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THE SOURCES OF ATTITUDES ON THE CANADIAN HEALTHCARE SYSTEM

A REPORT TO THE CANADIAN HEALTH SERVICES
RESEARCH FOUNDATION

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MAIN MESSAGES

- ▼ Understanding the sources of Canadians' attitudes toward healthcare is a critical step in making public opinion useful for healthcare policy-makers. This report examines three sources of opinion concerning the healthcare system: demographic characteristics, mass media and direct experiences with the health system.
- ▼ Individuals who differ in terms of age, education, gender, income and region tend to express different perspectives toward the importance of healthcare, confidence about the state of the health system, government spending on health and the privatization of healthcare.
- ▼ Public opinion is affected by the amount of media coverage that is devoted to healthcare. When health-related news is more frequent, Canadians are more concerned about healthcare, more favourable to increased health expenditures and less supportive of private care options.
- ▼ Being hospitalized and receiving treatment for more life-threatening diseases tends to increase confidence in the quality and safety of medical care; those treated for less serious diseases tend to voice less confidence.
- ▼ Waiting for treatment has a particularly deleterious impact on public confidence in the healthcare system.

EXECUTIVE SUMMARY

This report relies on statistical regression analyses of individual survey data to identify the factors that explain Canadians' attitudes toward healthcare. Moving beyond the examination of aggregate patterns in public opinion about health allows us to determine the sources and reasons behind the perceptions and preferences held by citizens.

Various sources of evidence are assessed. First, Environics' Focus Canada series provides an overview of the current state of healthcare attitudes up until 2010. Then, four representative opinion surveys from the last decade (Canadian Election Studies 2000–2008) are combined with a new database capturing the content of media coverage during election campaigns. These analyses focus on the correlates of four topics: healthcare issue salience (or the prominence of healthcare issues), spending on healthcare, support for private hospitals and support for paying to obtain quicker access. The key findings of this section are the following:

- ▶ Women are more likely than men to consider healthcare important, to want to augment health spending and to oppose a two-tier system.
- ▶ Education tends to reduce the salience of healthcare and the need for more expenditures. Wealthier individuals are more supportive of privatized healthcare.
- ▶ Atlantic residents show greater levels of support for the system and spending, while residents of Western Canada show the opposite pattern. Both Quebecers and Westerners tolerate privatization to a greater extent.
- ▶ Exposure to the mass media affects healthcare opinions. People who watch television and read newspapers more frequently have a slightly greater tendency to name health as an important issue and to support an increase in government healthcare budgets.
- ▶ Canadians are influenced by the actual volume of media discussion about healthcare, across elections. In years when health is more prevalent in the media, issue salience is more widespread, there is more support for healthcare spending, private hospitals are less accepted and paying to jump the queue is less endorsed.
- ▶ There are indications that the daily variations in health media coverage during the course of an electoral campaign have an impact on the opinions expressed on a given day.

The Commonwealth Fund's 2007 International Health Policy Survey of Canadians was also analyzed, specifically to assess people's experiences with the healthcare system and whether direct encounters had an effect on overall assessments of the quality and safety of the system. The main findings of this analysis include:

- ▶ Women exhibit less confidence about healthcare than men.
- ▶ Those aged between 30 and 64 are less optimistic than younger and older cohorts.
- ▶ Individuals with higher education and higher income have less positive evaluations of the healthcare system.
- ▶ Assessments of healthcare vary as a function of different types of experience with the healthcare system. Hospitalization is linked to increases in positive ratings. Furthermore, people treated for life-threatening ailments such as cancer and heart disease, often requiring hospitalization, tend to demonstrate more confidence in healthcare than people who are treated for conditions such as asthma and chronic pain.

- ▼ Having to wait for services has a marked impact on attitudes about the healthcare system. Waiting for access to emergency room services or appointments with a doctor is associated with increasingly negative attitudes.
- ▼ Judgments about the quality of care received interact with wait times. While waiting for medical care decreases confidence in healthcare overall, it further decreases when a person has to wait to see a doctor and is dissatisfied with the medical care they receive.

This report establishes that both media content and interactions with the health system influence attitudes about healthcare. In so doing, it makes clear that public opinion can be used as a valuable tool for those interested in healthcare policy. However, the available data do not permit us to directly compare the relative impact of media versus experience—no single survey captures both. Once measures of these two factors are captured in the same survey—a goal that has been set for the 2011 Canadian Election Study—future research ought to distinguish empirically the relative contributions of media exposure and direct experiences in shaping Canadian public opinion toward healthcare.

BACKGROUND

There is a growing body of work exploring Canadian attitudes about the Canadian healthcare system. There have been a series of general reviews of public opinion, for the Romanow Commission,¹ the Health Council of Canada,² the Canadian Health Services Research Foundation³ and the Health Care in Canada partnership.⁴ There is also a small body of academic studies on the subject.⁵ There is, however, a lack of research, in Canada and elsewhere, exploring in detail the relative importance of the various determinants of citizens' attitudes about the healthcare system.

Put differently, existing work does a good job of setting out the distribution of opinion on the Canadian public healthcare system, but does relatively little to help us understand exactly where that distribution comes from. What are the *sources* of Canadians' opinions on healthcare?

Answering this question is of critical importance. First and foremost, if healthcare policy-makers are going to pay attention to and maybe respond to, public opinion, we need to understand exactly where these opinions come from. Are opinions driven by media content alone? Does experience matter? If so, what experiences seem most beneficial, or problematic, for attitudes about the healthcare system? The answers to these questions help us make sense of public opinion. And making sense of public opinion makes it a more valuable policy tool.

For instance, if opinion shifts with experience, then we can use opinion measures to help gauge the current quality of the healthcare system. Holding other things constant, if emergency room visits tend to make people more positive (or negative) about the state of the healthcare system, then we have some useful information about the quality or efficiency of care in emergency rooms, for example. Further, capturing the impact of experience over time may be a particularly useful measure of policy success. Changes to the funding or organization of emergency rooms may, for instance, shift the impact of emergency room visits on Canadians' attitudes about the state of the healthcare system. If opinion shifts with media content as well, then healthcare policy-makers know to take this into account when interpreting polling results, when looking for policy effects and when designing policy communications strategies.

The goal of this report, then, is to take one further step toward understanding where Canadians' attitudes on healthcare come from. We do so by drawing on three relatively new bodies of public opinion data—the 2010 Focus Canada survey, the 2000–2008 Canadian Election Studies and the 2007 Commonwealth Fund International Health Policy survey. These surveys are used alongside two content analytic databases of media coverage—one covering all healthcare coverage in major Canadian dailies over the past two decades³ and the other capturing campaign-period news content in Canadian federal elections. Together, these data sources are used to investigate the state of current opinion, as well as the relative impact of both media coverage and personal experience on Canadians' attitudes toward healthcare.

THE CURRENT STATE OF PUBLIC OPINION

Our study begins with an overview of where opinion currently stands, drawing on the new Focus Canada survey conducted by the Environics Institute.¹ The survey tracks attitudes on a wide range of issues, taking advantage of long-term time series gathered since 1978 in the Environics' syndicated Focus Canada surveys. Three questions in particular are of interest here, the results for which are shown in Figures 1 through 3.²

Figure 1 shows trends in responses to the question, “Which of the following is closer to your point of view ... Canada’s healthcare system is basically in good shape ... Canada’s healthcare system is in a state of crisis?” Trends are shown since 2002, the year of the Commission on the Future of Healthcare in Canada (Romanow Commission). At that time, roughly 67% of respondents believed the healthcare system was in a state of crisis. Beginning in 2005, however, that view started to change. Currently, 52% see the system in a state of crisis—no small proportion, but markedly fewer than eight years ago.

Figure 1: State of the healthcare system

Which of the following is closer to your point of view ... Canada’s health care system is basically in good shape ...Canada’s health care system is in a state of crisis?



Shifts in opinion are also evident in Figures 2 and 3, although these shifts are not necessarily as positive as demonstrated in Figure 1. Figure 2 shows the proportion of Canadians who identify a lack of funding, versus inefficiency, as the main source of difficulty for the healthcare system.³ Funding was the main concern in 2002, but that has shifted steadily since that time; 64% of Canadians now see inefficiency as the principal cause of problems. Figure 3 looks at support for private care as a means of getting quicker service. There has been relatively little change in this area since 2004, though the data point toward a slight rise in support for the private option.

1 The survey was co-funded by the Environics Institute (<http://www.environicsinstitute.org>), the Canadian Opinion Research Archive (CORA) and the CBC. Data and methodological information is available through CORA, at <http://www.queensu.ca/cora>.

2 There are, of course, margins of error around all of the survey results discussed here. For the sake of clarity, we do not discuss levels of statistical significance in every case. All changes discussed in the text, unless it is otherwise stated, are statistically significant at $p < .05$.

3 In this and subsequent figures, we present data for all years in which they are available. Missing years are those in which the questions were not asked.

Figure 2

Which do you think is the main cause of problems in our health system ... Not enough funding for the system ... Inefficient management of the system?

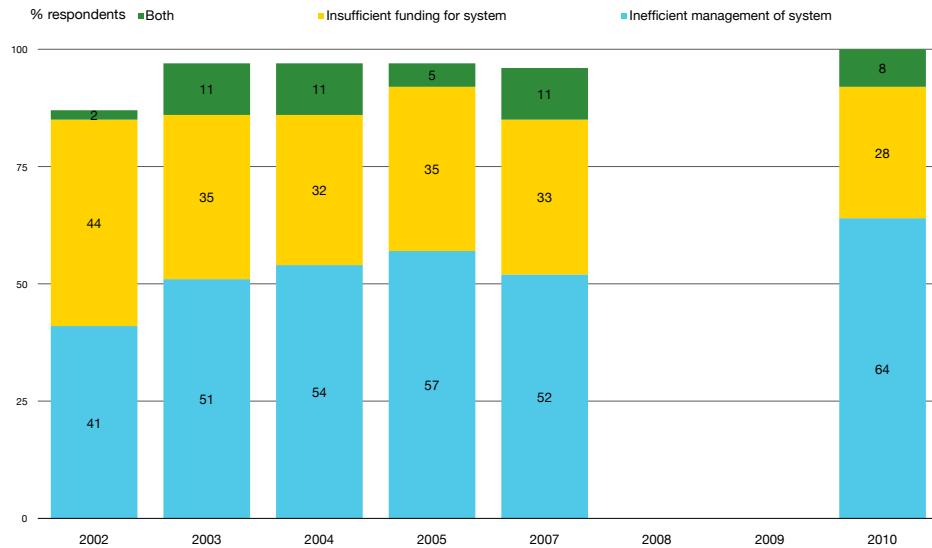


Figure 3: Pay for quicker access

Do you strongly agree, agree, disagree, or strongly disagree that individual Canadians should be given the right to buy private health care within Canada if they do not receive timely access to services in the public system, even if this might weaken the principle of universal access to health care for all Canadians because some people might have quicker access to services?



