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Health Care Utilization Pilot Study: Recruiting and Interviewing Residents of the South Valley

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Health Care Utilization Pilot Study: Recruiting and Interviewing Residents of the South Valley

By: Irma Mariana Santiago
Mariana Mejia Botero

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Abstract

Although research nationwide has shown that health care utilization amongst undocumented immigrants is substantially lower than U.S. citizens, the former are often blamed for the inadequacies of our health care system. In order to test whether utilization patterns amongst undocumented immigrants in our own city of Albuquerque coincide with current data, we first needed to determine the best recruitment methods for identifying undocumented immigrants. This pilot project tested three commonly used methods in survey research: 1) in-person household surveys (from here on referred to as canvassing), 2) RDD telephone survey (from here on referred to as calling) and 3) a combination of the two (initial phone call to set up appointment for in-person household survey; from here on referred to as making appointments). Each method was assessed based on time efficiency, effectiveness and overall performance. Time efficiency was defined as the number of attempted contacts (e.g. # of doors knocked on) per hour and successful contact rate (e.g. ratio of doors answered to doors knocked on). The effectiveness of a recruitment method was measured by cooperation rate (ratio of participants to contacts) and percentage of surveys corresponding to undocumented immigrants. Overall, by combining both time efficiency and effectiveness, the number of undocumented surveys per hour was used as a good estimate of overall performance for each method. In addition, this pilot study tested the effectiveness of the survey instrument together with efforts to maintain confidentiality. Effectiveness was defined as the ability of the survey to safely identify a responder as undocumented (i.e. did participants answer survey questions about immigration status and thus disclose their undocumented status?). The South Valley of Albuquerque was chosen as the setting due the proportionally greater number of immigrants that reside there. Overall, our results show that although calling was the most time efficient method, canvassing was more effective and had a better overall performance. Moreover, although not originally factored as a performance measurement, canvassing proved to be much more affordable than calling. Lastly, the survey instrument and informed consent process were effective in identifying undocumented immigrants without incurring discomfort or compromising personal safety.
Background and introduction

Although immigrants founded the United States of America, there is a perpetual debate over the rapidly growing immigrant population and its financial and cultural consequences. The debate is mostly centered on poor undocumented immigrants from Mexico and other Latin American countries, and one of the main concerns is their alleged abuse of public services. There is no doubt that immigrant population growth rates have increased in the past few years. According to the US Census, in 1990 the number of foreign born was estimated at 7.9% of the total U.S. population whereas by 2005 this figure almost doubled (12.4%). The composition of the immigrant population has also changed drastically over the years. In 1970 the percent of undocumented immigrants was estimated to be 5% of total immigrants living in the US for less than 5 years. In 2002, this figure has grown to almost 50%.

These trends combined with the current general discontent with health care and its rising costs have raised concerns about the cost of providing health care to undocumented immigrants. In 2006, eighty-three percent of Americans polled were concerned that it costs taxpayers too much money to provide illegal aliens with services such as health care and education. This overwhelmingly common concern elucidates two underlying assumptions. First, it assumes that undocumented immigrants do not pay any taxes. In fact, in addition to paying sales and property taxes it is estimated that about three fourths of undocumented immigrants pay payroll taxes using invalid social security numbers. Second, it assumes that undocumented immigrants are using health care services at high rates. In fact, the research described below demonstrates significantly lower health care utilization rates among undocumented immigrants when compared to native born.

A study by Berk et al., examined the health care utilization rates of undocumented Latinos residing in four sites of known concentration (Los Angeles, Fresno, Houston and El Paso) by using data from a 1996/1997 survey of undocumented Latino immigrants (n=973). They compared the results to use of the same services by all Latinos (self-identified) and total U.S. population as determined by the 1994 National Health Interview Survey.

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2 Native born includes all people born within the United States and its territories and therefore are automatically given U.S. Citizenship. Foreign born includes all those who were not born within the U.S. or its territories but acquired legal status via citizenship/naturalization, permanent residency, or non-expired visas or legal documents. Undocumented includes all people currently residing in the U.S. without a legal document permitting them to remain in the country.
4 Time Magazine/SRBI Survey, January 24-26, 2006
6 Hispanic Immigrant Health Care Access Survey, Project HOPE Center for Health Affairs, 1996.
Overall, the proportion of undocumented immigrants with at least one ambulatory physician visit ranged from 27% in Los Angeles and 49.9% in Fresno, compared to 74.8% of total U.S. population. Of those that had seen a physician, the intensity of service use was also lower for the undocumented (3-4 visits per year) than that of the nation overall (six visits per year).

A study by Goldman et al., used self-reported data from the 2000 Los Angeles Family and Neighborhood Survey (L.A.FANS) conducted by RAND. L.A.FANS was a stratified random sample of sixty-five neighborhoods in L.A. County with over sampling of poor neighborhoods. Among the 3,086 adults selected for interview (English or Spanish speaking) 85% started the interview and 82% completed it. Data was gathered via door-to-door survey. The Goldman study used the data from this survey to determine health care usage and cost based on residence status. Results show that despite usage differences by sex (higher use by women in all population groups) overall use of health care by undocumented is lower than native born. The native born visited a physician an average of 4 times in the previous year, whereas the undocumented saw a physician 50% less times per year (2 times).

There are several proposed explanations for the disproportionately lower use of medical services by undocumented immigrants. First, it is not the main reason why they immigrate to this country. Berk et al, shows that only 1% of undocumented respondents cited obtaining social services as the most important reason for immigrating. The second specifically applies to Latino immigrants and the growing body of evidence indicating that (even after adjusting for age) on average these immigrants are healthier than the native population. Furthermore, with regards to illegal immigration, due to the hazardous and physically demanding border crossing and jobs available on arrival, those who are relatively young and healthy are predominantly chosen to migrate. Another important consideration that partly explains the lower rates of use of medical services involves the element of fear of deportation amongst undocumented immigrants.

Clearly, the research so far has consistently shown that undocumented immigrants use less health care services than native born. Nonetheless, we believe that data from other parts of the country, even if they correlate with national data, do not have the same impact on public opinion as evidence about our own unique state. In addition, each state and city has distinct economic and social strains that can affect immigrants’ place in society and in turn their use of services. Thus, we were compelled to evaluate whether the utilization patterns shown above would hold true in New Mexico. However, before

8 D.P. Goldman et al., “Immigrants and the Cost of Medical Care,” *Health Affairs* 25, no. 6 (2006): 1700-1711.
11 Ibid.
analyzing data on utilization patterns amongst undocumented immigrants in New Mexico, we needed to determine the best way to gather this information. We were concerned about our ability to safely recruit and identify undocumented immigrants because of their potential reluctance to reveal their status. Moreover, we were unsure that we could complete sufficient surveys within our limited time frame. Based on a preliminary calculation using data from the Goldman study, in order to show a significant difference between the null hypothesis (that undocumented immigrants use the same amount of services as native born) and the alternate hypothesis (that undocumented immigrants use less services), a sample size of 65 of each group would be necessary. Therefore, we developed a pilot study to determine the best methods for recruiting participants and identifying undocumented immigrants in a manner that safeguards their anonymity.

