

The Economic Crisis and Medical Care Use: Comparative Evidence from Five High-Income Countries*

Annamaria Lusardi, *The George Washington University*

Daniel Schneider, *University of California, Berkeley*

Peter Tufano, *Oxford University*

Objective. We examine how the economic crisis has affected individuals' use of routine medical care and assess the extent to which the impact varies depending on national context. *Methods.* Data from a new cross-national survey fielded in the United States, Great Britain, Canada, France, and Germany are used to estimate the effects of employment and wealth shocks and financial fragility on the use of routine care. *Results.* We document reductions in individuals' use of routine nonemergency medical care in the midst of the economic crisis. Americans reduced care more than individuals in Great Britain, Canada, France, and Germany. At the national level, reductions in care are related to the degree to which individuals must pay for it, and within countries, reductions are linked to shocks to wealth and employment and to financial fragility. *Conclusions.* The economic crisis has led to reductions in the use of routine medical care, and systems of national insurance provide some protection against these effects.

The global economic crisis, beginning roughly in July 2007, weakened national economies and household finances globally. Stock markets, housing prices, and household wealth plummeted, and unemployment rates rose markedly. These economic conditions can have effects in many areas, including health. We draw on new cross-national survey data of adults aged 18–65 in the United States, Great Britain, Canada, France, and Germany and document a substantial reduction in use of routine nonemergency medical care during the economic crisis. We find that reductions in medical care use were more pronounced in the United States, which lacks universal healthcare, relative to four other high-income countries in our sample. In addition to the cross-national comparison, we make use of measures of economic shocks as well as of income and wealth to understand the impact of the crisis on use of routine medical care.

*Direct correspondence to Annamaria Lusardi, The George Washington University School of Business, Duques Hall, Suite 450E, 2201 G Street, NW, Washington, DC 20052 (alusardi@gwu.edu); Daniel Schneider, Department of Sociology and Robert Wood Johnson Foundation Scholars in Health Policy Research, University of California, Berkeley, 480 Barrows Hall, Berkeley, CA 94720 (djschneider@berkeley.edu); Peter Tufano, Saïd Business School, University of Oxford, Park End Street, Oxford OX1 1HP, UK (peter.tufano@sbs.ox.ac.uk). Annamaria Lusardi gratefully acknowledges financial support from Netspar. Daniel Schneider thanks the National Science Foundation, Princeton University, and the Robert Wood Johnson Foundation for financial support. Peter Tufano thanks the HBS Division of Research and Faculty Development for financial support for this work. This work was done in collaboration with the global market research firm, TNS, and we would like to thank Bertina Bus, Maria Eugenia Garcia-Neder, Ellen Sills-Levy, and Bob Neuhaus. The views expressed herein do not reflect those of TNS. A previous version of this article was presented at the 2010 Annual Meeting of the Population Association of America. Data and coding for replication purposes can be obtained from Daniel Schneider. The appendices are available online at (http://scholar.berkeley.edu/djschneider/files/ssq_online_appendix.pdf) (as of August 2013).

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Economic Shocks, Health, and Healthcare

Previous research suggests that economic shocks, especially unemployment, can have negative effects on health at the individual level by increasing behaviors, such as alcohol abuse and suicide, associated with depression (Catalano, 2009; Eliason and Storrie, 2009; Sullivan and Wachter, 2009). However, a number of recent studies present the somewhat counterintuitive finding that health, at the population level, may actually improve in economic downturns (Ruhm, 2000, 2007). This research documents declines in mortality during times of recession and traces out several mechanisms by which these surprising effects are brought about in the short term, including reductions in traffic fatalities (Ruhm, 2000) and improvements in the quality of nursing home care (Stevens et al., 2011). This work stands in contrast to much of the broader literature on the effects of recession on individual behavior, which focuses on the generally harmful effects of recession. For instance, recessionary economic conditions have been linked to increased economic hardship (Pilkaukas, Currie, and Garfinkel, 2012), reductions in fertility (Sabotka, Skirbekk, and Philipov, 2011), and shifts in marriage and divorce (Schaller, 2012).

