions among both medium and high users of media. Indeed, had media coverage of the issue increased only in the short term, the results regarding high users may have been significantly different from that of medium users. In short, what has been observed here is a rather clear indication of media effects generally, but not necessarily of campaign effects alone.

## Notes

- 1 In the 2004 CES, health care received 31.7 per cent of responses, with the next highest being 11.2 per cent responses for “honesty/integrity” and the “sponsorship scandal” (these responses are expected to be closely related and were combined for this total). In the 2000 CES, health care received 31.8 per cent of responses, with the next highest being 10.5 per cent for taxes. With “don’t know/refused” responses excluded, health care makes up 37.2 per cent and 42.5 per cent of responses respectively. The CES is available at <http://www.ces-ec.umontreal.ca>.
- 2 For Canada, see Penner et al., 2006; Soroka and Wlezien, 2004; Petry and Mendelsohn, 2004; Petry, 1999. For the US, see Stimson et al., 1995; Page and Shapiro, 1992, 1983; Monroe, 1979.
- 3 However, Gidengil and others suggest that partisanship may not clearly be in decline in Canada, though trust in parties likely is. In any event, partisanship does not tend to be as significant a factor in elections in Canada as it tends to be in the US (2004).
- 4 Also of importance to the discussion of personal experience with issues is the notion of “easy” and “hard” issues (see Carmines and Stimson, 1980).
- 5 Newspapers included the *Vancouver Sun*, *Calgary Herald*, *Toronto Star*, *Montreal Gazette*, and *Halifax Daily News*. Searches were conducted using Canadian Newsstand.
- 6 This measure is admittedly not perfect and, without expending the time to examine every article, could suffer from a high degree of error. Nevertheless, there is no apparent reason to expect this error to be non-random, and the change in values on the measure is as expected.
- 7 The total number of stories with mentions of the key terms was 64 in the first year, and 308 in the final year. Years were measured November to November, to align with the 2000 Canadian election, which occurred in November 2000. Thus the first year of media coverage was measured from November 2, 1993, to November 1, 1994, and the final from November 2, 1999, to November 1, 2000.
- 8 This is based on the same search criteria used above, but the “crisis” search term is excluded. The difference in the amount of coverage across the first five years is not significant.
- 9 The proportional increase in the negative frame is observed across the five newspapers in a substantively similar manner, with the exception of the *Calgary Herald*, where the increase, while significant, is only about double in the final two years compared to the first year. It is notable, however, that the number of stories which fit the negative frame for the *Calgary Herald* is much higher in the first year compared to all other newspapers, while the total number of stories over the entire period (192) is approximately the same as the *Vancouver Sun* (195) and greater than the *Halifax Daily News* (106). Overall, there is little reason to expect that the negative frame is substantially different on a regional basis.
- 10 The 2000 Canadian Election Study consisted of an election campaign survey, a post-election survey and mail-back survey (the post-election and mail-back are not used



in this study). The pre-election study included a rolling cross-section survey with a representative sample of 3,651 respondents, as well as a post-election survey of 2,862 of the campaign respondents. The response rate for the campaign survey was 60 per cent.