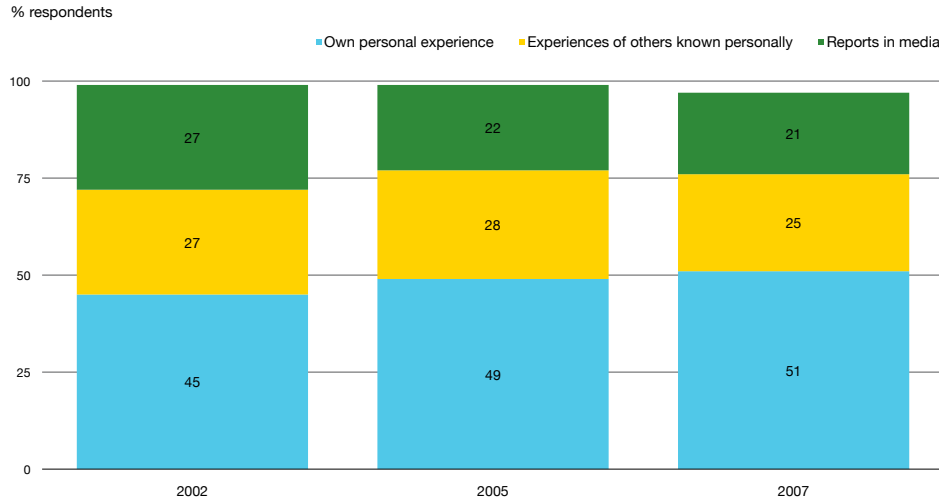
The story in these Focus Canada surveys is rather divided, then. Canadians do seem more positive about the healthcare system than they were in 2002, but it is still the case that a majority of Canadians sees the system in a state of crisis. And that concern is reflected in attitudes about inefficiency and paying for quicker access.

These are just broad opinions, of course; the focus of this paper is where these attitudes come from. Environics Focus Canada data in Figure 4,³ show results from the question: “On which of the following do you mostly base

your opinion of Canada’s health system ...?” Roughly half of respondents said their own personal experience; a quarter said the experience of others they know; and another quarter said media content.

Figure 4: Where do attitudes come from?

On which of the following do you mostly base your opinion of Canada’s health system ...?



How accurate are these estimates? Can we find evidence of the impact of media and experience on Canadians’ attitudes on healthcare? We have argued that doing so has implications for the way we understand and use public opinion in healthcare policy development. We thus set out to find this evidence.

AGGREGATE TRENDS: MASS MEDIA AND PUBLIC OPINION

We begin by drawing on a database of healthcare media coverage gathered for previous work for CHSRF.³ The data are described in more detail there; for the current paper, we use just a subset of those data—coverage from the *Globe and Mail* and *Toronto Star* (the two papers for which data are available over the longest time period). The data include all healthcare coverage *except* stories on (a) fitness and nutrition and (b) outbreaks and epidemics.⁴

Figure 5 shows the total number of articles each year dealing with healthcare spending. We observe a drop in 2003, observable across all healthcare media series and potentially a consequence of post-Romanow fatigue with the issue. Discussion of spending rises again after that, but has been decreasing since then. We note that this is in line with what we have seen in public opinion, namely a decreased focus on lack of funding as a source of difficulties in the healthcare system (Figure 2).

⁴ The idea is to focus here just on media content dealing with the healthcare system; however, note that the general trends shown below do not change very much if we do not make these exclusions.

Figure 5: Coverage of spending on healthcare

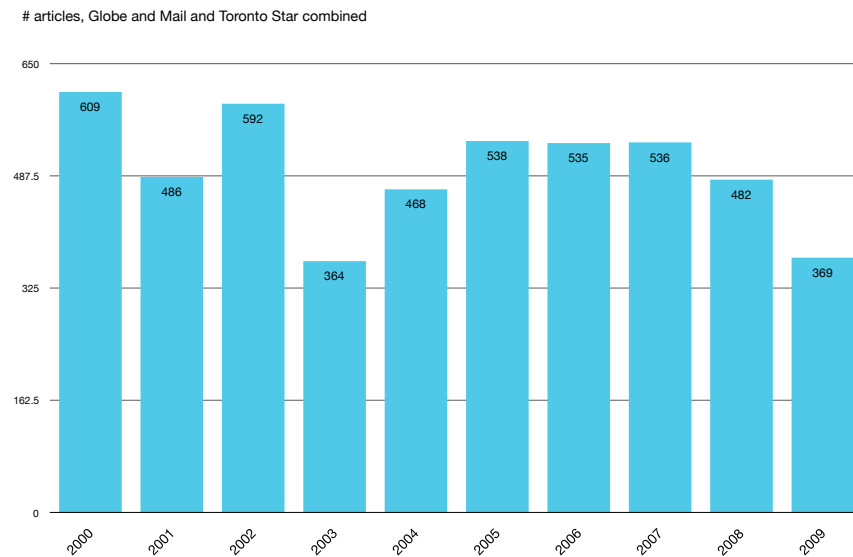
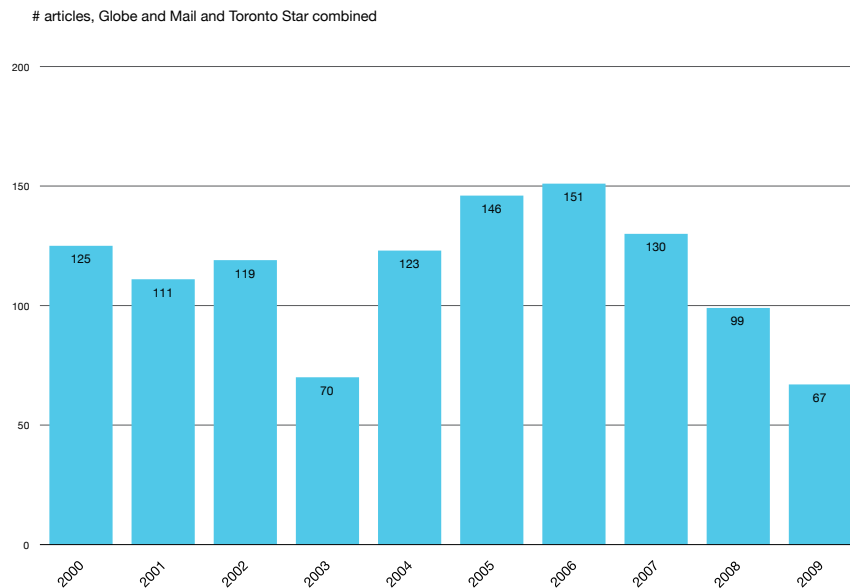


Figure 6 shows similar data for stories that mention waiting lists. Waiting lists have been a central concern in media and indeed in many policy discussions, over the past five years. They have become a symbol for the problems Canadians perceive with the healthcare system; discussion in media has been correspondingly high. Discussion of waiting lists reached a high in 2006—note that this figure suggests more than 10 wait-list stories each month in the two papers combined, more than a story a week per newspaper for the entire year. Coverage has dropped steadily since that time, however. As of 2009, it had declined by almost two-thirds.

Figure 6: Coverage of wait-lists



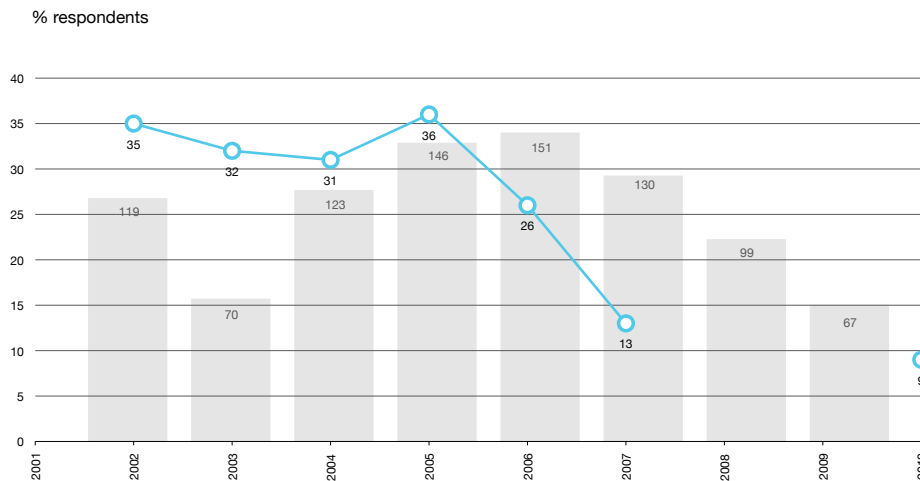
The link between coverage of waiting lists and the state of aggregate opinion is illustrated in Figure 7, which combines the opinion results from Figure 1 with the media results from Figure 6. We do not expect

a perfect match here—after all, public attitudes do not come from media content alone and waiting lists are not the only topic related to attitudes about the healthcare system at large. Even so, the link between this negative focus in media and the negative emphasis in public opinion is striking.

Figure 7: Media coverage and public opinion

Media coverage: # stories dealing with wait-lists, Globe and Mail and Toronto Star

Public Opinion: % saying “crisis”—% saying “good shape” from Which of the following is closer to your point of view ... Canada’s health care system is basically in good shape ... Canada’s health care system is in a state of crisis?



Just how much does media content matter to public attitudes about healthcare? Where generalized attitudes about healthcare are concerned, we expect it matters a great deal. As has been argued elsewhere,^{6,7} attitudes about the healthcare system in general are necessarily affected by factors other than one’s own personal experience. Our thinking here draws in particular on work about “impersonal influence,” focusing on individuals’ attitudes that are a consequence of their perceptions of the beliefs or experiences of others.^{8,9,10}

The concern that people may adjust their own opinions based on information they receive about the opinions of unknown “others” has a long history,¹¹ and recent work in the field focuses on the potential for mass media to increase the likelihood of this kind of “impersonal influence,” particularly through the reporting of opinion polls. But opinion polls are not the only way in which media may inform us about what others believe. Media coverage—on polls or not—can affect our views concerning the collective perceptions of others.