While recessions may have short-term positive effects on *health*, in the realm of *health-care utilization* we might expect to find negative hardship effects because individuals' willingness and ability to seek medical care may decline with reduced ability to pay for it. This is evidenced indirectly by a voluminous literature documenting a negative association between socioeconomic status and medical care use (Feinstein, 1993; Williams and Collins, 1995). Additionally, evidence from developing countries suggests that individuals reduce use of medical care following economic crises (Musgrove, 1987; Yang, Prescott, and Bae, 2001; Waters, Saadah, and Pradhan, 2003). However, in more affluent countries where individuals are perhaps less resource-constrained and social safety nets are more robust, medical care use might not be severely impacted by recession and economic stress.

Health-Care Utilization in Economic Crisis

Little research has sought to gauge how the recent recession may have affected health-care utilization. Some recent evidence from the United States during the Great Recession shows real declines in health insurance coverage (Holahan, 2010) and in self-reported spending on health, particularly on doctor visits and prescription drugs (Hurd and Rohwedder, 2010).

The key hypothesis stemming from prior research is that the decision to seek care is constrained by financial resources and that the economic crisis reduced these resources, thus depressing use of care. Here, we can distinguish between different elements of financial resource constraints. First, unemployment may constrain resources through diminished income. Second, apart from income shocks due to unemployment, wealth shocks may also lead to lower health-care use. Third, the recession could deplete other resources, such as borrowing capacity or social support, and this "financial fragility" could also lead individuals to seek less care (Lusardi, Schneider, and Tufano, 2011).

In sum, if financial resources constrain the decision to seek care, then (1) the use of routine care should have declined overall since the economic crisis, (2) reductions in the use of routine care should be positively associated with unemployment and (3) positively associated with wealth loss, and (4) reductions in the use of routine care should be positively associated with financial fragility, independent of income and wealth per se.

Economic Shocks and the Use of Routine Care: Cross-National Variation

Any impacts of individual-level economic circumstances on the use of medical care might vary considerably depending on the structure of the health-care system and specifically on the privately borne portion of the cost of care. We provide some illustration of the extent to which the privately borne portion of the cost of care varies across five high-income countries: Great Britain, Canada, France, Germany, and the United States. All individuals in Great Britain, Canada, France, and Germany are covered by national health-care systems, but only about 80 percent of individuals aged 18–65 in the United States have health insurance. However, even in countries with universal coverage, individuals pay some medical costs out of pocket. Using economy-wide data, in 2007 these payments accounted for 0.8 percent of GDP in France, 1.0 percent in Great Britain, 1.4 percent in Germany, 1.5 percent in Canada, and 2.0 percent in the United States (Organization for Economic Co-operation and Development (OECD), 2009).

While it is difficult to compare the degree of cost sharing across countries, given the different systems in place, we note that in France patients generally pay 30 percent co-insurance for outpatient physician services and 35 percent co-insurance for prescription drugs (though many also have supplemental coverage) (Lundy and Finder, 2009). In Germany, co-payments of 5 to 10 Euros are required for physician visits and outpatient medications, though total out-of-pocket expenses are capped relative to income (Commonwealth Fund, 2008). There is no cost sharing in Great Britain and Canada for routine care. However, prescriptions are not covered by the Canadian system and costs not covered by private or provincial plans are paid out of pocket. Such costs are also partially paid for out of pocket in the United Kingdom (Schoen and Doty, 2004). In the United States, the approximately 20 percent of the population aged 18–65 that is uninsured is fully responsible for the cost of care; those who are covered still face substantial cost sharing in the form of co-payments and co-insurance as well as deductibles. Some key additional comparative facts about these five health-care systems are summarized in Appendix Table A1.

In other words, even in countries that provide “universal” healthcare, we might expect to find reductions in routine medical care use following the economic crisis and to observe associations between such reductions and unemployment, wealth loss, and financial fragility. However, we expect to find greater reductions in routine medical care use in countries where medical care has a greater economic cost to the individual and expect the impact of economic shocks on reductions in care to be larger in these countries.

Data

To assess how shocks to financial resources affect medical care use, we analyze data from the TNS Global Economic Crisis Survey. These data were collected in collaboration with TNS and other work (Lusardi, Schneider, and Tufano, 2011) provides a detailed analysis of the data. For convenience, we provide below a brief discussion of the data and the advantages and disadvantages of this data set.