Specifically, we attempted to answer the following questions:
1) Is the proposed methodology efficient (time efficiency) and effective for recruiting undocumented residents of Albuquerque’s South Valley to participate in a survey on health care utilization and immigration status?
   - Time efficiency was defined as the number of attempted contacts (e.g. # of doors) per hour and the rate of contacts (ratio of answered doors to total attempted contacts).
   - The effectiveness of a recruitment method was measured by the cooperation rate (e.g. ratio of completed surveys to contacts) and the percentage of all surveys completed by undocumented immigrants.

2) Is the proposed instrument effective at obtaining the desired information from the target population?
   - Effectiveness of survey was defined by two measures:
     a) ability of the survey to safely identify a responder as undocumented (i.e. did participants answer survey questions about immigration status and thus disclose their undocumented status?)
     b) clarity of the questions and comfort of responders.

Methods

The South Valley of Albuquerque, NM was chosen as the target population based on the high concentration of immigrants: The South Valley has a 12.6% of foreign born residents compared to the city of Albuquerque (8.9%).

Methods for Canvassing: The area we chose to canvass was the quadrant limited by Old Coors (west), Rio Bravo (south), Isleta (east) and Bridge (north). This is the central

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area of the neighborhood and corresponds to two census tracts. Since we did not intend to analyze the data gathered from the surveys, we did not randomize the homes for this pilot. However, we made sure to include different types of homes available in the South Valley: mobile homes, apartments and free-standing houses. Each half day we picked a street, mobile park or apartment complex and knocked on every door within it. Doors with “beware of dog” or other safety concerns were excluded and logged. We did not have a pre-determined number of houses to canvass; instead we wanted to determine how many we could do within three 4-hour days. Due to safety concerns all door-to-door canvassing was conducted only between the hours of 10am and 3pm. In order to compare the success rates between day of week and time of day, we canvassed on Saturday, Sunday and Tuesday and each day was further divided into morning (10am-12pm) and afternoon (1-3pm). For each door we logged the following information: Date, time knocked on door, time left house, language, response, and if skipped for safety reasons (dog, gate or other).

**Methods for Phone and Appointments:** We purchased a list of 300 randomized phone numbers (including cell phones), limited to the 87105 zip code, from the same source contracted by the Institute of Public Policy of the University of New Mexico: Survey Sampling International (see Appendix B for their randomization procedures). We wanted to test two different recruitment methods within the phone group: 1) asking participants to complete the survey over the phone, and 2) asking respondents to schedule an appointment for an in-person survey at their house. Therefore, every other phone number on the already randomized list was assigned to the phone survey group and the others to the appointment group. In order to test the best times and days for contacting participants, and be able to compare results to the canvassing group, we made calls all day Tuesday and Saturday (10am-12pm and 1pm-3pm). In addition, unlike canvassing where safety concerns prevented us form doing so, we also made calls on Wednesday and Thursday evenings (5pm-8pm). We reserved Sunday for repeating calls to those phone numbers categorized as “no answer” during the previous days. The following details were logged for all phone calls: Date, time made call, time hung up, language, and response (no answer, disconnected, business, agreed, or refused).

**Informed consent and instrument:** Exclusion criteria for participation was language other than English or Spanish, age less than 18 or greater than 64 years and persons unable to give informed consent due to mental or physical disability. Surveys were conducted in either Spanish or English.

Due to the sensitive nature of the questions regarding immigration status, informed consent was obtained verbally and the signature waived in order to maintain full anonymity. In order to establish trust and prevent selection bias, we divided the informed consent process into two steps: First we gave the respondent a brief description of the purpose of the study and asked the respondent to agree only to hear more about the study. Once the respondent agreed to hear more about the study, we handed them the informed consent document with full disclosure of the types of questions to be asked (see Appendix D), read it to them as clearly as possible and answered any questions. If they agreed to participate, we then began the survey. For the in-phone survey, a similar method was used with one distinction: participants could not be given a hard-copy of the
informed consent form. For the phone appointment group, participants were asked to make an appointment to hear more about the study and only once we were at their home and could establish trust, the informed consent process was conducted.

We compiled the survey based on question sequences from the various L.A.FANS questionnaires. The questionnaire modules for L.A.FANS were developed based on several general principles that we also attempted to follow. First, they sought to employ questions and question sequences which have been used in recent surveys of national population samples in the United States. Moreover, questions taken from these interview instruments have generally been well-tested, their data have been carefully evaluated, and they are available in Spanish. However, the original instrument addresses several areas that are not relevant to our question, and therefore, we only used appropriate sections. Primarily we combined Section M, “Health status” from the Adult Questionnaire for health care utilization information and part of the Household Roster for demographics (see Appendix A).

Undocumented status was determined by using the following validated algorithm: Respondents were first asked their country of origin. If not U.S., they were asked if they are U.S. Citizens. If “no”, they were asked if they are permanent residents. If “no,” they were asked if they have any legal document allowing them to stay in the United States for a limited time. The remainder were classified as undocumented. (See Appendix A for specific questions.) We only made minimal adjustments in terminology and added a few questions in order to make the instrument applicable to Albuquerque’s healthcare system.

All responses were recorded onto a separate answer sheet at the time of the interview. This sheet had no information linking it to the house or phone number. Also, the data collected did not include identifiers that would permit reconstruction of the subject’s identity. Opinio, an online survey response tool used at UNM, was selected as the data entry software. Most simple two-variable comparisons were done on Opinio. More complex three-variable comparisons were conducted using SPSS. However, because this was a pilot study without a pre-determined sample size, we did not determine statistical difference.

Despite the fact that we did not analyze the data from the surveys, we were interested in testing the instrument and it’s applicability to our specific population. Hence, as we performed the interview we marked questions that we were forced to repeat more than twice, and vocabulary that was not understood. In order to test the clarity of the questions and the comfort of the interviewees, we added a two-question evaluation at the end of each survey. To test the length of the interview process, the following

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14 N. Sastry et al., The Design of a multilevel Longitudinal Survey of Children, Families, and Communities: The Los Angeles Family and Neighborhood Survey, Pub no. 00-18, DRU-2004/1-LAFANS (Santa Monica, Calif: RAND, 2004)
16 Do you recall any questions that were difficult to understand? If so, which ones? Do you recall any questions that made you feel uncomfortable? If so, which ones?
information was logged for all interviews: language, duration of pre-survey discussion (consent, confidentiality etc), duration of survey, and duration of wrap-up.