- 11 Analysis of this measure with Internet users included indicates no significant difference compared to results when Internet users are excluded. The media measure was also constructed using a combined score of all three (and all four, including Internet) responses for each medium, using deciles to evenly distribute scores, though no substantial difference was found using this approach. All forms of measurement were highly correlated with pairwise correlation coefficients greater than .80.  
A model was also tested previously using a variable for each medium separately, though no statistically significant difference across these variables was found.
- 12 The score is based on total correct responses to five questions. Cases where the respondent correctly answers are given two points, and cases where the correct response is given along with other responses are given one point. The distribution was then broken down into four sets for statistical purposes.
- 13 Available data indicates that females were approximately 12 per cent more likely than males to visit a health professional at least once in a 12-month period during 2000–2001. This probability also increases generally with age, with those aged 75 years and over being approximately 12 per cent more likely than those aged 20–34 to visit a health professional at least once in a 12-month period during 2000–2001 (see Statistics Canada at <http://www.statcan.ca/english/freepub/82-221-XIE/00502/tables/html/4275.htm>, accessed April 16, 2006). Note however that the difference in *frequency of visits per year* should be even more pronounced for females and older persons.
- 14 In an earlier version of this paper, additional variables with less apparent relationship to actual health care experience were also considered. These included having children, having a long-term partner, and income, though none of these variables were found to have any significant impact.
- 15 The controversy regarding party ID as a meaningful measure of long-term partisan attachment in Canada is at least partially one of methodology (see Blais et al., 2002a; Clarke et al., 1996). Party ID is coded here to include respondents who indicated a particular party and then indicated their attachment as “very strong” or “fairly strong.” The question in the 2000 CES was split, with only half of respondents having the “no preference” option read out to them. Both sets are included here.
- 16 Probit regression was also used to test the model, though results were not significantly different.
- 17 Education and cynicism were also included in the model in earlier tests, as both are expected to affect perceptions of policy issues. However, their impact in the model did not affect the other coefficients in any significant manner.
- 18 As the pseudo- $R^2$  is relatively small, it is important to point out that the likelihood-ratio  $\chi^2$  is statistically significant, meaning, in simple terms, that prediction of values of the dependent variable using the full model is enhanced in a statistically significant manner compared to prediction using the constant alone. More tangibly, approximately 72.2 per cent of values on the dependent variable (both zeros and ones) are correctly predicted by the model. Although one could accurately predict 72.0 per cent of cases by simply assuming all responses were “gotten worse,” this would inaccurately predict 100 per cent of all alternative responses. According to DeMaris, the actual rate of correct prediction by chance must be based on the ability to correctly predict both values on the dependent variable in the logit model. The chance correct prediction rate is  $p^2 + (1 - p)^2$  (2004: 271–72). Based on the same standard of prediction, then, the percent correctly predicted by chance is 59.7 per cent. This means that the ability to correctly predict all possible values on the dependent variable increases by approximately 12.5 per cent using this model.

- 19 Analysis of “most important issue” responses for the 2000 election also reflects this rather stark difference.
- 20 In 2000, BC respondents were the lowest in the country in terms of expressing an inability or a difficulty in accessing health care services (Mendelsohn, 2002). There is no provincial level breakdown of blame attribution between provincial and federal governments.
- 21 Marcus and others suggest that anxiety about a given issue may cause a change in individual behaviour, such as seeking more information on the issue (2000).
- 22 The results of the OLS regression model predicting media use found the following variables are correlated with media use at a .05 significance level: party ID (increase), though with no difference between Liberal and opposition identifiers; male (increase), Quebec (decrease), age (increase).
- 23 As one anonymous reviewer accurately noted, there remains the possibility that another (omitted) variable drives both media use and perceptions of health care. Admittedly, this does suggest the possibility—hypothetically at least—that the relationship described here lacks internal validity. However, because such a variable has not been identified and because the theoretical explanation provided here does justify the interpretation of results, this potential concern was not deemed substantial enough to render the findings inaccurate.
- 24 Simulation of probability estimates were conducted using CLARIFY for STATA (King, Tomz, & Wittenberg, 2000). All other control variables were set to their mode (simulation suggests predicted scores for a 42-year-old female from Ontario with no party ID).
- 25 The effect of the media’s role in pressing a particular issue could be of greater electoral importance if parties clearly staked out different positions on the issue at hand in a manner that the public could discern (Butler and Stokes, 1976). This does not appear to have been the case in 2000 with health care, but in the 1988 election, when parties drew clearly different positions on the most salient issue of that election, the Canada-US Free Trade Agreement, the party positions on the single issue had a significant impact on vote outcomes (Johnston et al., 1992).

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