The survey was administered in June and July 2009 in a set of countries, including 2,148 respondents in the United States, 1,001 in Great Britain, 1,132 in Canada, 1,097 in France, and 1,107 in Germany, for a total of 6,485 respondents. The survey firm TNS fielded the survey using an online questionnaire given to members of its online omnibus panels.

These panels are assembled by recruiting a very large number of individuals (e.g., approximately 1.5 million in the United States) through multiple online channels and then regularly contacting these individuals to invite them to participate in surveys. In general, response rates to survey invitations range between 7.5 percent and 19.5 percent. Because of the repeat nature of the surveys, respondents for a particular survey can be selected from the entire pool of participants through stratified sampling to be representative of each country's population aged 18–65, and results can be subsequently weighted to better reflect each nation's population.

This methodology has the benefit of permitting for rapid, low-cost implementation of surveys in a cross-national context and of reducing social desirability bias (Duffy et al., 2005; Bronner and Kuijlen, 2007). However, the data could be biased by the survey methodology. The sample is restricted to those with Internet access, possibly skewing the sample toward the more affluent and underrepresenting those with fewer economic resources. While 78 percent of Americans have Internet access (Horrigan, 2010), the rate is somewhat lower across the four other countries in the sample (OECD, 2010), a fact that might lead us to underestimate the effect of the crisis outside of the United States. Conversely, the panel might overrepresent those with more free time and underrepresent those in the highest income households who might have little interest in the small monetary rewards given for participation. However, the U.S. sample matches the general population well on multiple characteristics (including many that are not used in the sample stratification), as measured using data from the American Community Survey and Survey of Consumer Finances (Lusardi, Schneider, and Tufano, 2011).

Key Variables

Medical Care Use

Predicting how economic shocks, such as those generated by the economic crisis, affect medical care use is challenging because the impact of such shocks on individuals' medical care use is mediated by the impact of the shock on individuals' *health* and *willingness* to seek care; with willingness related to the money, time, and psychological costs of seeking care. For that reason, we focus on use of routine medical care, which allows us to set aside changes in medical care use stemming from deterioration in health.

Specifically, respondents were asked: "Since the economic crisis, have you increased, decreased, or kept the same trips to the doctor for routine medical and nonemergency treatment?" The dates of the economic crisis were not specified, as the onset of the crisis varied across countries. Self-reported measures of medical care use have been employed in the literature and have been shown to have strong associations with measures of care based on administrative and medical records (Bhandari and Wagner, 2006).

Economic Stress

The survey also reports several measures of economic conditions. First, respondents were asked to report any *changes* in the value of their wealth (defined as financial assets, value of real-estate holdings, and business equity) over the past year, indicating whether their wealth increased (by 0–10 percent or greater than 10 percent), stayed the same, or fell in value (by 0–10 percent, 10–29 percent, 30–50 percent, or greater than 50 percent). Respondents could also state that they did not know the answer or could refuse to answer. We note that

any error in reporting on changes in wealth will make it less likely that we would detect a relationship between shocks to wealth and reductions in routine medical-care use.

Second, the survey collected information on employment status, using variables that capture whether the respondent is (1) unemployed and looking for work, (2) not in the labor force and not looking for work, and (3) currently working. Data on unemployment were not collected for the Canadian sample, so analyses that include this variable are restricted to respondents in the United States, Great Britain, France, and Germany.

Third, we gauge financial fragility based on the ability of respondents to access resources—a new measure designed to go beyond changes in income and wealth to more richly characterize the difficulties experienced by individuals during a crisis. Respondents were asked: “How confident are you that you could come up with \$2000 [or local currency equivalent] if an unexpected need arose within the next month?” Respondents could reply that they certainly could, probably could, probably could not, or certainly could not raise the funds. Respondents also could refuse to answer or state that they did not know. It is important to note that the question asks whether the respondent could come up with, or raise, the funds, not whether they have had to come up with such funds or whether they have such funds in the form of savings. An extensive analysis of financial fragility using this measure is provided in Lusardi, Schneider, and Tufano (2011).

Empirical Analysis

We begin our empirical work by presenting descriptive cross-country and by-country analyses of respondents’ reports of changes in medical-care use and respondents’ reports of wealth loss, unemployment, and financial fragility. We next show the share of respondents who report reducing care by our measures of economic stress.

