1-1-1993

Government Sponsored Health Care: A Cluster Profile of Supporters and Nonsupporters

Bonnie L. Lewis
Southeastern Louisiana University

F. Dale Parent
Southeastern Louisiana University

Follow this and additional works at: http://digitalcommons.wayne.edu/csr

Government Sponsored Health Care: A Cluster Profile of Supporters and Nonsupporters*

Bonnie L. Lewis
Southeastern Louisiana University

F. Dale Parent
Southeastern Louisiana University

ABSTRACT

While there has been a great deal of information revealing the public's dissatisfaction with our current health care system, there is little detailed analysis of these attitudes, and of the individuals who are most likely to support or reject such a system. This becomes more and more important as health policy debates shift toward a questioning of the viability of the current health care system and possible alterations to that system. In this paper we use cluster analytic methods on data collected from a public opinion survey of Louisiana residents to develop profiles of those people who support and who reject government-sponsored health care for all citizens. We then use these profiles to develop informed strategies for use by sociologists to impact health care policy.

Much of the literature on attitudes toward human resource spending were confirmed by the multivariate analysis we performed. However, the cluster analysis illuminated the true diversity that exists. Quite often, rather weak statistical relationships tend to be overgeneralized. In attempting to develop these profiles, the cluster analysis allowed us to regain the diversity in a comprehensive fashion. We found that there are clear groupings of both supporters and nonsupporters, but probably of greater importance is that there is more similarity between supporters and nonsupporters than distinctiveness.

142

The United States health care system is currently in the midst of a crisis. We spend a higher proportion of our gross national product (GNP) on health care than any other industrialized nation. In 1970, health care costs accounted for 7.4% of the GNP; in 1980 they rose to 9.1%; and in 1989 they had reached 12% (U.S. General Accounting Office, 1991). Further, many people assume that this trend will continue and the proportion spent on health care could reach as high as 20% in a few decades (Fuchs, 1990). In 1970, health care expenditures were about $75 billion; they are expected to reach $738 billion by the end of 1992. Nevertheless, over 32 million Americans are uninsured and the number has been rising along with health care costs (U.S. General Accounting Office, 1991).

In addition, many insured citizens are finding adequate health care more expensive and less accessible. Private health insurance costs are increasing at an extremely high rate. Health insurance premiums increased 12% in 1987, 24% in 1989, and 14% in 1990 (Sullivan & Rice, 1991). This is forcing many people to either drop or reduce coverage, leaving them vulnerable to high out-of-pocket costs and therefore with reduced access to medical care (Sullivan & Rice, 1991).

This country is unique in that it is the only Western society without a comprehensive health care system sponsored by the government. Throughout the 1980s, the policy debates leaned against developing such a program. Instead, the emphasis was on reducing the federal role in health care (Navarro, 1988). In the past two or three years, however, new interest has surfaced, both in the popular press and in the policy arena. Studies have been prepared by and for the federal government, grass roots organizations, health care associations and agencies, as well as professional journals, all beginning to consider alternative methods of providing health care access to Americans (Families USA, 1990; Neuschler, 1991; U.S. Government Accounting Office, 1991). Most of these plans would move the United States closer to some type of universal health care system financed by the government. Additionally, several states in this country are exploring legislation for programs which increase the involvement by state governments (Sullivan & Rice, 1991).

A fundamental change in our health care system is crucial as more and more Americans find adequate medical care an unaffordable luxury. Much of the progress in correcting this problem will depend on the strategies developed by the nation's policy makers to promote such change. Unfortunately, much of this effort will probably occur without significant input from sociologists. Yet sociologists have the most comprehensive understanding of society, including the health care system and its relationship with other institutions and individuals, and of social change. Sociologists can contribute in many ways to improving health care delivery

in the United States. Two important contributions are to interpret the public's attitudes toward our current system of health care and toward government sponsored health care, and to develop and apply strategies for intervention to mobilize support for a fair, equitable, and effective health care system. This paper is directed toward this end.