The same may be true for healthcare. We can (and do) have views of the healthcare system generally and of our own personal experience with that system. This fact has been used elsewhere to account for an apparent paradox in Canadian attitudes on healthcare: largely positive accounts of one’s own interactions with the healthcare system, but steadily declining views of the state of the system generally.⁴ The former may be driven by personal experience; the latter may be driven by media content. Of course, the distinction is not so precise. The former may be driven more by personal experience than by media content and the latter may be the opposite. But surely both experience and media content factor, at least in part into both kinds of attitudes.

Our focus in the following section is on the role of media in shifting public attitudes about the Canadian healthcare system in general. Media are by no means omnipotent—attitudes about the healthcare system

also shift with personal experience, as we shall see in the subsequent section. But media do matter and these broad attitudes—the source of a good deal of public and policy-oriented discussion in the healthcare domain—are ones for which the media may play an especially critical role.

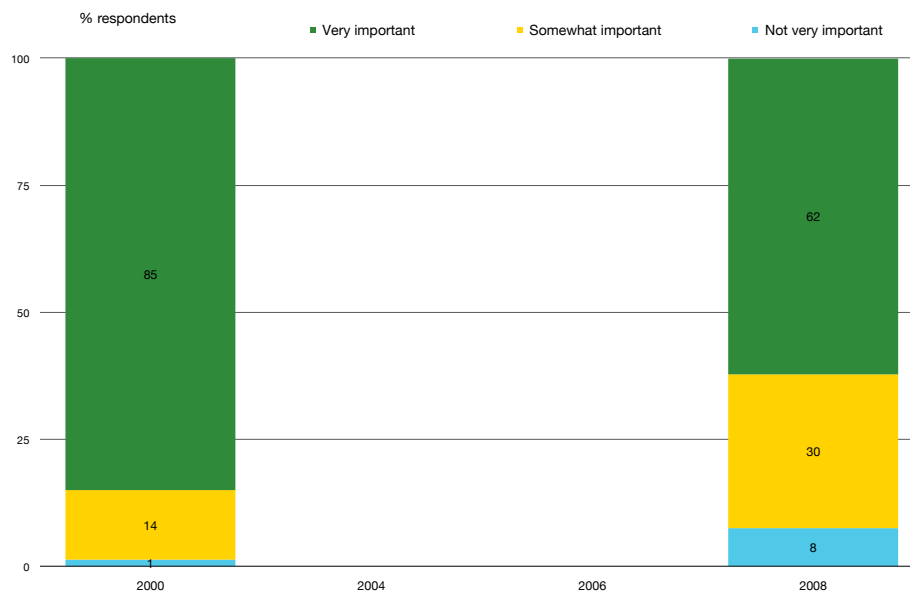
MEDIA CONTENT AND PUBLIC ATTITUDES TOWARD HEALTHCARE

To examine in more detail the relationships between the mass media and the population’s opinions toward healthcare, we rely on the four most recent Canadian Election Studies (2000–2008). These datasets offer two advantages. First, they provide measures of public health preferences and of exposure to the media. Second, their fieldwork occurs during a period that is a crucible for debates about public policy and during which media coverage is captured as well. The Canadian Election Study (CES) surveys contain four healthcare questions measured on numerous occasions during the last decade. The views of citizens on these four topics are presented in Figures 8 to 12.⁵

Whether Canadians are asked to rate the importance they attach to improving healthcare (Figure 8), or to choose the most important issue among a list of five priorities (Figure 9), healthcare is definitely very high on their agenda. That said, the salience of healthcare declined somewhat over the period. The proportion of people that rates improving healthcare as very important dropped from 85% in 2000 to 62% in 2008 (Figure 8). Similarly, those who rank healthcare as the most important issue fell from 49% in 2004 to 41% in 2006 (Figure 9).

Figure 8: Healthcare issue salience #1

To you personally, in this Federal election, is improving health care: very important, somewhat important, or not very important?



⁵ Full methodological details regarding the Canadian Election Studies are available at ces-ees.org and at the CES archive at queensu.ca/cora.

Figure 9: Healthcare issue salience #2

Which of these five issues is the most important issue to you PERSONALLY in this election? Healthcare, taxes, social welfare programs, the environment, or corruption in government?

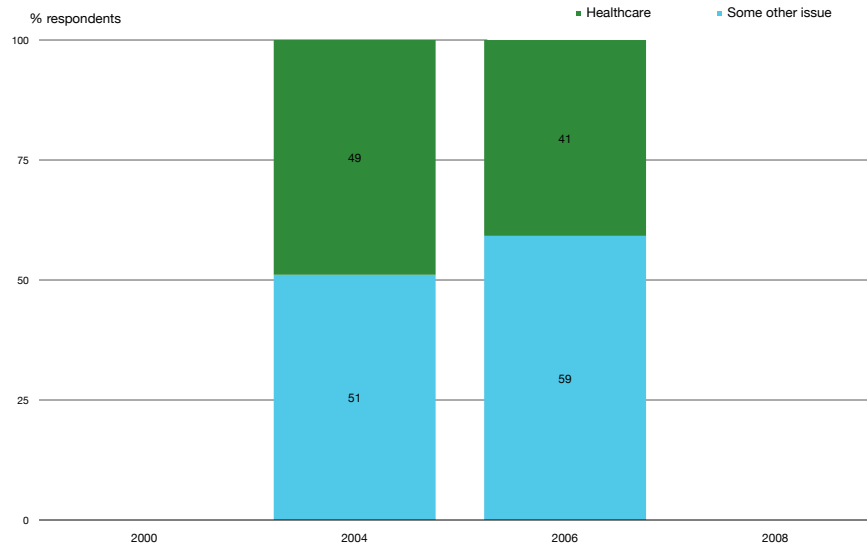
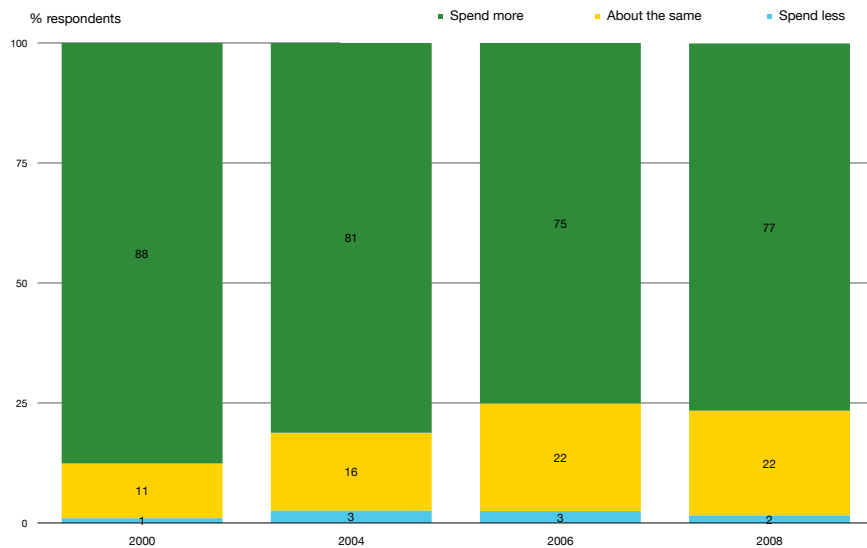


Figure 10: Support for healthcare spending

Should the Federal government spend more, less, or about the same as now on the following areas? Healthcare?



Even so, the salience of healthcare remains high; so too does support for spending (Figure 10). The vast majority seeks an increase in health expenditures, though support for health spending has shrunk slightly. While at the beginning of the decade 88% believed the federal government should spend more on healthcare, about three-quarters shared this opinion eight years later. Between 2000 and 2008, the proportion of people who want to keep spending at the same level doubled from 11% to 22%.

Figure 11: Support for private hospitals

Would you favour or oppose having some private hospitals in Canada?

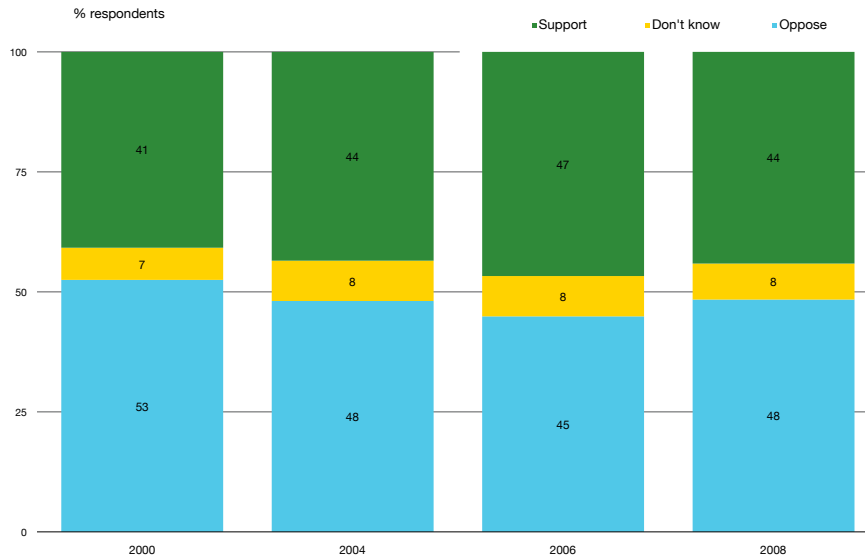
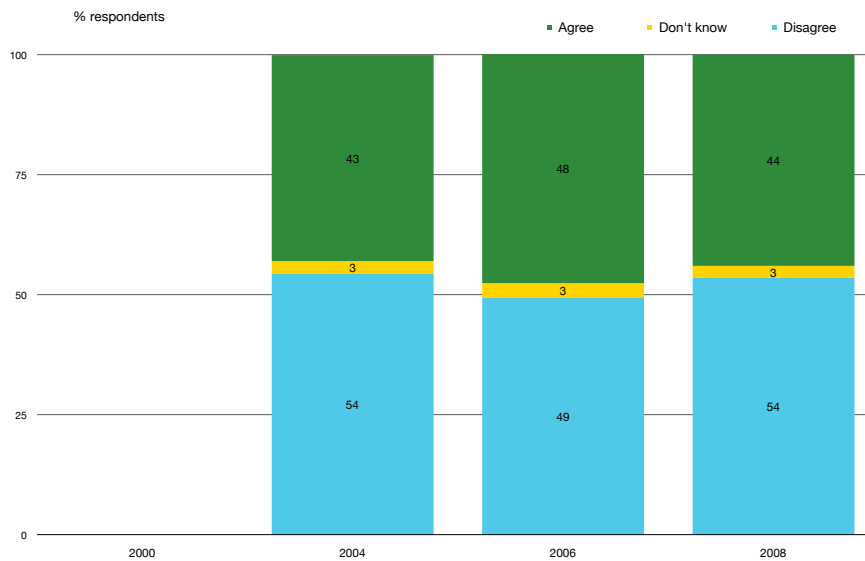


Figure 12: Support for paying for quicker access

People who are willing to pay should be allowed to get medical treatment sooner.