Next, we estimate multivariate regression models to examine whether the link between shocks to resources and changes in routine medical-care use persists after controlling for additional demographic characteristics (age, gender, and education) and for income and wealth (as reported by respondents in their local currency and then harmonized across countries). Descriptive statistics for these variables, by country, are provided in Appendix Table A2.

We provide estimates separately for each country to test whether the relationship between changes in medical-care use and economic stress are more pronounced in the United States, which does not have a national health-care system and in which out-of-pocket health costs at the national level are the highest among the countries considered in this work. We limit the full sample of 6,485 respondents to those with complete data on education, age, and gender, variables that we include in our multivariate regression models. This restriction eliminates 131 respondents. We also limit our analyses to respondents with nonmissing information on the dependent variable, a restriction that eliminates an additional 917 respondents. We include dummy variables for respondents for whom we had missing data on four key independent variables: our measure of income, changes in wealth, postcrisis wealth, and financial fragility. These procedures leave us with an analysis sample of 5,437 respondents.

We also tested the sensitivity of our results to alternative approaches to handling missing data. First, we reestimated our models after using multiple imputation to construct data for the 1,796 respondents in the United States, France, Germany, and Great Britain who reported missing values on any of the model covariates. Second, we reestimated our models after using list-wise deletion to exclude those cases with missing data on any model covariate.

TABLE 1

Changes in the Use of Routine Medical Care Since the Economic Crisis and Economic Characteristics of Respondents (Percent of Respondents)

Economic Attributes	All	United States	France	Germany	Canada	Great Britain
Change in use of routine care						
Reduce	15.2	26.5	12.0	10.3	5.3	7.6
Keep the same	78.3	66.5	82.7	83	89.3	84.4
Increase	6.6	7	5.4	6.7	5.4	7.9
Net change	8.6	19.5	6.6	3.6	0	-0.3
Change in wealth						
Incr \geq 10 percent	8.5	7.8	9.9	9.3	9.0	7.8
Incr < 10 percent	11.3	10.6	13.0	11.4	14.0	7.8
About same	35.0	26.8	42.9	42.8	38.5	39.0
Decr < 10 percent	13.3	13.0	10.7	15.1	14.4	14.8
Decr 10 percent to 29 percent	17.2	21.5	11.8	8.8	15.6	19.5
Decr 30 percent to 50 percent	8.0	11.3	6.3	7.7	4.9	5.4
Decr > 50 percent	6.5	9.1	5.5	4.9	3.6	5.8
Employment						
Unemployed and looking for work	9.9	13.8	10.1	14.4	na	6.6
Financial fragility						
Certainly raise \$2,000	31.0	24.8	36.0	30.5	45.3	24.3
Probably raise \$2,000	24.7	25.7	26.7	19.6	26.8	23.5
Probably not raise \$2,000	19.1	22.1	18.8	21.9	12.0	17.4
Certainly not raise \$2,000	25.2	27.4	18.4	28.0	16.0	34.9

NOTES: Data on unemployment are not available for Canada. However, Canadian respondents are included in the tabulations of all other variables. Sample limited to respondents with complete data on the dependent variable, age, education, and gender. Sample size varies depending on missing data on changes in wealth, employment, and fragility. Tabulations are weighted using individual sample weights.

These two different procedures yielded substantively similar results to those presented in the main text. Thus, we focus in the next section on the results generated using the 5,437-person sample.

Study Results

Reductions in Use of Routine Care

More than a quarter (26.5 percent) of American respondents reported reducing their use of routine medical care since the economic crisis (Table 1). This proportion is much larger than the 5.6 percent of Canadian, 7.6 percent of British, 10.3 percent of German, and 12 percent of French respondents reporting such reductions. This ordering tracks the level of privately borne out-of-pocket routine medical costs across countries. Both absolutely and comparatively, Americans, who face higher out-of-pocket health-care costs, reduced their routine medical-care use more than respondents in any of the other four countries.