There frequently are differences between public policy positions and public opinions. Surveys indicate that a majority of Americans have consistently supported the idea of a government sponsored health care system since the 1940s, and that support is growing (Blendon & Donelan, 1990). In fact, "public concern and support for government assistance in medical care is virtually on par with social security as an entitlement" (Shapiro & Young, 1986, p. 418). Support is as high in the United States as it is in many other Western societies with much more extensive programs (Prescosolido, Bayer, & Tsui, 1985).

While there has been a great deal of information revealing this general support for government sponsored universal health care, there is very little research which develops an in-depth profile of those individuals most likely to support or reject such a system. The purpose of this paper is first to develop such profiles, using cluster analytic methods on data collected from a public opinion survey of Louisiana residents, and second, to use this information to help develop strategies to create a health care system that provides high quality health care for all. Additionally important is the application of cluster techniques in social science research. This approach is not used often, and it is hoped that this paper will demonstrate its utility.

The literature describing the characteristics of supporters and nonsupporters of government sponsored health care in this country is limited. Therefore, our analysis is exploratory in nature. However, to develop a conceptual framework to guide our analysis, we turned to the general literature on attitudes toward spending on human services. From this information, we determined the most salient independent variables to be age, race, sex, and household income. In addition to these variables, we selected two additional independent variables which are related to our specific topic: personal health status and method of payment for hospital care.

A summary of recent public opinion polls toward government spending on social services (Erikson, Luttbeg, & Tedin, 1988) indicates the following. First, in general, there is a negative relationship between income and approval of social services spending. Although this relationship has existed since the 1940s, there are indications that it is not as strong today as in the past (Erikson et al. 1988). Second, there appears to be a "gender gap" in attitudes on this subject, with women more

supportive than men of government assistance for human welfare services. However, the differences are typically not that large (Shapiro & Mahajan, 1986).

Race provides one of the most clear divisions in attitudes toward social service spending, with blacks much more likely than whites to take a liberal position. For age the pattern is not so clear. "On most issues the young are the more liberal, but on issues like government-supported medical care the older group (having a vested interest) is more liberal" (Erikson et al., 1988, p. 184). It is, of course, the medical issue that is of most importance to the current investigation.

Methodology

Population and Sample

The Louisiana Statewide Health Care Survey was used for this analysis. This telephone survey was conducted for the State of Louisiana Department of Health and Hospitals in December of 1989. Using current telephone directories, a sample of 1011 Louisiana adults was selected. Because women were over represented, the sample was weighted so that males and females represented equal proportions. Women tend to make health care decisions for families, making the skewed sample in some cases justifiable. However, because this is a descriptive study, we felt the weighting would be more appropriate.

After removing those persons who were unsure of their position on government sponsored health care, and those persons who had missing data on one or more of the variables, the resultant weighted sample size was 796.

Measurement

Survey respondents were asked the following question:

> "Some people say it is their belief that every American has a fundamental right to a full health care system provided by the government, while others feel the present system of health care is better. What is your opinion? Do you favor a system such as we have now, or full health care provided by the government?"

We defined persons supporting a system with full health care provided by the government as "supporters" and persons favoring a system "as now" as nonsupporters. Persons who were unsure were omitted from the analysis.

Based on the reviewed literature, race, sex, household income, and age were selected as independent variables. Response options for age and household income were in 4 categories, as shown in Table 1. Race included white, black, Asian, Hispanic, and other. However, due to the small numbers of Asians, Hispanics, and others, they were omitted.

We also included two additional independent variables: personal health status and method of payment for hospital care. It is assumed that the worse a person's health, the more likely that he or she will support a government health care program. People in good health are less likely to be concerned and therefore less interested in such a proposal. For personal health status, respondents were asked whether they "rated their general health as excellent, good, only fair, or poor."

Method of payment for hospital care is also used in the analysis. A person who has private health insurance is expected to be less likely to desire a public program, since he or she has an independent method of payment. On the other hand, persons who already rely on the government for payment of their health care may have very different attitudes toward government sponsored health care. People who must rely on private funds for health care payments can be expected to support government sponsored health care. To measure method of payment for hospital care, persons were asked, "If you or a member of your immediate family living with you were hospitalized tomorrow, would the largest part of the expense be paid by: private or group health insurance; membership in an HMO or PPO; Medicare, Medicaid, CHAMPUS [an insurance program for military and retired military personnel], or a like government insurance or public health program; from personal funds, or other." Membership in an HMO or PPO was grouped with private insurance. This resulted in three categories, private health insurance, government health insurance, and self-payment (for those with no insurance).