Results:

**Canvassing Results:** Overall we canvassed 166 houses and completed 27 surveys in three 4-hour days (Saturday, Sunday and Tuesday), a total of 12 hours. This means that we knocked on an average of 14 households per hour (Table 1, attempted contacts per hour). Of all doors knocked on, 98 were “no answers” (Table 5). This means that of all 166 attempted contacts, 68 were contacted i.e. we were able to speak with someone at the door 41% of the time (Table 1).

<table>
<thead>
<tr>
<th>Table 1. Canvassing: time efficiency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total # of doors</td>
</tr>
<tr>
<td>Total # of hours</td>
</tr>
<tr>
<td>Total # of surveys completed</td>
</tr>
<tr>
<td># of doors per hour</td>
</tr>
<tr>
<td>Contact rate</td>
</tr>
</tbody>
</table>

Since all of those who agreed to participate in the study actually completed the survey (or the majority of the survey), participation can be measured by completed surveys. Of all contacts (68), 27 agreed to participate. In other words, the rate of cooperation was 0.40 (Table 2). Of all surveys completed, 19% were by undocumented immigrants (Table 2).

<table>
<thead>
<tr>
<th>Table 2. Canvassing: effectiveness as recruitment tool</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total # of surveys completed</td>
</tr>
<tr>
<td>Total # of undocumented immigrants</td>
</tr>
<tr>
<td>Cooperation rate</td>
</tr>
<tr>
<td>% of all surveys completed by undocumented immigrants</td>
</tr>
</tbody>
</table>

In general, the day of week a door was knocked on did not affect the outcome. Of 57 doors canvassed on Saturday, 18% agreed to complete the survey (Table 3). This is very similar to the 16% and 15% that agreed on Sunday and Tuesday, respectively (Table 3). Cooperation and contact percentages also do not vary much by day. However when broken down by time of day, Sunday morning proved to yield the highest rate of cooperation (67%) and Tuesday afternoon the lowest (20%) (Table 3). This difference is difficult to attribute to type of home since cooperation rates did not vary greatly in this respect (Table 4).

<table>
<thead>
<tr>
<th>Table 3. Canvassing: Day of week compared to Time of Day compared to Response (For agreed column, the row sequence is: #, percent of total, percent cooperation)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agreed</td>
</tr>
<tr>
<td>--------</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>
Of the 40 mobile homes, 65 houses and 61 apartments that we knocked on and a contact was made, the cooperation rate was about the same (43%, 40%, 36%, respectively) (Table 5). Of all 5 undocumented immigrants identified, 2 lived in mobile homes and 3 in apartments.
Overall, combining time efficiency and effectiveness measures it took approximately 2 hours to achieve 1 survey by an undocumented immigrant.

<table>
<thead>
<tr>
<th>Mobile</th>
<th>apartment</th>
<th>House</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>no answer or not home</td>
<td>17</td>
<td>41</td>
<td>40</td>
</tr>
<tr>
<td>17.4%</td>
<td>41.8%</td>
<td>40.8%</td>
<td>100.0%</td>
</tr>
<tr>
<td>42.5%</td>
<td>67.2%</td>
<td>61.5%</td>
<td>-</td>
</tr>
<tr>
<td>10.2%</td>
<td>24.7%</td>
<td>24.1%</td>
<td>59%</td>
</tr>
<tr>
<td>Refused</td>
<td>13</td>
<td>12</td>
<td>16</td>
</tr>
<tr>
<td>31.7%</td>
<td>29.3%</td>
<td>39%</td>
<td>100%</td>
</tr>
<tr>
<td>32.5%</td>
<td>19.7%</td>
<td>24.6%</td>
<td>-</td>
</tr>
<tr>
<td>-</td>
<td>7.2%</td>
<td>9.6%</td>
<td>24.7%</td>
</tr>
<tr>
<td>Agreed</td>
<td>10</td>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td>37.0%</td>
<td>29.6%</td>
<td>33.3%</td>
<td>100.0%</td>
</tr>
<tr>
<td>25%</td>
<td>13.1%</td>
<td>13.9%</td>
<td>-</td>
</tr>
<tr>
<td>43%</td>
<td>40%</td>
<td>36%</td>
<td>40%</td>
</tr>
<tr>
<td>cooperation</td>
<td>6.0%</td>
<td>4.8%</td>
<td>5.4%</td>
</tr>
<tr>
<td>Total</td>
<td>40</td>
<td>61</td>
<td>65</td>
</tr>
<tr>
<td>-</td>
<td>100.0%</td>
<td>100.0%</td>
<td>-</td>
</tr>
<tr>
<td>-</td>
<td>24.1%</td>
<td>36.8%</td>
<td>39.2%</td>
</tr>
</tbody>
</table>

## Table 5. Canvassing: overall performance

<table>
<thead>
<tr>
<th># surveys per hour</th>
<th>2.3</th>
</tr>
</thead>
<tbody>
<tr>
<td># undocumented surveys per hour</td>
<td>0.42</td>
</tr>
</tbody>
</table>

**Telephone results (calling and combination methods):** Every other phone number on the list was assigned to one of the following subgroups: a) calling: people were offered to complete the survey over the phone versus b) making appointment: people were offered to make an in-person appointment in order to complete the survey. Therefore, within a given time frame equal numbers of phone versus appointment calls were made. As a result, data regarding the time efficiency of phone calls (ie. number of calls placed per hour) includes both subgroups. The total number of calls placed was 373; this includes “no answers” (which were called twice) and “disconnected/business”. The total amount
of hours used to make the 337 calls was 16 hours. Therefore, the rate of phone calls per hour was 23 (Table 6).

<table>
<thead>
<tr>
<th>Table 6. All phone-based methods (including phone calling and appointments): time efficiency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total # of calls</td>
</tr>
<tr>
<td>Total # of hours</td>
</tr>
<tr>
<td># of calls per hour</td>
</tr>
</tbody>
</table>

In regards to calling “no answers” twice, it was decided that the list would be run once and that at the end all “no answer” numbers would be called again at another time. Therefore, all second calls to originally “no answer” numbers were made on Sunday morning and afternoon. The response rate indicated that 71% of those numbers indeed remained “no answers.” (Table 7)

<table>
<thead>
<tr>
<th>Table 7. All phone-based methods: Distribution of responses to calling all “no answer” numbers for a second time (Sunday am and pm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency</td>
</tr>
<tr>
<td>Agreed</td>
</tr>
<tr>
<td>Disconnected/ business</td>
</tr>
<tr>
<td>No answer</td>
</tr>
<tr>
<td>Refused</td>
</tr>
<tr>
<td>Age inappropriate/ Not a SV resident</td>
</tr>
<tr>
<td>Total</td>
</tr>
</tbody>
</table>

**Calling Subgroup:** This subgroup was offered to complete the survey during the phone call. A total of 187 phone calls were made. In general, 14 surveys were completed which consist of 7.5% of the total calls made (Table 8). Taking into account that only 53 were eligible contacts, the cooperation rate was 0.26.