The surveys also contain two questions about encroachments on the public healthcare system. Most Canadians are opposed to the existence of private hospitals (Figure 11),⁶ but the majority has recently been much slimmer than it was in 2000. In 2006, supporters even edged out opponents. Respondents were also asked whether “People who are willing to pay should be allowed to get medical treatment sooner.” Those

⁶ Note that hospitals are already privately run, but with government money. Our interpretation of this question and we assume respondents’ interpretation as well, is that “private hospitals” refer to hospitals that are run and paid for with private money.

who disagreed outnumbered those who agreed by a margin varying between 11 points in 2004 and 1 point in 2006 (Figure 12).

Our key objective here is to ascertain whether views about these four topics—salience, spending, private hospitals and paying for quicker access—were influenced by portrayals of healthcare in the media. We tackle this goal with three different empirical approaches: we examine the impact of media exposure on opinions, the impact of total media coverage on variation in opinions across elections and the impact of daily media coverage on variation in opinions over the course of electoral campaigns.

Healthcare opinions and media exposure

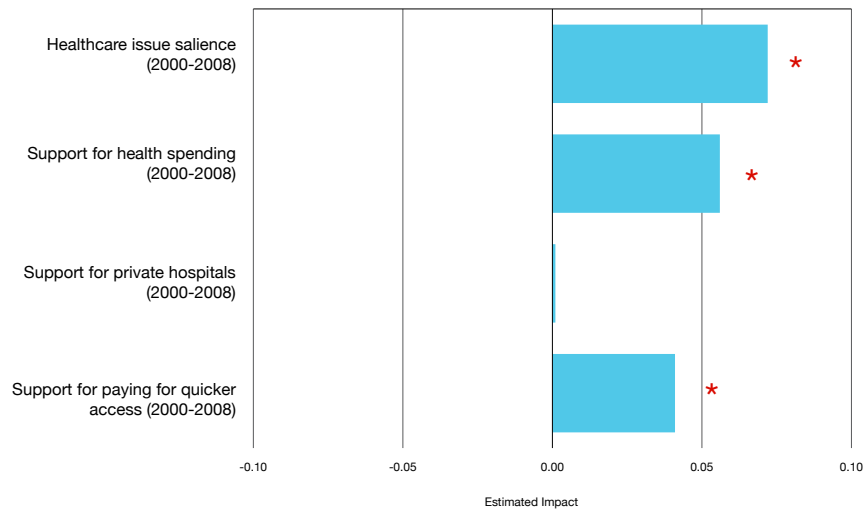
If the mass media's depiction of the healthcare system affects Canadians' perspectives, then people who pay more attention to media coverage should hold opinions that differ from those of individuals who pay less. We capture media exposure—just “raw” exposure, that is, not coverage of healthcare specifically—with an index composed of both television and newspaper consumption. In all four CES surveys, respondents were asked “How many hours a day do you usually watch TV?” and “How many days a week do you read a newspaper?”. People who neither watch television nor read a newspaper are located at the low end of the index, while those who watch five hours or more of TV and read a newspaper every single day are found at the top of the scale.

To gauge the impact of media exposure, we use regression models. They allow us to identify the determinants of the four healthcare opinions (salience, spending, private hospitals and paying for quicker access) while controlling for other factors. Beyond media exposure, we also examine the role played by many demographic characteristics: gender, age, region, education and income. The full results of the statistical estimations are presented in Appendix Table A. The impacts of media exposure are summarized in Figure 13. (Results for demographic variables are not reviewed in figures, but they are included in Appendix tables.)

Who attaches a higher level of importance to healthcare? Women, residents of the Atlantic Provinces and less educated people tend to care more about healthcare. In contrast, residents of western Canada, university graduates and the highest income earners are less likely to consider healthcare a priority.

Most importantly, media exposure is positively related to healthcare issue salience. The more an individual consumes television and newspapers, the more they are preoccupied by healthcare. As illustrated in Figure 13, the gap between the least and the most media-active (that is, least exposed to media to most exposed to media) is .07 on the 0-1 salience scale. To simplify, this means that the proportion of people who consider healthcare a priority is approximately 7 points higher among high-media consumers. The impact is not large, but it is statistically significant.

Figure 13: The estimated impact of media consumption on healthcare opinions



* statistically significant

Source: 2000-2008 Canadian Election Study; results based on estimates in Appendix Table A. Estimated effects including controls for gender, age, education, income and region.

Views about healthcare spending are linked to the same demographic predictors that mattered for healthcare salience. Women, Atlantic residents and the less educated exhibit a more pronounced preference for spending on healthcare. While Westerners, the more schooled and the wealthiest, along with the elderly, are less inclined to increase public health expenditures. Media exposure again has a positive effect (see Figure 13). Attention to television and newspapers is associated with greater support for healthcare spending. The size of the impact is about the same as in the case of salience (.06) and it is statistically significant.

Media exposure also affects ideas about paying to obtain quicker access. Television viewers and newspaper readers have a higher tendency to support paying for access to treatment sooner. The impact is marginal—0.04 on a 0-1 scale—but it is statistically significant. In terms of demographic profile, men, Quebecers, Westerners and those from the top income quartile tend to be more favourable toward private healthcare.

Support for private hospitals, like views toward paying for quicker access, tends to be more widespread among men, those who reside outside Ontario and the more affluent. Media exposure, however, is not correlated to opinions regarding private hospitals. Whether one follows the media or not, the proportion in favour of private hospitals is the same.

Thus, controlling for demographic differences, raw media exposure has a notable impact on three of the four healthcare attitudes. Paying attention to the media appears to fuel not only the salience of healthcare and the desire to spend more on healthcare, but also the willingness to tolerate a private healthcare component.⁷ These effects speak to the nature of media content on the issue, perhaps. But we can look at media content in a more detailed way as well.

7 It should be noted that these relationships are not due to the variance of opinions across elections; they remain essentially intact if we include controls for election years. See Appendix Table A.

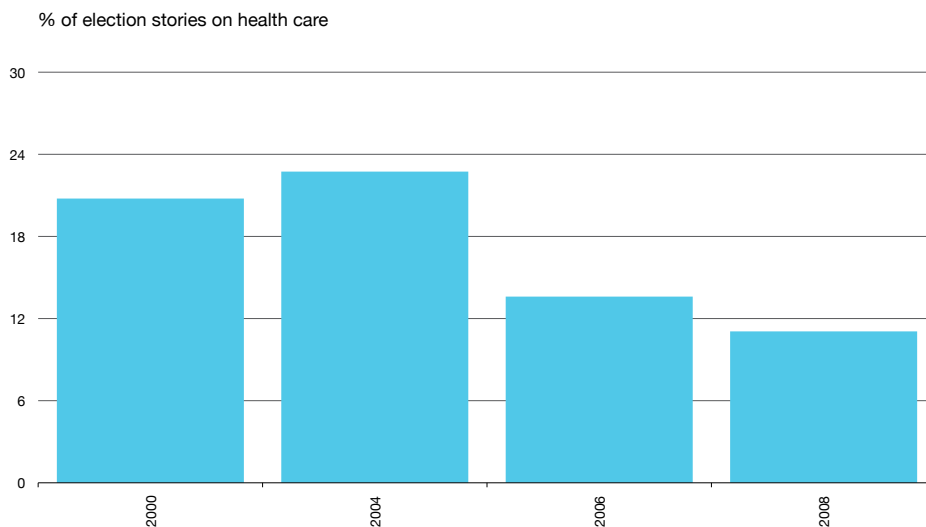
Healthcare opinions and total media coverage

If the mass media are a driving force behind public opinion on healthcare, then variations in the actual content of the news coverage should be connected to variations in attitudes. Simply put, when the media talk more about healthcare, public preferences should be different than when the media cover healthcare less. In this section, we explore the dynamics on a yearly basis and determine whether the total amount of healthcare coverage during each election campaign (there were four federal elections held in Canada during this period, in 2000, 2004, 2006 and 2008) influences the opinions manifested during each election.

To capture healthcare media coverage, we use a new database of election media content. We extracted from electronic databases all articles published during each election campaign by five newspapers spanning the country: Calgary Herald, Globe and Mail, Montreal Gazette, Toronto Star and Vancouver Sun. In total, the content of 15,975 articles was coded by computerized automation according to topic. To be classified as relating to healthcare, an article needed to contain two or more of the following keywords: cancer, disease, doctor, drugs, health, hospital, medical, nurse, patients, physician, prescription, sick, syndrome and vaccine.⁸ A total of 2,677 of the articles satisfied this criterion.