Analysis

Our analysis utilized five distinct stages standardly used in cluster analysis: (1) subgroup comparison, in which we compare supporters to nonsupporters of government sponsored health care; (2) multivariate analysis, to examine the ability of our independent variables to predict our dependent variable and to validate empirically our selection of cluster variables; (3) cluster development; (4) validation of the clusters using the cubic clustering criterion and discriminant function analysis; and (5) analysis of the final cluster configuration.

Cluster analysis consists of a wide variety of statistical procedures and techniques which group observations into homogeneous groups. The Fastclus clustering method, available in the SAS Statistical Package (*SAS/STAT User's Guide*, 1990) was used for this paper. Fastclus is a disjoint clustering program that is designed for large data bases such as this. It develops the "best" grouping of observations for a pre-specified number of clusters. Groupings, or clusters, of observations are formed such that the variation between cluster groups is maximized and the variation within clusters is minimized (Aldenderfer & Blashfield, 1984). Because cluster procedures can group the data into any number of clusters, a statistic, the cubic clustering criterion, was used to decide the "best" number of clusters (Sarle, 1983).[1]

Findings

Of the 796 respondents who were either supporters or nonsupporters, and for whom complete data were available, 48.7% favored "full health care provided by the government" while 51.3% supported a "system such as we have now." The level of support for a new health care system is somewhat lower than recently published polls on this topic. There are two reasons for this. First, people tend to be less supportive of increased government spending during economic hard times (Blendon, 1988). In 1989, Louisiana was in the sixth year of a major economic downturn. Further, the wording of the question can affect the response. The item phrasing, "system provided by the government" is less likely to elicit a positive response than one that uses the term "national health insurance" (Blendon & Donelan, 1990).

A comparison of these two groups is contained in Table 1. It can be seen that income, race, personal health status and method of payment were all significantly related to whether a person supports some form of government sponsored health care. The only variables not important statistically were age and sex.

Next, we used multivariate analysis to examine the ability of our independent variables to predict support of government sponsored health care. The results from regression analysis differ from the bivariate analysis in that age was now found to be significant. Also the method of payment variables were no longer significant. Table 2 contains the results.

Table 1

Summary Statistics of Supporters and Nonsupporters (N=796)

	Supporters (N=388)		Nonsupporters (N=408)	
Independent Variables	Mean	S.D.	Mean	S.D.
Age (1=18-25; 2=26-44; 3=45-65; 4=65+)	2.37	.90	2.43	.94
Income (1=$1,000 or less; 2=$10-25,000; 3=$25-45,000; 4=$45,000+)	2.22**	1.01	2.53	1.02
Sex (0=female; 1=male)	.50	.50	.52	.50
Race (0=black; 1=white)	.68**	.47	.81	.39
Personal Health Status (1=excellent; 2=good; 3=fair; 4=poor)	2.06**	.89	1.80	.82
Payment for Hospital Care (0=no; 1=yes)				
- Private Insurance	.59**	.49	.70	.46
- Government (Medicare, Medicaid, Champus, or other govt. ins.)	.27*	.44	.20	.41
- Personal Funds	.14+	.35	.10	.30

In t-tests comparing two groups, significant differences are indicated by the following:

    + p = < .10

    * p = < .05

    ** p = < .01

Table 2
Standardized Regression Coefficients for Assessing the Relative Importance of Independent Variables for Predicting Attitudes Toward Government Sponsored Health Care (N=796)

Independent Variable	Support for Government Sponsored Health Care
Age	-.10*
Income	-.08+
Sex	-.03
Race	-.11**
Personal Health Status	.14**
Payment for Hospital Care	
- Private	-.04
- Government (excluded category)	
- Personal Funds	.05

+ p <.10
* p <.05
** p <.01

The findings of both the bivariate and multivariate analysis give general support to our expectations about the effect of the independent variable on the dependent variable. Based on these analyses, we decided to form the clusters based on: age, income, sex, race, personal health status, and method of payment for hospital care. While sex and payment method were not found to predict attitudes toward government sponsored health care, we included them based on theoretical justification.