While care reductions were quite common, a small minority of respondents, between 5.4 percent and 7.9 percent, reported increasing their use of care. We subtract the share

increasing care from the share reporting decreasing care to generate a measure of *net* change in care. On net, 19.5 percent of Americans reduced their use of routine care. In Canada and Great Britain, where few co-payments or co-insurance payments are required, there is essentially no change in aggregate country-level routine medical-care use (-0.04 percent and -0.31 percent, respectively). In France and Germany, where somewhat larger co-payments are required, we observe intermediate levels of net reductions in routine medical-care use, 6.6 percent and 3.6 percent, respectively. This exercise further highlights the disparity in reduction of routine medical-care use between the United States and the four comparison countries.

Changes in Wealth, Unemployment, and Financial Fragility

The effects of the crisis are large and visible when looking at changes in income and wealth. Wealth losses were pervasive among households in the United States, with nearly 55 percent of American respondents reporting some decline in their wealth since the start of the economic crisis and one-fifth reporting a decline of 30 percent or larger (Table 1). Losses were smaller in Great Britain, Canada, France, and Germany, with between 45 percent and 34 percent of respondents reporting any loss of wealth and between 13 percent and 9 percent reporting losses in excess of 30 percent. The share of respondents who reported being unemployed and looking for work was largest in Germany (14.4 percent) and the United States (13.8 percent), somewhat less in France (10.1 percent), and lower still in Great Britain (6.6 percent). The unemployment rates found in our data are quite similar to official statistics for the third quarter of 2009 for those aged 16–64 in Great Britain (6.5 percent) and France (9.1 percent). The rates of unemployment in Germany and the United States in our data are somewhat higher than the 10.4 percent and 9.7 percent recorded in official statistics (Bureau of Labor Statistics, 2010; Eurostat, 2010), though we note the ordering of countries by unemployment rates is the same in our data and in official statistics (though we lack data on Canada). These figures indicate that the economic crisis took a greater economic toll on Americans than on those in France, Canada, and Great Britain. Further, variation in social safety net programs across countries may have made the effects of the economic shocks stronger in the United States.

Financial fragility, as measured by the variable described earlier, was highest in the United States, Germany, and Great Britain, where approximately 50 percent of respondents reported that they would probably or certainly be unable to raise \$2000 (or the equivalent) in the event of a financial emergency. Financial fragility was somewhat less severe in France (37.2 percent) and Canada (28 percent), but these data point to the financial precariousness of large shares of households in all five countries.

Economic Stress and Medical-Care Use

Economic stress and medical-care use are strongly correlated: the greater the reported loss in wealth, the larger the reported reductions in routine medical-care use across all countries. Similarly, reductions in the use of care were more pronounced among the unemployed who were seeking work (a figure that excludes Canadians). Reductions were also more pronounced among the financially fragile, as shown in Table 2, column 1. The next five columns show the share of respondents reducing use of routine care by changes in wealth, unemployment, and financial fragility for each country. Larger shares of those

TABLE 2

Economic Loss and Reductions in Medical Care (Percent of Respondents Reducing Routine Medical-Care Use by Changes in Wealth, Unemployment, and Financial Fragility)

Economic Attributes	All	United States	France	Germany	Canada	Great Britain
Change in wealth						
Incr \geq 10 percent	11.5	15.4	12.6	15.6	5.1	5.4
Incr < 10 percent	12.2	21.2	10.1	11.3	4.5	1.8
About same	9.2	17.7	6.7	7.7	1.4	7.4
Decr < 10 percent	16.6	27.5	13.0	15.0	5.6	8.6
Decr 10 percent to 29 percent	18.5	28.3	16.6	8.6	7.0	5.4
Decr 30 percent to 50 percent	33.1	41.4	32.0	20.6	18.3	17.6
Decr > 50 percent	37.9	49.4	32.0	31.5	22.2	9.7
Employment						
Unemployed and looking for work	28.6	39.6	23.7	14.6	na	14.0
Financial fragility						
Certainly raise \$2,000	6.9	12.4	7.2	4.8	2.9	4.1
Probably raise \$2,000	14.9	26.6	10.7	8.8	5.3	7.4
Probably not raise \$2,000	20.2	32.0	17.4	13.6	6.8	6.8
Certainly not raise \$2,000	21.1	34.6	17.2	13.3	9.5	10.8

NOTES: Data on unemployment are not available for Canada. However, Canadian respondents are included in the tabulations of all other variables. Sample limited to respondents with complete data on the dependent variable, age, education, and gender. Sample size varies depending on missing data on changes in wealth, employment, and fragility. Tabulations are weighted using individual sample weights. na = not available.

who lost wealth, were unemployed, and were financially fragile reduced care in the United States than in Canada, Great Britain, Germany, or France. For instance, nearly 40 percent of Americans who were unemployed and seeking work reported reducing their use of routine care as compared with between 14 percent and 28 percent of respondents in the four other countries.