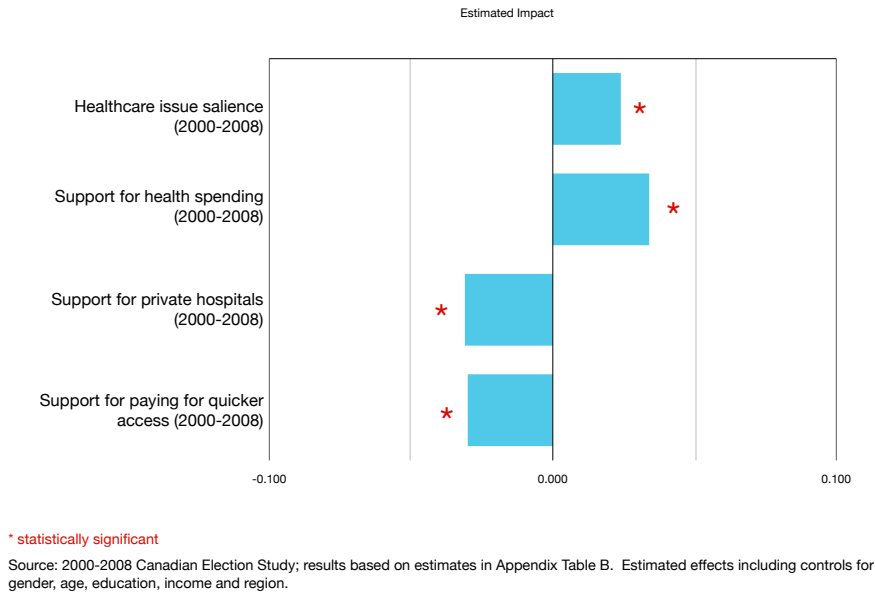
The distribution of healthcare stories, expressed as a proportion of all stories in each election campaign, is displayed in Figure 14. In 2000 and 2004, between one-fifth and one-quarter of news coverage dealt at least briefly with healthcare. The proportion declined in the following two contests, first to 14% in 2006 and then to 11% in 2008. To ascertain whether this evolution of coverage swayed public opinion, we performed regression analyses where the aggregate percentages of Figure 14 are used to predict the distributions of healthcare attitudes across the four elections. The complete results are presented in Appendix Table B; the summary findings are highlighted in Figure 15. Since the demographic predictors are similar to those identified in the previous section, we concentrate here on the media story.

Figure 14: Total healthcare coverage by election



⁸ These are obviously not all the words linked to healthcare in media articles, but they do capture election media content related to healthcare since 1993. These are part of the Lexicoder Topic Dictionary, available with and implemented in Lexicoder (lexicoder.com).

Figure 15: The estimated impact of total healthcare coverage on healthcare opinions



Aggregate media coverage has a significant impact on all four healthcare topics. There is a positive link between coverage and issue salience. When healthcare is the subject of more news stories during an election campaign, Canadians are more inclined to consider that healthcare is an important policy issue in that same election. Support for healthcare spending is also positively related to coverage, so a greater proportion of people are willing to increase health expenditures in years when mentions of the healthcare system are more frequent in the media. In contrast, there is a negative connection between coverage and views about the two non-public healthcare components—namely, private hospitals and paying for quicker access to treatment. This means that support for these two notions decreases as the amount of health news reporting climbs during a campaign.

The first two patterns are consistent with the results of the preceding section. Both media consumption and media coverage stoke issue salience and support for spending. The last pattern is contrary to the effect of media consumption noted earlier and points to the nature of healthcare discussion during election campaigns—that is, the tendency for campaign-period communication to focus on additional funding and support for the existing public system.

What does the size of these impacts really mean? The regression coefficients tell us about the consequence for each healthcare opinion of moving from one end of the media coverage scale to the other end. In these data, we are comparing a situation where 11% of the news coverage is devoted to healthcare (2008) with a situation where 23% of the attention centres on the subject (2004). Other elections might focus more or less extensively on healthcare; here, we examine only the range of actual aggregate media behaviour exhibited during the decade under study. A movement of .024 to .034 on opinion scales that run from 0 to 1 is obviously not a very large effect. Concretely, these impacts suggest that the proportion of people who find healthcare important, who wish to spend more on healthcare, who are in favour of private hospitals and who agree with paying for quicker access would be roughly two to three percentage points higher (or lower) when the volume of health media coverage swings from its lowest to its highest aggregate levels observed during these four elections.

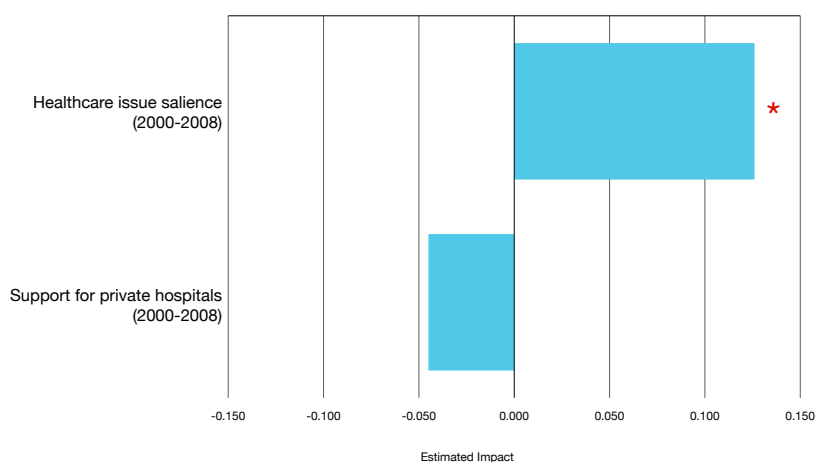
Healthcare opinions and daily media coverage

We have seen that fluctuations in the aggregate level of media coverage affect public opinion. Does that influence transfer to the short term? Can day-to-day variations in the volume of health coverage also move healthcare opinions? To test this idea, we conducted regression analyses using the proportion of health coverage measured on each day of the campaigns. The daily coverage variable possesses greater variance than the total coverage variable of the previous section: it ranges from 2% to 43%.⁹ We cannot examine all four healthcare topics—we need to restrict the analyses to those opinions that were captured during the campaign wave of the surveys and can thus be influenced by that day’s coverage. Only issue salience (2000–2008) and support for private hospitals (2004–2008) meet this standard.

The summary findings of this daily analysis are displayed in Figure 16, with the full results located in Appendix Table C. Healthcare opinions are correlated to the same demographic variables as before. We focus here on the role of daily media coverage.

The quantity of news stories published on a given day does indeed influence significantly the salience judgments that Canadians express on that particular day. More extensive coverage of healthcare translates into more widespread assessments that healthcare is an important issue. The impact of daily coverage is in the same direction as that observed for media consumption and total media coverage, but it is much more pronounced than those two. When you compare a day when healthcare is essentially absent from the media (2% of the coverage) to a day when healthcare almost dominates the agenda (43% of the reports), the proportion of individuals who consider healthcare a priority is nearly 15 points higher on the second of the two days. This is a sizeable effect.

Figure 16: The estimated impact of daily healthcare coverage on healthcare opinions



* statistically significant

Source: 2000-2008 Canadian Election Study; results based on estimates in Appendix Table C. Estimated effects including controls for gender, age, education, income and region.

Is the impact on issue salience entirely attributable to the variation in coverage across days? Could the trends in coverage across election campaigns still be exerting some weight? To ascertain whether this is the case or not, we replicated the analyses with the inclusion of binary variables capturing the

9 This is recoded for models to range from 0 to 1.

discrepancies between election years (see Appendix Table C). With such controls, daily media coverage is no longer as pronounced a determinant of healthcare salience. But the effect does not disappear completely. In fact, the remaining effect (.029) is still larger than that of total coverage on salience (.024).

The link between daily media coverage and support for private hospitals, also shown in Figure 16, is negative, as in previous estimations. More discussion of healthcare is associated with less favourable views toward privatization. This effect is not statistically significant, however.

Thus, the volume of media coverage devoted to healthcare that is published on each day of an election campaign affects the opinions that Canadians voice about healthcare during that day. The impact is limited to issue salience and the influence of coverage on salience is due more to the overall variation in the amount of news stories across elections than the day-to-day variation. The implication is that media matters, but that the impact may be longer-term—not day-to-day, but perhaps over weeks or months. Even so, this demonstration of the link between attitudes and media coverage of healthcare is one critical step in making sense of Canadians' opinions on healthcare.

EXPERIENCE AND SUPPORT FOR THE CANADIAN HEALTHCARE SYSTEM

Canadians' attitudes toward the healthcare system are not driven by media alone, of course. Canadians regularly interact with the healthcare system—they experience it directly. This experience clearly matters to opinions about one's own doctor, or the local hospital or clinic. It likely matters to views of the overall system as well.

Unfortunately, while the Canadian Election Studies are strong on measures of media influence, they have no information on individuals' health or use of the system. (See the conclusions for a further discussion.) The Commonwealth Fund's International Health Policy (IHP) surveys do, however and so we focus on those here. Specifically, we rely on the 2007 wave of the survey, the most recent publicly-available wave that was conducted on a nationally-representative sample of the Canadian public (alongside similar samples in other countries).¹⁰

The survey includes two questions on the general state of the healthcare system; descriptives for each are shown in Figures 17 and 18. The figures show results for all seven countries in the 2007 IHP survey. They make clear that Canadians offer somewhat middling views of the healthcare system, comparatively speaking. Figure 17 focuses on responses to “How confident are you that if you become seriously ill, you will get quality and safe medical care?” The results show that 20% of Canadians are “not very” or “not at all” confident—a smaller proportion than Germany (26%), New Zealand (23%) and the U.K. (28%), but slightly more than the U.S. (18%) and Australia (17%) and markedly more than in the Netherlands (5%).

¹⁰ Full methodological details on the Commonwealth Fund's IHP surveys are available at commonwealthfund.org.

Figure 17: General attitudes in the IHP: Confidence

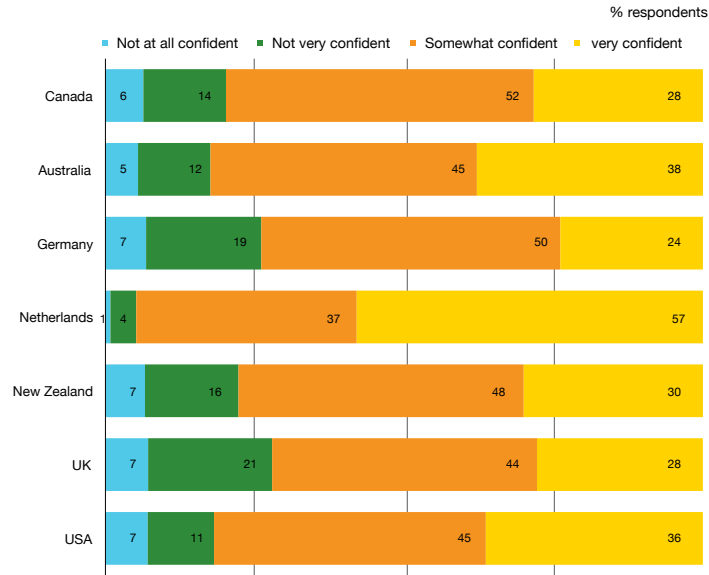
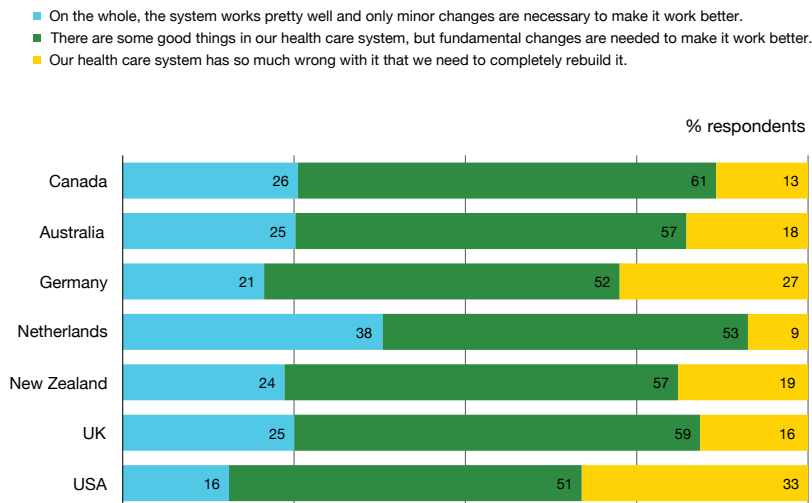


Figure 18 shows responses for the question, “Which of the following statements comes closest to expressing your overall view of the healthcare system in this country?” Again, the distribution in Canada hovers in the middle, with 26% saying “On the whole, the system works pretty well and only minor changes are necessary to make it work better,” 61% saying “There are some good things in our healthcare system, but fundamental changes are needed to make it work better,” and 13% saying “Our healthcare system has so much wrong with it that we need to completely rebuild it.”