<table>
<thead>
<tr>
<th>Table 8. Calling: distribution of responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency</td>
</tr>
<tr>
<td>Agreed</td>
</tr>
<tr>
<td>Disconnected/ business</td>
</tr>
<tr>
<td>No answer</td>
</tr>
<tr>
<td>Refused</td>
</tr>
<tr>
<td>Age inappropriate</td>
</tr>
<tr>
<td>Total eligible contacts</td>
</tr>
<tr>
<td>Total</td>
</tr>
</tbody>
</table>

More specifically, the time period that yielded the most surveys was a weekday afternoon, with 31% of the phone calls made resulting in a completed survey. Factoring out no response and ineligible calls, the cooperation rate was about 0.70. Weekday
afternoon was also the time period with the least phone calls made (Table 9). However, of the 14 surveys completed none was identified as undocumented.

Assuming that the total hours spent making phone calls (Table 6) were divided equally among the two subgroups, we can calculate that 1.75 surveys were completed per hour using the calling methodology. However, none of the participants were identified as undocumented.

Assuming that the total hours spent making phone calls (Table 6) were divided equally among the two subgroups, we can calculate that 1.75 surveys were completed per hour using the calling methodology. However, none of the participants were identified as undocumented.

**Table 9. Calling: distribution of responses based on day of week and time of day. (Sequence in rows: #, percent of total, percent cooperation)**

<table>
<thead>
<tr>
<th>Day of week</th>
<th>Time of day</th>
<th>Agreed</th>
<th>Disconnected/ business</th>
<th>No answer</th>
<th>Refused</th>
<th>Age inappropriate</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Saturday</td>
<td>Morning</td>
<td>3</td>
<td>(12%)</td>
<td>3</td>
<td>14</td>
<td>(56%)</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td>afternoon</td>
<td>0</td>
<td>(52%)</td>
<td>11</td>
<td>4</td>
<td>(19%)</td>
<td>21</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>3</td>
<td>(7%)</td>
<td>14</td>
<td>18</td>
<td>(39%)</td>
<td>46</td>
</tr>
<tr>
<td>Sunday</td>
<td>Morning</td>
<td>1</td>
<td>(7%)</td>
<td>0</td>
<td>12</td>
<td>(80%)</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>afternoon</td>
<td>1</td>
<td>(10%)</td>
<td>0</td>
<td>23</td>
<td>(68%)</td>
<td>34</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>1</td>
<td>(2%)</td>
<td>1</td>
<td>35</td>
<td>(71%)</td>
<td>49</td>
</tr>
<tr>
<td>Weekday</td>
<td>Morning</td>
<td>1</td>
<td>(3%)</td>
<td>13</td>
<td>11</td>
<td>(36%)</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>afternoon</td>
<td>5</td>
<td>(14%)</td>
<td>3</td>
<td>6</td>
<td>(19%)</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Evening</td>
<td>4</td>
<td>(9%)</td>
<td>12</td>
<td>17</td>
<td>(38%)</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>10</td>
<td>(11%)</td>
<td>28</td>
<td>34</td>
<td>(22%)</td>
<td>92</td>
</tr>
</tbody>
</table>

**Table 5. Calling: overall performance**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td># surveys per hour</td>
<td>1.75</td>
</tr>
<tr>
<td># undocumented surveys per hour</td>
<td>0</td>
</tr>
</tbody>
</table>

**Making appointments subgroup:** This subgroup was called and offered to make an in-person appointment in order to further discuss their participation in the research project. A total of 186 phone calls were made. In general, 2 appointments were made, which is 1% of the total calls made (Table 10). Both appointments were kept and resulted in
surveys being completed. The contact rate was 0.26 and the cooperation rate was 0.04. More specifically, the time period that yielded the most surveys was a weekday evening (Table 11). However, of the 2 surveys completed during the in-person appointment neither was identified as undocumented.

<table>
<thead>
<tr>
<th>Table 10. Making appointments: distribution of responses</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agreed</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Disconnected/ business</td>
<td>45</td>
<td>24</td>
</tr>
<tr>
<td>No answer</td>
<td>88</td>
<td>48</td>
</tr>
<tr>
<td>Refused</td>
<td>47</td>
<td>25</td>
</tr>
<tr>
<td>Age inappropriate/ Not a SV resident</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Total eligible contacts</td>
<td>49</td>
<td>26.3</td>
</tr>
<tr>
<td>Total</td>
<td>186</td>
<td>100.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Table 11. Making appointments: distribution of responses based on day of week and time of day</th>
<th>Agreed/ Survey</th>
<th>Disconnected / business</th>
<th>No answer</th>
<th>Refused</th>
<th>Age inappropriate/ Not SV resident</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Saturday</td>
<td>Time of day</td>
<td>Morning</td>
<td>0</td>
<td>3 (14%)</td>
<td>11 (50%)</td>
<td>8 (36%)</td>
</tr>
<tr>
<td></td>
<td>afternoon</td>
<td></td>
<td>0</td>
<td>9 (41%)</td>
<td>5 (23%)</td>
<td>7 (32%)</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td></td>
<td>0</td>
<td>12 (27%)</td>
<td>16 (36%)</td>
<td>15 (34%)</td>
</tr>
<tr>
<td>Sunday</td>
<td>Time of day</td>
<td>Morning</td>
<td>0</td>
<td>0</td>
<td>10 (71%)</td>
<td>4 (29%)</td>
</tr>
<tr>
<td></td>
<td>afternoon</td>
<td></td>
<td>0</td>
<td>0</td>
<td>25 (70%)</td>
<td>8 (22%)</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td></td>
<td>0</td>
<td>0</td>
<td>35 (70%)</td>
<td>12 (24%)</td>
</tr>
<tr>
<td>Weekday</td>
<td>Time of day</td>
<td>Morning</td>
<td>0</td>
<td>12 (40%)</td>
<td>14 (47%)</td>
<td>4 (13%)</td>
</tr>
<tr>
<td></td>
<td>afternoon</td>
<td></td>
<td>0</td>
<td>5 (31%)</td>
<td>8 (50%)</td>
<td>3 (19%)</td>
</tr>
<tr>
<td></td>
<td>Evening</td>
<td></td>
<td>2 (4%)</td>
<td>16 (35%)</td>
<td>15 (33%)</td>
<td>13 (28%)</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td></td>
<td>2 (2%)</td>
<td>33 (36%)</td>
<td>37 (40%)</td>
<td>20 (22%)</td>
</tr>
</tbody>
</table>

**Survey Results:** The entire process, from the introduction to the end of the wrap-up session, took less time than anticipated, with canvassing (average of 6.5 minutes per survey) being less time consuming than over the phone (average of 8 minutes per
survey). On the other hand, doing the survey in Spanish took more time than in English irrespective of the setting (Table 12).