Table 3 presents estimates of the relationship between our indicators of economic stress and reductions in routine medical-care use separately by country (Appendix Table A3 presents the complete model specification). The results for the United States appear in the first column. Here, we see that even after controlling for postcrisis wealth, income, education, age, and other characteristics, wealth loss is significantly associated with reductions in routine medical-care use in the United States. As compared with respondents who reported no change in wealth since the crisis, surveyed individuals who lost between 30 percent and 50 percent of their wealth are 28 percentage points more likely to have reduced routine medical-care use, and those who lost at least 50 percent of their wealth are also 28 percentage points more likely to have reduced care.

This model also shows that, in the United States, unemployed respondents seeking work are 7 percentage points more likely to have reduced routine care than employed respondents. Unemployed respondents not seeking work had behavior similar to the employed. We also see a strong relationship between financial fragility and reductions in use of routine medical

TABLE 3

Relationship Between Reduction in Routine Medical Care Following the Crisis and Changes in Wealth, Unemployment, and Financial Fragility (Marginal Effects from Probit Regression)

Explanatory Variables	United States	France	Germany	Canada	Great Britain
Change in wealth since crisis					
Increase wealth	−0.017	0.045	0.071	0.082*	−0.015
> 10 percent					
Increase wealth	0.059	0.043	0.019	0.041	−0.055
< 10 percent					
Decrease wealth	0.126**	0.111*	0.116*	0.056*	0.016
< 10 percent					
Decrease wealth	0.161***	0.142**	0.042	0.099**	−0.007
10 percent to					
29 percent					
Decrease wealth	0.277***	0.311***	0.162*	0.211***	0.088
30 percent to					
50 percent					
Decrease wealth	0.284***	0.252***	0.226**	0.235***	0.006
> 50 percent					
Same (reference)	—	—	—	—	—
Financial fragility					
Certainly raise					
\$2,000 (reference)	—	—	—	—	—
Probably raise \$2,000	0.136***	0.031	0.050	0.023	0.029
Probably not raise \$2,000	0.142***	0.078*	0.091**	0.047*	0.027
Certainly not raise \$2,000	0.146***	0.061	0.088*	0.055*	0.071*
Employment status					
Unemployed and looking					
for work	0.071*	0.108**	0.016	na	0.037
Not in the labor force	−0.021	0.025	−0.027	na	−0.002
Employed (reference)	—	—	—	—	—
Pseudo <i>R</i> -squared	0.094	0.122	0.122	0.162	0.091
<i>N</i>	1,901	868	870	1,029	757

NOTES: All models include controls for age, income, wealth, and gender. Regressions are estimated using individual sample weights. Each sample limited to respondents with complete data on the dependent variable, age, education, and gender. Dichotomous indicators are included for respondents missing data on income, wealth, changes in wealth, unemployment, and fragility. The dependent variable is defined to be equal to one if the respondent reported reducing routine healthcare and zero if the respondent reported increasing or keeping routine healthcare the same. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

care in the United States. Compared to respondents who were certain they could raise funds in the event of an emergency, those who thought it only probable, improbable, or certainly not possible were each 14 points more likely to report reductions in routine care.

While Table 3 only reports the coefficients on the financial status variables, we also find that reductions in routine medical-care use were higher for the young and for those with lower incomes. Relative to those aged 50–65, respondents aged 16–24 were 11.2 percentage points more likely to reduce care. Relative to individuals in the top income quartile, those in the bottom quartile and in the 26–50th percentile were 8 and 9 percentage points more likely to reduce medical-care use, respectively (Appendix Table A2, Model 1). We also tested an alternative model of the data for the United States that allows for three outcomes: reduction in care, constant levels of care, and increased routine medical-care use. In short, while there are few statistically significant associations between changes in wealth loss,

unemployment, or fragility and *increases* in care (relative to no change in care), we continue to find large and statistically significant associations between *reductions* in care and wealth loss and financial fragility, though the effect for unemployment is somewhat reduced to 0.053 from 0.071 and the *p*-value is 0.118.