We utilized a statistic called the cubic clustering criterion (CCC) to help decide the best number of clusters in each group (Sarle, 1983). In using this statistic, the goal is to obtain an interpretable set of clusters that maximizes the CCC for the number of clusters. This is similar to the F-test in analysis of variance in that you are minimizing the within cluster variances and maximizing the between cluster variances.

Table 3
Detailed Profiles of Supporters and Nonsupporters

	Age*	Income*	Personal Health*	Race	Sex	Hospital Payment*
Supporters (N=338)						
Cluster 1 (n=113)	1 - 11%	1 - 15%	1 - 8%	WH - 95%	F - 44%	PRIV - 95%
	2 - 50%	2 - 41%	2 - 63%	BL - 5%	M - 56%	GOVT - 5%
	3 - 33%	3 - 45%	3 - 22%			SELF - 0%
	4 - 5%	4 - 0%	4 - 7%			
Cluster 2 (n=87)	1 - 25%	1 - 0%	1 - 72%	WH - 85%	F - 44%	PRIV - 92%
	2 - 56%	2 - 1%	2 - 27%	BL - 15%	M - 57%	GOVT - 8%
	3 - 18%	3 - 48%	3 - 2%			SELF - 0%
	4 - 0%	4 - 51%	4 - 0%			
Cluster 3 (n=60)	1 - 0%	1 - 77%	1 - 4%	WH - 82%	F - 57%	PRIV - 4%
	2 - 6%	2 - 19%	2 - 30%	BL - 18%	M - 44%	GOVT - 96%
	3 - 31%	3 - 3%	3 - 42%			SELF - 0%
	4 - 63%	4 - 1%	4 - 24%			
Cluster 4 (n=23)	1 - 7%	1 - 26%	1 - 17%	WH - 90%	F - 63%	PRIV - 0%
	2 - 52%	2 - 48%	2 - 26%	BL - 10%	M - 37%	GOVT - 0%
	3 - 35%	3 - 26%	3 - 32%			SELF -100%
	4 - 6%	4 - 0%	4 - 25%			
Cluster 5 (n=38)	1 - 28%	1 - 65%	1 - 20%	WH - 2%	F - 73%	PRIV - 10%
	2 - 44%	2 - 28%	2 - 50%	BL - 98%	M - 27%	GOVT - 90%
	3 - 26%	3 - 8%	3 - 26%			SELF - 0%
	4 - 2%	4 - 0%	4 - 4%			
Cluster 6 (n=32)	1 - 44%	1 - 37%	1 - 53%	WH - 23%	F - 41%	PRIV - 0%
	2 - 51%	2 - 51%	2 - 40%	BL - 77%	M - 59%	GOVT - 0%
	3 - 2%	3 - 12%	3 - 7%			SELF - 100%
	4 - 2%	4 - 0%	4 - 0%			
Cluster 7 (n=35)	1 - 2%	1 - 38%	1 - 28%	WH - 11%	F - 46%	PRIV - 100%
	2 - 55%	2 - 44%	2 - 62%	BL - 89%	M - 54%	GOVT - 0%
	3 - 26%	3 - 15%	3 - 11%			SELF - 0%
	4 - 17%	4 - 2%	4 - 0%			

Using this procedure we came up with seven distinct clusters of supporters and six distinct clusters of nonsupporters (Table 3). As can be seen, the sizes of the clusters vary greatly. For supporters, they vary from 23 to 113, and for nonsupporters, from 19 to 228. Table 3 gives further detail about these clusters, allowing us to determine both broad patterns and deviations from those patterns. We use this tabular information to develop the profiles of supporters and of nonsupporters.