<table>
<thead>
<tr>
<th>Surveying Method</th>
<th>Language</th>
<th>Average Time (mins)</th>
<th>Total Average Time (mins)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canvassing</td>
<td>English</td>
<td>5.0</td>
<td>6.5</td>
</tr>
<tr>
<td></td>
<td>Spanish</td>
<td>8.0</td>
<td></td>
</tr>
<tr>
<td>Phone</td>
<td>English</td>
<td>7.5</td>
<td>8.0</td>
</tr>
<tr>
<td></td>
<td>Spanish</td>
<td>8.0</td>
<td></td>
</tr>
</tbody>
</table>

In regards to participants recalling any questions that were difficult to understand, all 43 respondents answered “no.” In regards to participants recalling any questions that made them feel uncomfortable, two participants stated that the immigration status questions made them feel uncomfortable. However, these two participants plus another one that stated not feeling uncomfortable with any of the questions, only provided answers after having questioned the interviewers about the purpose and use of this information. Among the remaining 41 participants that did not identify any questions that made them feel uncomfortable, there was one participant who refused to answer many of the immigration questions. This was still considered a completed survey since more than 50% of the survey was completed.

**Discussion:**

**Canvassing:** Based on our limited data, canvassing proved to be a time efficient and effective method to recruit both undocumented and other residents of the South Valley. Despite only being able to knock on about 14 doors per hour, the contact rate was relatively high at 0.40. Day of week did not seem to affect contact or cooperation rates. However, Sunday mornings appeared to yield the greatest contact and cooperation rates whereas Tuesday afternoon proved to be yield the lowest results. This contradicts our original assumption that Sunday morning would be a bad time for canvassing because many residents would be attending church services. It is possible that church attendance in this area is lower than expected or services are held at a different time. With regards to increased cooperation rates, this could be explained by the possibility that on Sundays household members have more free time and are thus more willing to participate in a survey. Lower cooperation rates on a weekday afternoon on the other hand could be explained by people generally being more tired and busy. However due to the low numbers, it is possible that these differences were due to chance alone. Nonetheless, an important lesson for future projects is not to exclude Sunday mornings.

Of all completed surveys, 19% were undocumented. Therefore, we can extrapolate that it would take approximately 150 hours to reach a sample of 65 undocumented immigrants (sample size necessary based on statistical analysis for future project).

\[
\text{65 undocumented surveys} \times \frac{27 \text{ surveys}}{5 \text{ undocumented surveys}} \times \frac{1 \text{ hour}}{2.3 \text{ surveys}} = 153 \text{ hours}
\]
At a rate of 6 hours per day, this would mean that two people canvassing together could obtain the desired sample of undocumented and other residents in 26 days. If 2 pairs of students were working on the research, this would cut down the required time to about 2 weeks. However, it is important to recognize that this estimate might be slightly low because of the fact that in a follow-up study, the houses will be randomized and hence there will be fewer households reached per hour.

Although we did not link each individual survey to type of home in order to avoid identifying information, we did tally the total number of undocumented reached at each type of home. The most important information we gained from the “type of home” data is that we did not reach a single undocumented immigrant at a free-standing house. It could be that due to lower income levels and/or less time as residents of the South Valley, undocumented immigrants might be less likely to be home-owners or there might be a lower rate of homes available for rent. Due to the small sample size, we cannot say that the survey-completion and undocumented rates are significantly different between the types of homes. However, we can safely say that if the randomization in a follow-up study only includes free-standing homes, there will likely be fewer undocumented reached.

Despite our overall success with canvassing in the South Valley, there were a few problems that deserve consideration. In general we enjoyed canvassing and never felt harassed or targeted because of our gender (we are two young female researchers). Dogs were our greatest hurdle and the only reason we ever felt threatened. Compared to 14 dogs and gates encountered in the mobile parks (35%), there were 36 dogs and gates in the neighborhood houses (55%). Not surprisingly, as a result of this, our comfort level was greatest at apartments and mobile homes and lowest in neighborhoods with free-standing houses. Although in a future randomized study the type of home cannot be controlled, it might be beneficial to meet with expert canvassers such as census teams, to learn some tips on how to best deal with dogs.

Also, since safety was a priority for us, our decision to approach or skip a house was often quite subjective. Our decisions were mostly based on what we felt would be an unsafe house or an invasion of privacy. We generally went through the gate if it was low, partially open or immediately in front of the door. However, if the gate was high, and there was a large distance between the gate and the door we refrained from going through. If a household had any signs discouraging passage such as “no trespassing”, “no solicitors”, “trespassers will be shot” etc, we did not approach the home. Often, if the house did not have a “beware of dog” sign but we saw a dog or heard barking, we did not approach the home. The exception to this was small, harmless-looking dogs. From this pilot, we can conclude that in a follow-up study the criteria for skipping houses due to safety concerns should be clearly outlined in order to avoid bias.

Another observation we did not anticipate was that several people did not feel comfortable letting us inside their home and rather chose to complete the survey at the
door or on their porch. In these cases we made sure that they understood the sensitive nature of the questionnaire and that their privacy was not compromised.

Another important consideration involves the large distances between some free-standing houses. There were a few neighborhoods with farms and other large properties that we chose not to canvass. However, students conducting a future project with randomization will not have this luxury and will likely need to drive from house to house instead of walking. This might add to the time required to reach a sufficient sample and it might increase the expenditure on gas.

**Calling Group:** As stated above, this group was divided into two sub-groups: individuals that were offered to do the survey over the phone and individuals that were offered an appointment to further discuss the study and their participation in it. In general, based on this limited sample, phone calls were a time efficient method when attempting to reach a large number of individuals within a short period of time (rate of 23 calls per hour). However, no answer rates are high and thus contact rates are relatively low (0.28). Tuesday afternoon had the highest cooperation rate at 0.75. However, due to the very small numbers of surveys and contacts, it is likely that this was due to chance. Nonetheless, it is interesting to note that this is the exact opposite result as in canvassing.