Figure 18: General attitudes in the IHP: Overall assessment

Which of the following statements comes closest to expressing your overall view of the health care system in this country?



While the 2010 version of the IHP is not yet available for analysis, basic results are available in the Health Council of Canada’s November 2010 volume of *Canadian Health Care Matters*. Those results suggest some improvement in the Canadian case. Results for the question in Figure 18 shift from 26%, 61% and 13% in 2007 to 38%, 52% and 10% in 2010, for instance.

Even so, we expect the basic relationships found here to apply in later years. Since preliminary analyses suggested that the questions in Figures 17 and 18 have the same basic drivers, we focus on just the first question. (Full models for both are available in Appendix Table D.)

Again, we rely on regression analysis, but this time to explore the demographic and experiential predictors of general attitudes about the healthcare system. We do so by building models of the responses to the question on confidence in receiving quality and safe medical care. Our models include basic demographics including gender, age, education and income and then a number of different ways of capturing experience with the healthcare system.

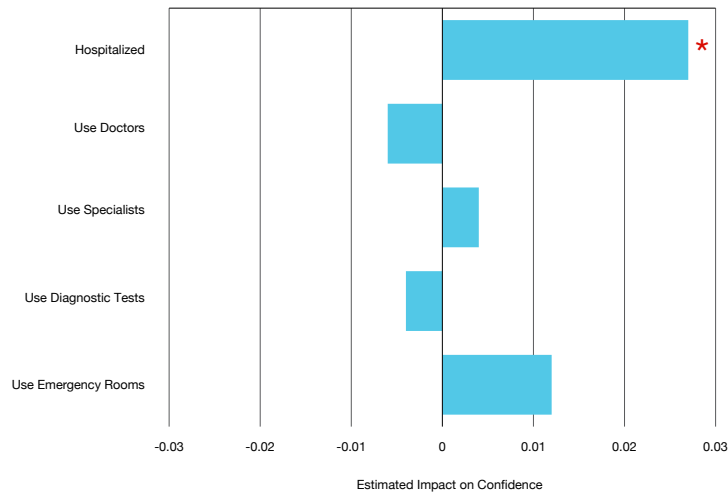
Confidence and experience: Use of services

We begin with an analysis that controls for the demographics listed above and then add variables capturing the ways in which respondents have used the Canadian healthcare system. Questions ask about the last two years; they ask about hospitalization, visits to doctors, visits to specialists, having diagnostic tests and visits to emergency rooms. (Full question wording is included in the Appendix.) We use five binary variables, equal to 1 for anyone who used the system in each of these ways and equal to 0 for all others. The resulting coefficients give us a sense for the degree to which these different types of system are connected with confidence in the healthcare system (controlling for the effect of demographics).

The full results are shown in Appendix Table D. Where demographics are concerned, the models suggest that confidence tends to be lowest for the middle-aged and highest for those above 65. Those with higher incomes and education tend to show greater levels of confidence; women exhibit somewhat less confidence in the system. Roughly the same differences are evident when we look at data for overall assessments: the view that the system is doing well is more common amongst men, those above 65 and those with higher levels of income and education. As above, we will not focus on the demographics very much here. Instead, having controlled for demographic effects, Figures 19 through 22 focus on the impact of experience.

Results for use of services are shown in Figure 19. Most of the effects are statistically insignificant—evidence, perhaps, that these experiences are either (a) exactly as respondents expected and thus have no impact on their confidence in the system, or (b) confidence is simply unaffected by personal experience. The latter seems unlikely, given that the effect of hospitalization is significant and positive. Note that confidence is measured here on a scale from 0 to 1 (where 1 is “very confident”). The impact of hospitalization is thus relatively simple to interpret: having been hospitalized in the last two years is associated with an average *increase* in confidence in the healthcare system of roughly .03 points, on a scale from 0 to 1. The impact is relatively small, but there is always measurement error in survey results and many other drivers of confidence as well. We take this positive impact as evidence of, on average, positive experiences where hospitalization is concerned. (This impact is also in line with recent work using different data.⁴)

Figure 19: The estimated impact of experience on confidence: Use of services



* statistically significant

Source: 2007 IHP Survey; results based on estimates in Appendix Table D. Estimated effects including controls for gender, age, education, income and self-reported health.

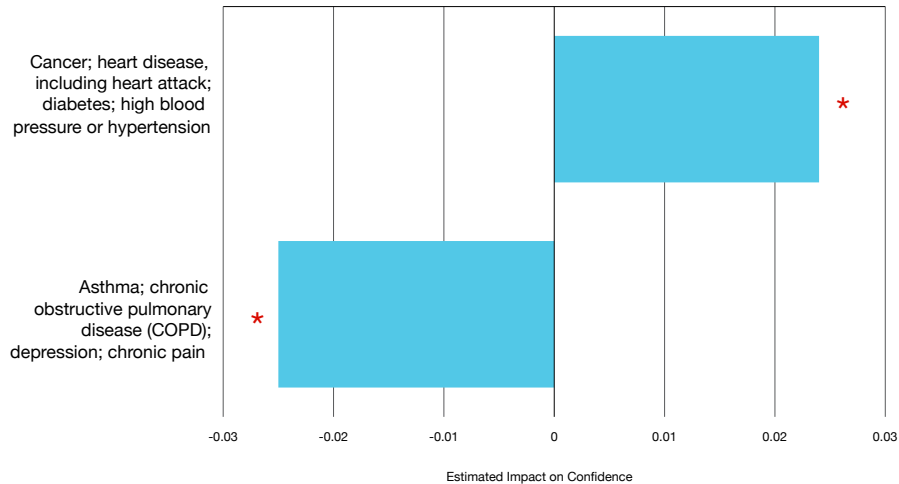
Confidence and experience: Treatment of diseases

A second analysis of experience focuses on questions capturing a series of diseases for which respondents are being treated. The various diseases are shown in Figure 20, divided into two groups—one where the disease tends to be more life-threatening and treatment more likely to involve hospitalization and the other where the disease, while serious, is less likely to involve these kinds of care.¹¹ The division is not perfect by any means; it is only a general approximation. Nevertheless, the associations between these variables and the variables capturing actual use above suggest that this division is justified and results in Figure 20 are roughly as we would expect.

First, being treated for life-threatening issues such as cancer and heart attacks tends to, *ceteris paribus*, increase your confidence in the healthcare system. The impact is roughly the same as for hospitalization in the preceding analysis—just less than an average .03 increase in confidence. The impact of being treated for the other diseases is almost exactly the opposite. Treatment for asthma or chronic pain, for instance, is associated with an average .03 *decrease* in confidence. Again, these results are in line with previous work;⁴ they speak to a potential difference in the quality of care experienced by those who are hospitalized and those who are not. This is not to say that hospitalization is what people want. But the care they receive once hospitalized seems to build confidence in the system, while the care they receive from clinics or doctor visits does not.

11 Note that this is just a rough approximation, based on the likelihood of hospitalization given the various diseases. There is certainly measurement error here, although results for the impact of hospitalization are in line with those in the preceding section, where hospitalization is captured directly.

Figure 20: The estimated impact of experience on confidence: Treatment of diseases*



* statistically significant

Source: 2007 IHP Survey; results based on estimates in Appendix Table D. Estimated effects including controls for gender, age, education, income and self-reported health.

Confidence and experience: Waiting for treatment

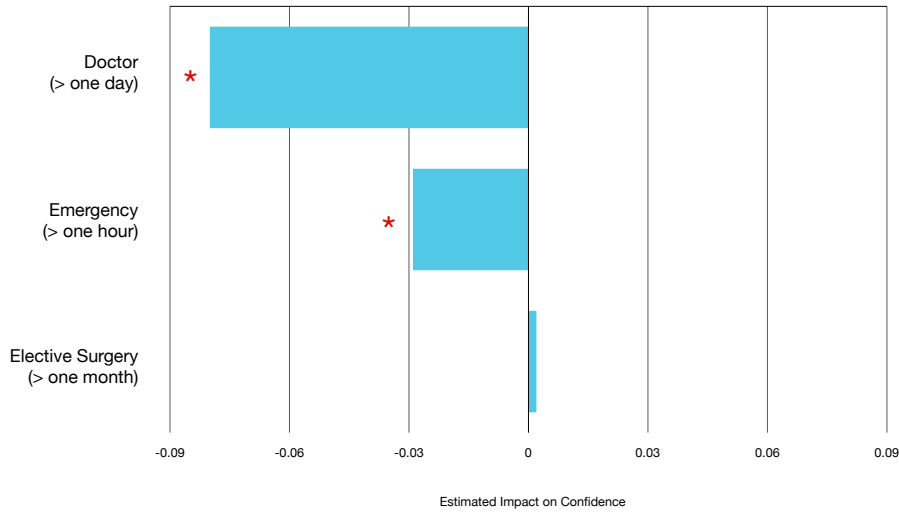
Waiting lists have assumed a central position in the current debate about the quality of the Canadian healthcare system. They are a central indicator for Canadian governments; as we have seen above, they are a regular part of media reports on the healthcare system. One major advantage of the IHP surveys is the inclusion of questions about wait times for doctor visits, emergency room visits and elective surgeries. We take advantage of these data to examine the role that actual experiences of wait times has on confidence in the system.