Table 3 continued

Nonsupporters (N=408)

Cluster 1 (n=34)	1 - 0%	1 - 59%	1 - 0%	WH - 63%	F - 49%	PRIV - 15%
	2 - 2%	2 - 30%	2 - 7%	BL - 37%	M - 51%	GOVT - 85%
	3 - 22%	3 - 11%	3 - 54%			SELF - 0%
	4 - 76%	4 - 0%	4 - 39%			
Cluster 2 (n=52)	1 - 31%	1 - 34%	1 - 37%	WH - 6%	F - 56%	PRIV - 69%
	2 - 42%	2 - 31%	2 - 58%	BL - 94%	M - 44%	GOVT - 31%
	3 - 24%	3 - 31%	3 - 6%			SELF - 0%
	4 - 3%	4 - 4%	4 - 0%			
Cluster 3 (n=21)	1 - 17%	1 - 45%	1 - 14%	WH - 93%	F - 18%	PRIV - 0%
	2 - 62%	2 - 49%	2 - 49%	BL - 7%	M - 82%	GOVT - 0%
	3 - 21%	3 - 7%	3 - 21%			SELF - 100%
	4 - 0%	4 - 0%	4 - 17%			
Cluster 4 (n=228)	1 - 16%	1 - 3%	1 - 47%	WH - 98%	F - 49%	PRIV - 100%
	2 - 55%	2 - 24%	2 - 44%	BL - 2%	M - 51%	GOVT - 0%
	3 - 28%	3 - 43%	3 - 9%			SELF - 0%
	4 - 1%	4 - 31%	4 - 1%			
Cluster 5 (n=54)	1 - 0%	1 - 39%	1 - 44%	WH - 97%	F - 55%	PRIV - 30%
	2 - 11%	2 - 36%	2 - 53%	BL - 3%	M- 45%	GOVT - 70%
	3 - 27%	3 - 15%	3 - 3%			SELF - 0%
	4 - 62%	4 - 11%	4 - 0%			
Cluster 6 (n=19)	1 - 31%	1 - 20%	1 - 84%	WH- 61%	F - 40%	PRIV - 0%
	2 - 33%	2 - 39%	2 - 12%	BL - 39%	M - 60%	GOVT - 0%
	3 - 8%	3 - 38%	3 - 4%			SELF - 100%
	4 - 29%	4 - 4%	4 - 0%			

*Age: 1=18-25; 2=26-44; 3=45-65; 4=65+
Income: 1=$10,000 or less; 2=$10-25,000; 3=$25-45,000; 4=$45,000+
Personal Health: 1=excellent; 2=good; 3=fair; 4=poor

Cluster Profiles of Supporters

Using information in Table 3, we can see that clusters 1 and 2 are very similar. Both are dominated by whites, contain both sexes, and have private health insurance. Compared to cluster 1, cluster 2 contains individuals who are generally younger, with more income and in better health. Cluster 1 is the largest of all the clusters among the supporters, with 113 individuals, or 29% of the total. Cluster 2, which contains 87 cases, is second. Together, they represent 51% of all supporters of government sponsored health care.

Both clusters 5 (N=38) and 7 (N=35) consist of low income black persons. Cluster 5 is composed of younger persons with government health insurance, while cluster 7 is comprised of more mid-aged (26-65) individuals with private insurance.

Cluster 5 members are of mixed health and mostly female, while cluster 7 members generally report good health, and include both males and females. Cluster 3 is a grouping of older, very low income whites, of both sexes and in fair to poor health. They are insured by government.

Both cluster 4 (N=23) and cluster 6 (N=32) are made up of individuals who must pay for hospital care themselves. Mid-aged, low income whites of both sexes (but disproportionately female), with mixed health status characterizes cluster 4. In contrast, cluster 6 is made up of young, low income, mostly black (77%), mostly males (59%), and in good to excellent health. The similarity between the two groupings is that they are low income and self-pay for hospital care.

Cluster Profiles of Nonsupporters

Among nonsupporters, clusters 1 and 5 are the most similar to each other. They are both older, are low income whites, both males and females, and rely mainly on government insurance. Individuals in cluster 5 report better health than those in cluster 1, and they are more likely to have private health coverage for hospital care than their cluster 1 counterparts. About 70% of the cases assigned to cluster 5 are government insured.

Cluster 4 (N=228) is the largest cluster of all nonsupporters. This cluster represents 56% of all nonsupporters of a government sponsored health care system. It contains younger, mid to upper income whites of both sexes, in good to excellent health, with private health insurance coverage. This is also almost identical to Cluster 2 of the supporters.