In our methods, we had decided to call “no answer” numbers again if there was time after running the entire list once. We finished the list on Saturday evening, which meant that Sunday would be available for calling “no answer” numbers once more. It seems that investing time to call “no answer” numbers again is not productive, since 71% of the calls remained “no answer.” Maybe these are individuals who screen their calls or it could be obscured by the fact that all repeat calls were made on Sunday which could be the worse day for placing phone calls.

Nonetheless, phone calls were an ineffective method for the recruitment of undocumented individuals. Among the 16 completed surveys, none was completed by an undocumented person. There are several hypothetical reasons for these outcomes: (1) too small of a sample – 267 phone numbers were purchased, of these 179 were unduplicated working residential phone numbers; (2) source of the phone numbers – Is a social security number required in order to have a phone number with the company from which these phone numbers were obtained? Are undocumented individuals more likely to use pre-paid cellular phones due to the lack of a paper trail? or (3) nature of the method – Are undocumented individuals less able to afford a phone? Are undocumented individuals less likely to answer unrecognized phone numbers? Are undocumented individuals less likely to make appointments or to participate in phone surveys that address their immigration status? The obtained results are most likely due to a combination of these factors, some which can be resolved and others which can not.

In addition to phone calls being an ineffective recruitment method for undocumented individuals, there were other challenges that should be discussed. The following were related to the generation of the phone list itself: despite the phone list supplier’s efforts not to include disconnected phone numbers in the list, these still made up 24% of the numbers provided; the phone list included numbers that were either unlisted or were
registered with the federal Do Not Call List; and the list guaranteed that only 75% of the numbers provided would fall within the requested zip code. These were issues that were not foreseen by the research group and which had a negative impact on the sample size. However, they can also be resolved by including them in the calculations of how many phone numbers would need to be purchased.

In regard to the calling sub-groups, there was a significant difference in cooperation rate, with doing a survey over the phone being more effective than making appointments. A total of 16 surveys were completed as a result of a phone call. Fourteen of the 16 surveys (88%) were done over the phone at the time of the original call versus 2 of the 16 surveys (12%) that were obtained from phone calls which arranged home-based appointments. It can be hypothesized that the differing factor was participants’ readiness to complete a survey over the phone rather than making an appointment at their homes. To illustrate this point further, there were 4 individuals that specifically stated their willingness to complete the survey over the phone but not make an appointment. Therefore, any future recruitment efforts should be made towards completion of the survey at the time of the original phone call. It is interesting to note that the rates of “no answer,” “refused,” and “disconnected/ business” were not significantly different between both phone-based subgroups.

**Calling vs. Canvassing:** In one respect, calling is a more time efficient method, with about 23 phone calls per hour vs. 14 residences per hour. However, the contact rate for canvassing was slightly better than that of both phone groups. Canvassing was clearly the most effective method. The cooperation rate was twice as high with canvassing (40% vs. 26% vs. 0.04%, Table 13). Most importantly, whereas we were able to reach 5 undocumented immigrants in the canvassing group (19% of total surveys), there were no undocumented immigrants in the phone group. It is possible that cooperation rates were higher in the canvassing group in part due to our ability to establish trust in-person. We are two young women and we wore our school badges. Perhaps our benign appearance influenced people’s willingness to open the door. We also chose not to wear our white coats in order to avoid standing out while walking in the neighborhood and also to avoid potential intimidation from association with an official or government agency. Moreover, we are both native Spanish speakers. It is possible that these two factors affected our ability to gain the trust of undocumented immigrants.

| Table 13. Comparison of time efficiency, effectiveness and overall performance of the three recruitment methods |
|--------------------------------------------------|------------------|------------------|------------------|
| # attempted contacts per hour                     | Canvassing       | Calling          | Making Appointments |
|                                                   | 13.8             | 23               | 23               |
| Contact rate                                      | 0.41             | 0.28             | 0.26             |
| Cooperation rate                                  | 0.40             | 0.26             | 0.04             |
| # of undocumented surveys per hour                | 0.42             | 0                | 0                |

Another important distinction that we had not anticipated is cost. Because of the problems stated previously, the number of phone numbers needed to get a sufficient sample of working residential numbers must to be greatly inflated. Supposing that 2
students made calls 6 hours per day for 2 weeks, they could make about 3400 calls. The purchasing of a phone list with 3400 numbers would cost about $510 plus the $75 registration fee. In addition, because we were making calls from a pre-paid cell phone, the cost of the minutes also needs to be factored. At about 19 cents per call, this could add up to over $646 for 3400 calls. Therefore, $1231 would be needed just for covering the cost of the phone calls, without including the cost of compensating the participants. For a medical student research project, with an allotted budget of $500 per student, a phone-based survey may not be financially feasible. On the other hand, canvassing is mostly free. Randomization can be achieved by using a software-generated list of randomized numbers and assigning them to households on a street or in an apartment complex or using census tracts. The only cost associated with canvassing is the gas mileage. In the 3 days we were canvassing we probably used half a tank of gas, which costs about $25.00. To extrapolate, canvassing for 2 weeks could add up to about $120 in gas money.

In conclusion, canvassing is a more effective and affordable method for recruiting residents of the South Valley.

Survey Tool: In general the survey, which was based on a longer validated series of questions, was well received. The difference between the time needed to administer the survey based on language or setting is not significant; however, one possible explanation is the required time needed to read over the phone the options for annual household income versus showing participants the list and having them choose their answer. As a matter of fact, many participants commented on how short the survey was and that they had been willing to allot a longer period of time for their participation; therefore, there is room to expand the number of questions asked and obtain more in depth information regarding health care utilization.

Despite all participants answering “no” to recalling any questions that were difficult to understand, the researchers noted that several questions required repeated clarification. For example in question 5, which inquires about employment status, due to the wording of the question participants kept answering if they had a full-time employment versus part-time versus being unemployed instead of yes or no. In questions 6 and 8, which addressed receiving public assistance benefits and being insured, participants were unclear if the answer should be based on self versus family. Therefore, including a brief description of what those terms mean as part of the question would have been helpful. Question 17 asks for the interviewer to record the reason for the participant’s last medical encounter, which is mildly intrusive but can also be captured with broad categories such as acute illness versus chronic illness versus injury versus routine physical, etc. Question 20 did not make sense if the answer to question 17 was “A” and question 3’s options are not concordant with New Mexican’s ethnic identifications. Therefore, despite participants’ not recalling any specific questions that were difficult to understand, there are definite improvements that can be made to the survey’s wording, answer options and question flow in order to maximize smoothness of administration.

In regard to participants recalling any questions that made them feel uncomfortable, 3 individuals questioned the interviewers regarding the need for immigration status
information and one person refused to answer. As expected, all the individuals that showed concern for people asking about their immigration status were undocumented and it can only be hypothesized that the person that refused to answer most of the immigration questions was also undocumented. It is interesting to note that the person who refused to answer most of the immigration questions was completing the survey over the phone where it was more difficult to establish trust and demonstrate that we were really medical students working on a research project.