To do so, we produce three binary variables, equal to 1 for those who waited beyond a certain amount of time for each service—more than one day to see a doctor, more than one hour in an emergency waiting room and more than one month for elective surgery.¹² We then add these variables to a regression model of confidence, alongside the various demographic controls. Results for the wait-time variables are shown in Figure 21.

Waiting for elective surgery has no significant impact here, although the number of respondents who sought elective surgery is relatively low. Waiting for either doctors or at emergency rooms has a marked negative impact on confidence, however. An emergency room wait of more than an hour is associated with a roughly .03 decrease in confidence. The impact of waiting for a doctor is nearly three times as great. Waiting for more than a day to see a doctor is associated with an almost .09 decrease in confidence. This is nearly 10% of the entire range in the confidence measure, so the impact here, taking into account the many other drivers of confidence, is rather large.

¹² The times used here seem relatively short, but in Canada 25% of those surveyed reported being able to see their doctor on the same day; 39% reported having been admitted in emergency in less than one hour; and roughly 30% reported having had elective surgery in less than one month after referral.

Figure 21: The estimated impact of experience on confidence: Waiting for treatment



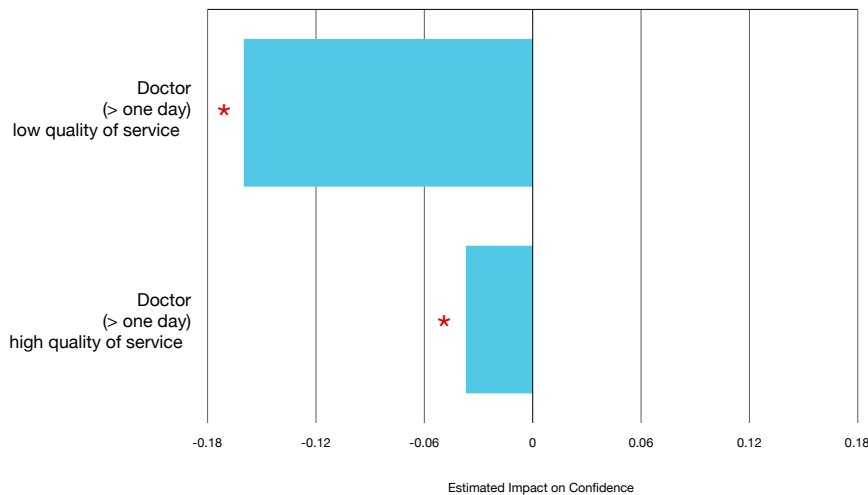
* statistically significant

Source: 2007 IHP Survey; results based on estimates in Appendix Table D. Estimated effects including controls for gender, age, education, income and self-reported health.

Waiting may matter more when the quality of care is low; it may conversely matter less if the quality of care is high. We test this possibility in Figure 22. The figure shows results from a model that interacts the doctor wait-time variable with another capturing respondents’ recalled quality of service when they saw their family doctor. Results are shown for the impact of wait-times for those respondents who rated the quality of care as “excellent” versus those who rated the quality of care as “poor.”

Differences in quality of care clearly matter. If you waited more than a day for a doctor’s visit and then received what you regarded as excellent care, the impact on confidence is a roughly .03-point drop. If you waited more than a day for a doctor’s visit and then received what you regarded as poor care, the impact on confidence is a roughly .16-point drop—almost one fifth of the entire range in the confidence variable.

Figure 22: The estimated impact of experience on confidence: Waiting for treatment by quality of service



* statistically significant

Source: 2007 IHP Survey; results based on estimates in Appendix Table D. Estimated effects including controls for gender, age, education, income and self-reported health.

The impact of wait times is striking, then, particularly when combined with the effect of perceived quality of care. The magnitude of the impact of waiting for poor care is perhaps the most impressive in terms of coefficient size. But the fact that even waiting for excellent care leads to a decrease in confidence is, we believe, just as notable. Quality of care is, of course, a central part of individuals' attitudes toward the healthcare system. But—and this is perhaps as we should expect given the focus on wait-times in public debates about healthcare in recent years—waiting for service may matter more.

CONCLUSIONS AND FURTHER RESEARCH

Understanding the sources of Canadians' attitudes toward healthcare is a critical step toward using public opinion effectively in healthcare policy-making. Past work has tracked opinion change over time and looked at some of the relationships between demographic factors and support for the Canadian healthcare system. This analysis has probed the source of those attitudes by focusing on the impacts of both media content and experience with the system. Both matter.

Media coverage is clearly associated with public attentiveness to healthcare. Campaign-period coverage, which tends to focus support for the existing system (particularly financial support), is often associated with increased public approval for funding. Media clearly play a role in public attitudes about healthcare—a point made frequently in public debate, perhaps, but also demonstrated empirically in both campaign and non-campaign contexts here.

Experience also makes a difference. Our results suggest that hospitalization tends to have a positive impact on attitudes about the system, while the same cannot be said of visits to doctors and emergency rooms. This may speak to the quality and accessibility of care in these different systems. Further, waiting for service seems to have quite a profound impact on attitudes. Even waiting for what is perceived to be “excellent” service tends to decrease confidence in the existing system.

The ideal model of the determinants of public attitudes toward healthcare combines both media effects *and* experience—to compare directly the relative impact of each. However, this is not achievable with existing data. Thankfully, the 2011 Canadian Election Study, currently underway, includes measures of both media attentiveness and experience with the healthcare system. In the meantime, this study makes clear that public attitudes about healthcare do indeed react to both media content and experience. The public does monitor the state of the healthcare system. It follows that healthcare policy-makers would be well-served to monitor public opinion.

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APPENDIX

CES Variables and analyses

Health care issue salience: For 2000 and 2008, based on “To you personally, in this Federal election, is improving health care very important, somewhat important, or not very important?”. 0 = not very important, .5 = somewhat important or don’t know, 1 = very important. For 2004 and 2006, based on “Which of these five issues is most important to you personally in this election: health care, taxes, social welfare programs, the environment, or corruption in government?”. 0 = any other issue, .5 = don’t know, 1 = health care.

Support for health spending: Based on “Should the Federal government spend more, less, or about the same as now on health care?”. 0 = spend less, .5 = about the same as now or don’t know, 1 = spend more.

Support for private hospitals: Based on “Do you favour or oppose having some private hospitals in Canada?”. 0 = oppose, .5 = don’t know, 1 = favour.

Support for paying for quicker access: Based on “People who are willing to pay should be allowed to get medical treatment sooner”. 0 = strongly disagree, .25 = somewhat disagree, .5 = don’t know, .75 = somewhat agree, 1 = strongly agree.

Gender: A binary variable equal to 1 for female and 0 for male.

Age: A set of binary variables capturing age cohorts 18-34 and 55+, with 35-54 as the residual category.

Region: A set of binary variables capturing Atlantic Canada, Québec and Western Canada, with Ontario as the residual category.

Education: A set of binary variables capturing high school dropouts and university graduates, with middle scores as the residual category.

Income: A set of binary variables capturing the lowest and highest income quartiles, with the middle quartiles as the residual category.

Media exposure: An interval-level variable based on answers to two questions; “How many hours a day do you usually watch TV?” and “How many days a week do you read a newspaper?”. 0 = does not watch TV and does not read a newspaper, 1 = watched 5 hours of TV or more and reads a newspaper every day of the week (with many scores in between the two poles).

Total media coverage: Percentage of news stories relating to health care over the entire election campaign.

Daily media coverage: Percentage of news stories relating to health care on each day of the election campaign.

Elections 2004–2008: A set of binary variables capturing each election survey, with 2000 as the residual category.

APPENDIX TABLE A. FULL REGRESSION MODELS—MEDIA EXPOSURE

	HEALTHCARE ISSUE SALIENCE (2000-2008)		SUPPORT FOR HEALTH SPENDING (2000-2008)		SUPPORT FOR PRIVATE HOSPITALS (2000-2008)		SUPPORT FOR PAYING FOR QUICKER ACCESS (2004-2008)	
Women	.102**	.114**	.053**	.054**	-.042**	-.043**	-.037**	-.036**
	(.009)	(.008)	(.005)	(.005)	(.010)	(.010)	(.009)	(.009)
Age: under 35	.024**	.000	.008	.006	-.003	.000	.019	.021*
	(.012)	(.010)	(.006)	(.006)	(.012)	(.012)	(.012)	(.012)
Age: over 54	-.009	.008	-.032**	-.029**	.016	.013	.009	.009
	(.011)	(.010)	(.006)	(.006)	(.012)	(.012)	(.011)	(.011)
Atlantic Canada	.057**	.051**	.028**	.028**	.041**	.041**	.004	.004
	(.017)	(.015)	(.009)	(.009)	(.018)	(.018)	(.018)	(.018)
Quebec	.006	-.001	.007	.008	.237**	.236**	.147**	.146**
	(.012)	(.010)	(.006)	(.006)	(.012)	(.012)	(.012)	(.012)
Western Canada	-.043**	-.045**	-.030**	-.031**	.119**	.120**	.105**	.105**
	(.011)	(.010)	(.006)	(.006)	(.012)	(.012)	(.011)	(.011)
High school dropout	.042**	.028**	.025**	.021**	.003	.007	.002	.003
	(.014)	(.013)	(.007)	(.007)	(.015)	(.015)	(.015)	(.015)
University graduate	-.054**	-.045**	-.042**	-.040**	-.011	-.014	.002	.001
	(.010)	(.009)	(.005)	(.005)	(.011)	(.011)	(.010)	(.010)
Lowest income quartile	.005	-.004	-.005	-.005	-.015	-.014	-.003	-.003
	(.012)	(.011)	(.006)	(.006)	(.013)	(.013)	(.012)	(.012)
Highest income quartile	-.040**	-.029**	-.019**	-.018**	.104**	.103**	.068**	.067**
	(.011)	(.010)	(.005)	(.005)	(.011)	(.011)	(.011)	(.011)
Media exposure	.072**	.071**	.056**	.056**	.001	.001	.041**	.038*
	(.020)	(.018)	(.010)	(.010)	(.021)	(.021)	(.020)	(.020)
Election 2004		-.432**		-.025**		.040**		
		(.011)		(.006)		(.013)		
Election 2006		-.506**		-.054**		.069**		.037**
		(.011)		(.006)		(.013)		(.011)
Election 2008		-.152**		-.039**		.050**		.024**
		(.012)		(.007)		(.014)		(.011)
Constant	.563**	.842**	.870**	.897**	.370**	.332**	.350**	.332**
	(.015)	(.015)	(.008)	(.008)	(.016)	(.018)	(.015)	(.016)
Number of cases	10062	10062	10052	10052	10046	10046	7496	7496
R-squared	.027	.233	.038	.046	.046	.048	.033	.035