Cluster 2 is a group of diverse aged (but below 65), low to middle income, male and female blacks, in good to excellent health. The majority are covered by private insurance (70%), but 30% are covered by government insurance.

Clusters 3 (N=21) and 6 (N=19) are the smallest groups of nonsupporters. All members of the clusters are self-pay and most are white males. Cluster 6, while disproportionately white, is more diverse on race than cluster 3. The younger, low income males, with mixed but generally only good health in cluster 3 contrasts with the diverse aged, middle to lower income, males in excellent health of cluster 6.

Discussion

The primary purpose of our analysis was to develop a better understanding of people who support and oppose government sponsored health care for all citizens. Using a survey of residents of Louisiana, we first compared supporters to nonsupporters, and found that, in order of importance, personal health status, race, age, and income were predictors of a person's position. Sex and method of payment for hospital care were not significant. All of these variables were used as the basis with which to form clusters among those who are supporters and nonsupporters.

A very interpretable set of profiles was generated by the cluster routine. Seven homogeneous groups, or clusters, occurred among supporters and six homogeneous clusters occurred among the nonsupporters.

However, the utility of the cluster analysis approach is its ability to "go inside" the summary statistics that are usually the end-all of statistical analysis. One of the first things that emerges from the findings is the diversity among both supporters and nonsupporters of government sponsored health care. No one characteristic is clearly identified with one or the other position. For example, cluster 4, the largest nonsupporter cluster, consisting of young, white, middle to upper income persons in good-to-excellent health, with private insurance, is almost identical to cluster 2 of the supporters. Blacks appear in clusters as both supporters and nonsupporters. The primary distinction between the two is that black supporters tend to be low income while nonsupporters tend to be mid to low income.

There are three clusters of older whites. One is a cluster of supporters (cluster 3, N=60), and two of nonsupporters (cluster 1, N=34, and cluster 5, N=54). The main difference between supporters and nonsupporters is that supporters are very low income while nonsupporters are low income. Both of these examples illustrate a mild economic distinction, but little other differences stand out.

What do these findings imply? First, people with very similar characteristics may have very different ideas about the best method of providing health care. Second, there most likely are additional variables that could help explain further differences.

Our multivariate analysis supports much of the existing literature on attitudes toward human resource spending. However, the cluster analysis illuminates the true diversity that does exist. Quite often, rather weak statistical relationships tend to be overgeneralized. In attempting to develop profiles of supporters and nonsupporters, the cluster analysis allows us to regain the diversity in a comprehensive fashion. What we did find in this study is that there are clear groupings of both supporters

and nonsupporters. But probably of more importance is the fact that the groupings of supporters and nonsupporters are not overly distinct.

Our findings also substantiate what has been found for the last 40 years. A large percentage of Americans support some type of universal health care system sponsored by government. But, as noted, this study has shown that this support cuts across age, sex, race, and class lines to a great extent. There are traditional divisions within our society with regard to attitudes toward human service programs and spending. Today, the debates about human service programs are often framed in such a way as to pit one group against another. Programs are thus seen in terms of gains for one group at the expense of other groups. The conflicting groups are usually divided in terms age, sex, race, and/or social class. Therefore, in many cases the real benefits or shortcomings of a policy or program are never really discussed. The focus instead is on group hostilities. Our findings suggest that with the issue of universal health care this obstacle may be much less than usual, and may even be nonexistent.

Implications for Intervention

Defining the Benefiting Group

The above information is very useful to sociologists attempting to influence policy makers to develop programs for universal access to health care. Sociologists must stress the benefits of such a system for all citizens. There must be a deliberate effort to define the "benefiting group" so that it incorporates as many people as possible. Based on our findings this should be less difficult to do than usual, without the traditional social divisions that often inhibit the support of many social programs. The health care issue can be debated on its own merit without the overtones of age, sex, race, and class prejudice. Much of the discussion concerning health care reform today emphasizes the problems of the poor and uninsured. While their problems are acute and should be addressed, a program directed toward all citizens will probably be much more widely accepted and supported and therefore beneficial to the poor and uninsured.