Other issues to consider are the need to randomize within the household and coding of answers. Early on in the project, researchers discarded randomizing the participant by the last person in the household to have had a birthday due to the confusion it created. Also, the majority of the times the person who answered the door was alone in the house; therefore, making the request to speak with the last person who had a birthday a mute point. The need for randomizing within the household should be explored, and if a bias based on who answers the door or phone is thought to occur than a less confusing technique should be considered. Researchers also felt a need for further guidelines on how to code answers when there had been a recent change in either insurance coverage or immigration status and when people had recently moved to the South Valley.

**Compensation:** Participants were offered a $10 gift card in gratitude for their time. The majority of participants were grateful for the token of appreciation, a couple of participants refused the gift card and wanted it to be donated to a charity organization, and a small minority expressed that they completed the survey in order to be helpful and that the gift card was welcomed but not necessary. Forty-three surveys were completed which comes to a grand total of $430 in gift cards. However, there are several considerations for future projects and the use of monetary compensation. Based on previous sample size analysis, a total of 193 native born and 45 undocumented participants would be needed in order to find statistical significance in the use of health care services. Therefore, a minimum of $2380 would be needed for gift cards which would all have to be provided upfront by the medical students. As a result, either additional funding would be required or the compensation could be reduced to $5, which based on participants’ reactions would still be deemed appropriate. The other consideration is the fact that the Medical Student Research Committee has started to request receipts with participants’ signatures and social security numbers stating that they received a gift card. Requiring this information poses several challenges to the design of this project: (1) the Medical Student Research Committee approved of the survey being anonymous and therefore, requesting signatures and social security numbers is inconsistent with the intended design of the project, and (2) half of the targeted population for this research project are undocumented individuals who by de facto do not have a social security number.

**Conclusions:** Canvassing (in-person interviews) proved to be the best method for recruiting undocumented immigrants in the South Valley to complete a survey. Canvassing had the highest contact and cooperation rates and was the only method that identified undocumented immigrants. It was also the most affordable method. Therefore, we recommend that future studies analyzing the health care utilization rates of this target
population base their data collection on in-person interviews. Data from this pilot can also serve to provide estimates for time feasibility in future projects with a large required sample size. Lastly, the survey instrument proved to be effective for identifying undocumented immigrants in safe and comfortable manner. Based on reactions from participants, it would be reasonable to increase the content and length of the instrument.

References:


Hispanic Immigrant Health Care Access Survey, Project HOPE Center for Health Affairs, 1996.


Time Magazine/SRBI Survey, January 24-26, 2006

Appendix A: Interview Instrument

(1. Interviewer please identify participant by sex.)
   a. Male
   b. Female

   2. How old are you?
   j.________________

   3. Are you Latino, white, African-American, Asian or something else?
   
   CODE ALL THAT APPLY
   a. Latino
   b. White
   c. African-American, Black
   d. Asian
   e. Pacific Islander
   f. Native American/American Indian

   4. How much school have you completed?
   
   INTERVIEWER NOTE: FOR THOSE CURRENTLY IN SCHOOL, THIS DOES NOT INCLUDE
   THE CURRENT YEAR OF SCHOOL, UNLESS IT IS ALREADY COMPLETED
   a. None
   b. Grade 1 through 11
   c. High school graduate or completed GED
   d. Some vocational school
   e. Completed vocational school
   f. Some college
   g. Associates’ degree (AA)
   h. Bachelors’ degree (BA, BS)
   i. Some graduate or professional school (after completing college)
   j. Completed graduate/professional degree

   5. Have you had a paid job full time or part time, at any time in the past month?
   a. Yes
   b. No

   6. Did you receive any type of public assistance or welfare benefits during the past month?
   a. Yes
   b. No

   7. Please choose from the following income categories:
   a. <10,000
   b. 10,000-14,999
   c. 15,000-24,999
   d. 25,000-34,999
   e. 35,000-49,999
   f. 50,000-74,999
g. 75,000-99,999  
h. 100,000-149,999  
i. 150,000 or more

8. Were you covered by any type of health insurance during the past month? This includes insurance through a job, through a plan you or someone else bought, or through a program like Salud?

a. Yes  
b. No

M17. Is there a place that you usually go to when you are sick or need advice about your health?

INTERVIEWER: IF YES, ASK “Do you have one place, or more than one place?”

a. Yes, one place  
b. Yes, more than one place  
c. No, (GO TO M22)

M18.  
[IF M17 EQUALS (a) ASK:] What kind of place is it? Is it a…

[IF M17 EQUALS (b) ASK:] What kind of place do you go to most often? Is it a…

a. Clinic or health center,  
b. Doctor’s office (private),  
c. HMO (lovelace, Presbyterian center)  
d. Hospital emergency room,  
e. Hospital outpatient department, or  
f. Don’t know  
g. REFUSED (GO TO M21)  
j. Some other place?? SPECIFY ______________________

M19. Is this place within the United States?

a. yes  
b. no

M21. Is that the same place you usually go when you need routine or preventive care, such as physical examination or check-up?

a. Yes (GO TO M25 )  
b. No

M22. What kind of place do you go to when you need routine preventive care, such as a physical examination or check-up? Is it a…

a. Clinic, health center,  
b. Doctor’s office,  
c. HMO (lovelace, Presbyterian center)  
d. Hospital emergency room,  
e. Hospital outpatient department, or  
f. Don’t know  
g. REFUSED (GO TO M25)  
h. DOESN’T GET PREVENTIVE CARE ANYWHERE  
j. some other place?? SPECIFY ______________________

IF M22=(g). GO TO M25
M23. Is this place within the United States?
   a. yes
   b. no

M25. During the past 2 years, that is since [MONTH AND YEAR EXACTLY TWO YEARS BEFORE THE INTERVIEW], how many different times have you been hospitalized? This includes any times you stayed in a regular hospital or mental health facility overnight or longer.

   a. NOT HOSPITALIZED IN PAST 2 YEARS.
   j. ____(NUMBER OF TIMES)
      (RANGE 1-24, VERIFY AT 10)

   IF M25=(a) GO TO M28

M27. Was the reason for the last hospitalization because you…

   a. Had a baby, childbirth
   b. Had other problems during pregnancy (not childbirth)
   c. Other

M28. When was the last time you saw a doctor, nurse or other health care professional for illness, injury or a routine check-up?

   j. ___ ____ __ YEAR
      (YEAR OF BIRTH-CURRENT YEAR)

   b. NEVER (GO TO M31)

M29. For what illness, injury or other reason did you see the doctor, nurse, or other health care professional?

   a. Routine check-up or physical
   j. Other reason, specify________________ (limited)

M30. In the past 12 months, about how many times have you seen a doctor, nurse, or other health professional about your health?

   j. ___ ____NUMBER OF TIMES
      (RANGE 1-50, VERIFY AT 12)

   b. NEVER

RSAM30ver. I want to verify that you said you have seen a doctor, nurse or other health care professional [FILL M30] times in the past 12 months. Is that correct?