Cells contain OLS regression coefficients with standard errors in parentheses. All variables range from 0 to 1.
 ** significant at .05; * significant at .10

APPENDIX TABLE B. FULL REGRESSION MODELS—TOTAL MEDIA COVERAGE

	HEALTHCARE ISSUE SALIENCE (2000-2008)	SUPPORT FOR HEALTH SPENDING (2000-2008)	SUPPORT FOR PRIVATE HOSPITALS (2000-2008)	SUPPORT FOR PAYING FOR QUICKER ACCESS (2004-2008)
Women	.111** (.008)	.051** (.004)	-.039** (.009)	-.037** (.009)
Age: under 35	.010 (.010)	.004 (.006)	.011 (.011)	.019 (.012)
Age: over 54	.013 (.010)	-.023** (.005)	.019* (.011)	.015 (.011)
Atlantic Canada	.051** (.016)	.029** (.009)	.055** (.017)	.004 (.017)
Quebec	.011 (.010)	.009 (.006)	.244** (.011)	.145** (.012)
Western Canada	-.046** (.010)	-.031** (.005)	.122** (.011)	.102** (.011)
High school dropout	.043** (.012)	.022** (.007)	.010 (.014)	.001 (.015)
University graduate	-.057** (.009)	-.041** (.005)	-.016 (.010)	.000 (.010)
Lowest income quartile	.002 (.010)	-.006 (.006)	-.009 (.012)	-.002 (.012)
Highest income quartile	-.039** (.010)	-.018** (.005)	.114** (.011)	.068** (.011)
Total media coverage	.024** (.010)	.034** (.005)	-.031** (.011)	-.030** (.010)
Constant	.581** (.012)	.877** (.007)	.379** (.013)	.384** (.013)
Number of cases	12917	10135	11696	7564
R-squared	.030	.038	.050	.033

Cells contain OLS regression coefficients with standard errors in parentheses. All variables range from 0 to 1.
 ** significant at .05; * significant at .10

APPENDIX TABLE C. FULL REGRESSION MODELS—DAILY MEDIA COVERAGE

	HEALTHCARE ISSUE SALIENCE (2000-2008)		SUPPORT FOR PRIVATE HOSPITALS (2004-2006)	
Women	0.111**	0.122**	-0.036**	-0.036**
	(0.008)	(0.007)	0.011	(0.011)
Age: under 35	0.013	-0.005	0.029**	0.030**
	(0.010)	(0.009)	(0.014)	(0.014)
Age: over 54	0.012	0.028**	0.044**	0.044**
	(0.010)	(0.009)	(0.014)	(0.014)
Atlantic Canada	0.041**	0.043**	0.073**	0.072**
	(0.017)	(0.015)	(0.022)	(0.022)
Quebec	0.002	-0.005	0.272**	0.271**
	(0.011)	(0.009)	(0.014)	(0.014)
Western Canada	-0.049**	-0.050**	0.147**	0.147**
	(0.010)	(0.009)	(0.014)	(0.014)
High school dropout	0.047**	0.031**	0.011	0.011
	(0.013)	(0.011)	(0.017)	(0.017)
University graduate	-0.062**	-0.053**	-0.016	-0.016
	(0.010)	(0.009)	(0.013)	(0.013)
Lowest income quartile	0.001	-0.002	-0.011	-0.011
	(0.011)	(0.010)	(0.015)	(0.015)
Highest income quartile	-0.041**	-0.028**	0.108**	0.108**
	(0.010)	(0.009)	(0.014)	(0.014)
Daily media coverage	0.126**	0.029	-0.045	-0.005
	(0.022)	(0.025)	(0.034)	(0.043)
Election 2004		-0.418**		
		(0.010)		
Election 2006		-0.490**		0.022
		(0.011)		(0.014)
Election 2008		-0.129**		
		(0.014)		
Constant	.544**	.858**	.365**	.339**
	(.013)	(.016)	(.019)	(.025)
Number of cases	12035	12035	7016	7016
R-squared	.033	.227	.060	.060

Cells contain OLS regression coefficients with standard errors in parentheses. All variables range from 0 to 1.
 ** significant at .05; * significant at .10

IHP Variables and Analyses

Gender: A binary variable equal to 1 for female, 0 for male.

Age: A set of binary variables capturing age cohorts 30–49, 50–64 and 65+, with 18–29 as the residual category.

Education: An interval-level variable ranging from 0 to 1, where 0 is less than HS and 1 is university degree or higher. Based on, in Canada, a seven-item measure. See IHP codebook for details.

Income: A set of binary variables capturing income terciles, where the lowest tercile is the residual category.

Health Status: Based on “In general, how would you describe your own health?” using a five-item scale from poor to excellent. Rescaled so that 0 is poor and 1 is excellent.

Hospitalization: Based on “Were you hospitalized in the past 2 years (, other than for a normal, uncomplicated delivery of a baby)? Yes is equal to 1; 0 otherwise.

Use of Doctors: Based on “How many visits to this doctor or place have you made in the past 12 months for your own care?”. Recoded so that any number of visits is equal to 1; 0 otherwise.

Use of specialists: Based on ““In the past 12 months, how many total visits to specialists or consultants have you made?” Recoded so that any number of visits is equal to 1; 0 otherwise.

Use of tests: Based on “Have you had any blood tests, x-rays, or any other medical tests in the past 2 years?” Yes is equal to 1; 0 otherwise.

Use of emergency rooms: “How many times have you personally used a hospital emergency department in the past 2 years?” Recoded so that any number of visits is equal to 1; 0 otherwise.

Various Diseases: Based on “Has any doctor ever diagnosed you with or treated you for any of the following health conditions?... Arthritis; Heart disease, including heart attack; Diabetes; Asthma; Chronic obstructive pulmonary disease (COPD); High Blood Pressure or hypertension; Depression; Cancer; Chronic Pain, diagnosed by a doctor; A mood disorder other than depression, such as bipolar disorder, mania, manic depression, or dysthymia?”

Wait-Doctor: Based on “Last time you were sick or needed medical attention, how quickly could you get an appointment to see a doctor? (Please do not include a visit to the hospital emergency department.)” Recoded so that one day or less is equal to 0; two or more days is equal to 1.

Wait-Emergency: Based on “The last time you went to the hospital emergency department, how long did you wait before being treated?” Recoded so that one hour or less is equal to 0; any longer is equal to 1.

Wait-Elective Surgery: Based on “After you decided you needed surgery, how many days, weeks or months did you have to wait for the non-emergency or elective surgery?” Recoded so that one month or less is equal to 0; any longer is equal to 1.

Quality of Care: Based on “Overall, how do you rate the quality of medical care that you have received in the past 12 months from your regular doctor?” Recoded so that excellent or very good are equal to 1 and good, fair and poor are equal to zero.

APPENDIX TABLE D. FULL REGRESSION MODELS

	CONFIDENCE (OLS) ^a				OVERALL (ORDERED PROBIT) ^b			
Female	-.026**	-.023**	-.028**	-.030**	-.104**	-.088*	-.085*	-.098*
	(.010)	(.010)	(.011)	(.011)	(.046)	(.047)	(.049)	(.051)
Age cohort 2	-.050**	-.054**	-.045**	-.055**	-.219**	-.230**	-.238**	-.291**
	(.015)	(.015)	(.016)	(.016)	(.069)	(.069)	(.074)	(.079)
Age cohort 3	-.033**	-.043**	-.032*	-.058**	-.292**	-.320**	-.315**	-.386**
	(.017)	(.017)	(.017)	(.018)	(.073)	(.073)	(.078)	(.084)
Age cohort 4	.049**	.029	.039*	.000	-.006	-.040	-.084	-.192**
	(.019)	(.020)	(.020)	(.021)	(.086)	(.089)	(.092)	(.098)
Income cohort 2	.031**	.030*	.021	.021	.110*	.099	.092	.117
	(.015)	(.015)	(.016)	(.016)	(.066)	(.066)	(.070)	(.073)
Income cohort 3	.041**	.039**	.027*	.012	.131**	.122**	.130**	.132**
	(.013)	(.013)	(.014)	(.014)	(.061)	(.060)	(.064)	(.066)
Education	.064**	.063**	.068**	.074**	.447**	.423**	.489**	.512**
	(.021)	(.021)	(.022)	(.022)	(.095)	(.093)	(.100)	(.104)
Health (self-report)	.155**	.140**	.132**	.086**	.431**	.368**	.436**	.356**
	(.025)	(.026)	(.025)	(.025)	(.105)	(.110)	(.106)	(.112)
Use of Services								
Hospitalized	.027*				-.066			
	(.016)				(.068)			
Doctor	-.006				.071			
	(.019)				(.086)			
Specialist	.004				-.090*			
	(.011)				(.050)			
Diagnostic Tests	-.004				-.060			
	(.014)				(.064)			
Emergency Room	.012				.078			
	(.011)				(.050)			
Treatment of Diseases								
Cancer, etc.		.024**				.013		
		(.009)				(.037)		
Asthma, etc.		-.025**				-.132**		
		(.009)				(.036)		
Waiting for Service								
Doctor			-.080**	-.160**			-.340**	-.378**
			(.011)	(.042)			(.051)	(.193)
Emergency Room			-.029**	-.016			-.078	-.072
			(.013)	(.013)			(.058)	(.061)
Elective Surgery			.002	.001			-.176**	-.159*
			(.021)	(.020)			(.086)	(.088)
Quality of Care				.188**				.662**
				(.040)				(.199)
Doctor* Quality				.123**				.072
				(.050)				(.235)
Constant	.536**	.555**	.617**	.526**				
	(.033)	(.027)	(.029)	(.041)				
N	2753	2753	2501	2310	2729	2729	2486	2299

^a Cells contain OLS regression coefficients with standard errors in parentheses.

^b Cells contains binary probit regression coefficients with standard errors in parentheses.