The next four columns of Table 3 present similar results for France, Germany, Canada, and Great Britain. We found that the relationship between wealth loss and financial fragility appeared, in general, to be strongest in the United States and weakest in Great Britain. In addition, we find that levels of income matter in the United States only (Appendix Table A3).

We also more formally tested for statistically significant differences in the regression coefficients between countries (Paternoster et al., 1998), adopting a 90 percent threshold for significance. We find some evidence that wealth losses are more strongly related to reductions in routine care in the United States than in Great Britain. Additionally, individuals in the bottom income quartile were significantly more likely to reduce their use of routine care, relative to those in the top income quartile, in the United States as compared with France. Finally, individuals in the bottom 60 percent of households by wealth were more likely to reduce their use of routine care, relative to those in the top 10 percent of the wealth distribution, in the United States as compared to Great Britain.

Discussion and Conclusions

We find evidence that the economic crisis—manifested in job and wealth losses and financial fragility—led to reductions in the use of routine medical care. More than a quarter of Americans reported reducing their use of such care, as did between 5 percent and 12 percent of Canadian, French, German, and British respondents. These cross-national differences align with differences in the out-of-pocket costs of care across countries, though we lack direct evidence on the relationship between these factors at the individual level. Our analysis shows that households experiencing economic stress were more likely to reduce routine medical-care use.

Our estimates suggest that it may be important to find ways to broadly ensure the availability and use of routine medical care. While there are prudent calls suggesting that consumers be mindful of the costs of healthcare, the patterns we show suggest that the unemployed, those who have lost wealth, and the financially fragile are most cost-sensitive. Neither economic theory nor considerations of equity would suggest this outcome to be optimal. While our cross-national evidence does not suggest the form that universal care should take, it does document that the U.S. model leads to different coverage patterns.

Yet universal coverage does not mean universal usage. The health-care debate in the United States has tended to assume that once healthcare is publicly provided, economic factors may not play a role in usage patterns. This is not borne out in our data. Even in countries providing universal coverage, there is a reduction in the number of individuals seeking care, perhaps due to other nonfinancial costs (time and psychic). However, the evidence that economic shocks are more strongly related to reductions in care in the United States than in Great Britain and France suggests that national variables (e.g., the health-care system overall) play a very important role in individual decisions to seek care.

Our study is subject to several limitations. Because we use online methods of data collection and convenience sampling, our sample may not fully reflect the populations of each of the five countries studied. We also lack information on employment status in Canada, so our inferences regarding unemployment and use of routine care are somewhat

limited. Finally, we cannot tell if reductions in use of routine care have given rise to long-lasting or material negative health outcomes or, rather, whether individuals have cut back on excess routine visits and palliative nonemergency care. However, the fact that cutbacks were largest among the poor, the unemployed, those who lost the most wealth, and those in countries without universal coverage is hard to reconcile with a view that routine care was an unnecessary expense.

Congress and the Obama Administration have passed landmark legislation to reform the financial, economic, and health-care systems. We show that these are by no means separate areas of policy; the economic stress brought on by the financial crisis is related to large reductions in routine medical-care use. Historical demography and economics has shown that famines and epidemics that have short-run effects on health and well-being often have long-term consequences (e.g., Almond, 2006). Today's hard times might well lead to tomorrow's undetected illness and the more-distant future's reduced individual health and well-being.

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Supporting Information

Additional Supporting Information may be found in the online version of this article at the publisher's website:

Table A1: Comparison of United States, France, Germany, Canada, and Great Britain on Health Care System Characteristics

Table A2: Characteristics of Respondents, United States, Great Britain, Canada, France, and Germany (Percent of Respondents) (Authors' calculations from the TNS Global Economic Crisis Survey, 2009)

Table A3: Complete Model Results of the Relationship Between Reduction in Routine Medical Care Following the Crisis and Changes in Wealth, Unemployment, and Financial Fragility. Marginal Effects from Probit Regression, Separately for the United States, Great Britain, Canada, France, and Germany