As shown in this research many different types of people are receptive to such a change in our medical care system. There is little need to alienate some segments of our population by promoting a system that appears to benefit only a few at the bottom of the socioeconomic scale. This issue is clearly not seen in terms of black

and white or rich and poor, and sociologists interested in change must be careful not to create the type of polarization that exists on other social issues.

Level of Intervention

Currently, most of the initiatives toward developing universal health care are taking place within state governments. In fact, the United States may be in the infancy of a movement that began in a similar fashion in Canada which led to their national health care system. The Canadian movement began at the provincial (state) level. This provides an excellent opportunity for sociologists to contribute to policy formation. In this situation it is not necessary for sociologists to attempt to make a direct impact on national health care policy. Efforts can effectively be concentrated on state and local systems.

As stated above, the primary goal of this work was to develop a profile of supporters and nonsupporters of a system of health care provided in full by the government and to use this information to develop strategies for creating such a system. When we turn to Straus's (1984) scheme of sociological intervention, it is apparent that our efforts are most directly concentrated at the "world level" of participation. This is the highest level at which a sociologist can intervene. The world level is preceded by the organizational, group, and personal levels. Since each level of social structure is an emergent product of the preceding structures, intervention at this level can be very complex, requiring attention to all levels (Straus, 1984). Therefore, a simple intervention model is difficult to develop. However, below we suggest some basic intervention strategies.

Intervention Strategies

Intervention by sociologists to influence government health care policy can take place by shaping public opinion and motivating citizen action to demand change, and/or through personal contact with government officials. In either case, one important first step is to provide high-quality, preferably locally based data. In this way both the public and government officials can know the current state of the health care system and local citizen attitudes about the system.

The local media provide an excellent avenue to inform citizens and hopefully promote citizen action. However, sociologists must be aggressive in their pursuit of media coverage. Typically, news people do not seek out sociologists as they do other experts to address issues. Sociologists quite often must "knock on doors" and make targeted phone calls to get their information reported in the press. It is a good

idea to establish a good relationship with individual reporters. They are often the key to whether a story is printed or receives air time. Again, though, delivering high quality research and information is imperative. News people have become much more sophisticated in their ability to assess the quality of social science research. Editors will want evidence of sound research procedures. We have had significant success in obtaining media coverage of research findings on health care issues following the above guidelines.

Sociologists rarely consider releasing their findings to the press. They most often think in terms of preparing results for publication in professional journals. While this should also be done, in order to have a direct impact on public opinion we must go to the public.

Good media coverage not only stimulates interest in the health care issues, but also adds to the credibility of the researchers. This becomes an asset in and of itself. Political scientists have had influence in policy affairs for years because of their willingness to have public audiences.

Another way to intervene in shaping public opinion and stimulating citizen action is by working with existing community organizations (Rubin & Rubin, 1986). The universal concern for improved health care should make almost any organization a potential partner in an effort to change the system. Again, from our findings we can assume that groups of very diverse origins and purposes will have members who are concerned about health care. Local groups frequently want speakers who are knowledgeable on subjects to speak at their meetings. A very brief talk could be prepared and presented to many local groups explaining the problems with our current system and solutions to reform it, stressing the benefits of reform for all. By working with a cross-section of organizations any stigma associated with one group or another is avoided.

Probably one of the most fruitful ways of promoting reform is working with organizations already mobilized to address the health care issue. Involvement in such a group can be beneficial in two ways. First, the sociologist can contribute his or her expertise to the group. Second, active participation in such an organization can be a source of valuable information. While this information often contains bias, as sociologists, we are well-trained to evaluate the validity of information.

We are members of a local organization devoted to reforming health care in Louisiana. It has been a way of disseminating our information for the most direct and effective impact. The organization has also provided us with very current information concerning the national and state health care systems. It has kept us informed on what is happening in our state. The organization has given us

additional credibility in the field and has served as an excellent opportunity to develop networks with "movers and shakers" in the state.

Working with political candidates is another avenue for intervention. Candidates often are looking for issues with wide appeal. Health care reform is just such an issue. Our findings would provide candidates with the mandate to promote universal health care. The candidate can campaign knowing that health care is an issue of interest to a broad cross-section of voters and that a significant percentage of the voters support such a plan. Therefore, the candidate can present the same clear message to diverse groups. We personally advised a local candidate for state representative on this topic using the findings presented in this paper and other information from our data. He raised universal health care as an issue and was the most articulate candidate on the issue. He actually defined the political discussion about it.

Finally, sociologists can have direct communication with public officials. In this way, the sociologist is working with people who will actually make the critical decisions concerning health care reform. Accurate information about the problems and sound solutions to them are of course crucial. But because many decisions include political considerations, sociologists wishing to engage in such a cooperative effort with government officials should open with the presentation of evidence that this issue is not infused with the typical social group divisions, making it easier for them to comfortably support what may seem to be extreme policy changes.

NOTE

1. Those persons wanting a more detailed description of cluster analytic techniques are referred to such standard references as Kaufman and Rousseeuw (1990), Romesburg (1984), Aldenderfer and Blashfield (1984), Lorr (1983), and Everitt (1980). More technical details can be obtained in the *SAS/STAT User's Guide* (1990) and Sarle (1983). Other information on our specific analysis can be obtained directly from us at the Department of Sociology, Social Work, and Criminal Justice, P.O. Box 544, Southeastern Louisiana University, Hammond, Louisiana 70402.

REFERENCES

Aldenderfer, M. S., & Blashfield, R. K.. (1984). *Cluster analysis*. Newbury Park, CA: Sage.
Blendon, R. J. (1988). The public's view of the future of health care. *Journal of the American Medical Association, 24*, 3587–3593.

Blendon, R. J., & Donelan, K.. (1990). The public and the emerging debate over national health insurance. *The New England Journal of Medicine, 19*, 208–212.

Erikson, R. S, Luttbeg, N. R., & Tedin, K. L. (1988). *American public opinion*. New York: Macmillan.

Everitt, B. (1980). *Cluster analysis*. New York: Halsted Press.

Families USA Foundation. (1990). *Emergency! Rising Health Care Costs in America 1980 – 1990 – 2000*. Washington, DC: Author.

Fuchs, V. C. (1990). The health sector's share of the gross national product. *Science, 247*, 534–538.

Kaufman, L., & Rousseeuw, P. J. (1990). *Finding groups in data: An introduction to cluster analysis*. New York: Wiley.

Lorr, M. (1983). *Cluster analysis for social scientists*. San Francisco: Jossey-Bass.

Navarro, V. (1988). The arguments against a national health program: Science or ideology? *International Journal of Health Services, 18*, 179–189.

Neuschler, E. (1991). *Canadian health care: The implications of public health insurance*. Washington DC: Health Insurance Association of America.

Prescosolido, B. A., Bayer, C. A., & Tsui, W. Y. (1985). Medical care in the welfare state: A cross-national study of public evaluations. *Journal of Health and Social Behavior, 26*, 276–297.

Romesburg, H. C. (1984). *Cluster analysis for researchers*. Belmont CA: Lifetime Learning Publications.

Rubin, H. J., & Rubin, I. (1986). *Community organizing and development*. Columbus, OH: Merrill.

Sarle, W. S. (1983). *Cubic clustering criterion* (SAS Technical Report A-108). Cary, NC: SAS Institute.

SAS/STAT user's guide (Vol. 1, Version 6). (1990). Cary, NC: SAS Institute.

Shapiro, R. Y., & Mahajan, H. (1986). Gender differences in policy preferences: A summary of trends from the 1960s to the 1980s. *Public Opinion Quarterly, 50*, 51–59.

Shapiro, R. Y., & Young, J. T.. (1986). The polls: Medical care in the United States. *Public Opinion Quarterly, 50*, 418–428.

Straus, R. A. (1984). Changing the definition of the situation: Toward a theory of sociological intervention. *Clinical Sociology Review, 2*, 51–63.

Sullivan, C. B., & Rice, T. (1991, Summer). The health insurance picture in 1990. *Health Affairs*, pp. 104–115.

U.S. General Accounting Office. (1991). *Canadian health insurance: Lessons for the United States* (HRD-91-90). Washington, DC: Author.