CHECK: IF M29=(a) GO TO M32, ELSE CONTINUE

M31. Not including visits for illness or injury, when was the last time you saw a doctor or clinic for a routine health check-up?

   j. ___ ____ __ YEAR
      (YEAR OF BIRTH-CURRENT YEAR)

   b. NEVER, don't get check-ups
C34. What country were you born in?
   j. ____________________ (COUNTRY)

(C34_4. CAPI CHECK C34: WAS RESPONDENT BORN IN THE UNITED STATES?)
   a. Yes (go to end of survey)
   b. No

C36. In what year did you first come to the United States to live or work? Please do not include short trips for shopping, vacation or family visits.
   j. __ __ __ __ YEAR
   (RANGE 1870-CURRENT YEAR. CANNOT BE BEFORE R WAS BORN)

C38. Are you a citizen of the United States?
   a. Yes (Go to end of survey)
   b. No

C39. Do you currently have a permanent residence card or a green card?
   a. Yes (Go to end of survey)
   b. No

C40. Have you been granted asylum, refugee status, or temporary protected immigrant status, TPS?
   a. Yes (Go to end of survey)
   b. No

C41. Do you have a tourist visa, a student visa, a work visa or permit, or another document which permits you to stay in the US for a limited time?
   a. Yes
   b. No (Go to end of survey)

C42. Is this visa or document still valid or has it expired?
   a. Still valid
   b. Has expired

Do you have any other comments about your health care, or barriers to care that you’ve experienced?

Survey Evaluation (optional):
   1. Do you recall any questions that were difficult to understand? If so, which ones?
   2. Do you recall any questions that made you feel uncomfortable? If so, which ones?
Appendix B: Randomization procedures for phone list

Random Digit sampling (RDD) can be accomplished through several methodologies. These are Random A, Random B, Epsem, and Cluster. Random A methodology provides an extremely representative random digit sample. Each exchange and working block will have a probability of selection equal to its share of active working blocks. Selected telephone numbers may be protected against reuse for a period of six months. Business numbers may be eliminated.

Random B methodology provides the most efficient random digit sample available. Each exchange and working block will have a probability of selection equal to its share of listed telephone households. Numbers may be protected against reuse for a period of nine months. Business numbers may be eliminated.

Epsem (Equal Probability Selection Method) ensures that every possible telephone number - including business and protected numbers - in a working block with at least one directory-listed telephone number has an equal probability of selection. Telephone numbers are not protected. Business numbers may be identified, but not removed.

Cluster methodology is used by many pollsters and other researchers who have only one or two nights in the field for interviewing purposes. Survey questions are time-sensitive. Cluster samples are accurate and representative, without the need for callbacks or interviewing by replicate.

Using SSI's standard RDD B methodology, a sample is drawn with a sample size equal to the number of completed interviews. For each sample element, or seed, 11-20 replacement numbers are generated within the same area code and exchange.
Appendix C: Phone Script (English)

Hello my name is _______ I am a medical student at the University of New Mexico. This is not a sales call. Would you like to continue in English o Prefiere hablar en Espanol? We are doing a research project for school about how often South Valley residents use health care services. It basically consists of a 5-minute home interview for which you will receive a ten-dollar gift card. Your phone number/home was selected at random.

Are you between the ages of 18 and 65?

3) (If no): Could I please speak to a member of your household that is between the ages of 18 and 65? (Once new member on the phone): Hello my name is _______ I am a medical student at the University of New Mexico. This is not a sales call. Would you like to continue in English o Prefiere hablar en Espanol? We are doing a research project for school about how often South Valley residents use health care services. It basically consists of a 5-minute interview for which you will receive a ten-dollar gift card. Your phone number/home was selected at random. Is it true that you are between the ages of 18 and 65?

(If not btw ages 18-65): (go back to section 3)
(If yes btw ages 18-65): Should you choose to participate in our survey, your answers will remain confidential. The University releases no information as to how any particular individual answers a survey and does not sell or give away the lists of randomly generated phone numbers used in our research. Would you be interested in hearing more about our study and possibly complete the survey?

(If no): Thank you for your time.
(if yes): (continue to informed consent) (if agrees to participate, continue to survey) Thank you so much for completing our survey. In order to compensate your for your time, we would like to give you a ten dollar gift card. You have two options: option one requires that we mail you the card, so we would need you to give us your first name and address; keep in mind that this information will only be written on an envelope with your gift card to be sent today. It will not in any way be traceable to your survey answers. Option 2 does not require that you give me any identifying information. Which option would you prefer?

(If option1) I will be sending you a $10 gift card to purchase anything you’d like at Albertson’s, the grocery store. Can you please give me your first name and address? (record)

(if option 2) I will be giving you a pin# for a $10 calling card for local and international calls. Do you have something to write with? (give access # and pin #)

Thank you so much for your time.
Appendix D: Informed consent letter

University of New Mexico Health Sciences Center

Informed Consent Cover Letter for Anonymous Surveys

Health Care Utilization Pilot Study:
Recruiting and Interviewing Residents of the South Valley

Dr. Waitzkin M.D. from the Department of Family and Community Medicine is conducting a research study. The purpose of the study is to test how to best recruit and interview South Valley residents about their use of health care services. You are being asked to participate in this study because you were randomly selected from a pool of adult South Valley residents.

Your participation will involve answering a short survey about your use of health care services and immigration status. The survey should take about 15 minutes to complete. Your involvement in the study is voluntary, and you may choose not to participate. There are no names or identifying information associated with this survey and all answers will be kept confidential. The survey includes questions such as “Is there a place that you usually go to when you are sick or need advice about your health?” and “Are you a citizen of the United States?”. You can refuse to answer any of the questions at any time. There are no known risks in this study, but some individuals may experience discomfort when answering questions. All information gathered will be shredded after completion of the study.

The findings from this project will provide information on how to best engage participation of South Valley residents in a research study and on the validity of the survey. If published, results will be presented in summary form only without any personal information.

If you have any questions about this research project, please feel free to call Irma Santiago at (505) 256-2546. If you have questions regarding your legal rights as a research subject, you may call the UNMHSC Office of Human Research Protections at (505) 272-1129.

By completing this survey you will be agreeing to participate in the above described research study.

Thank you for your participation.

Sincerely,

Howard Waitzkin, MD, PhD
Professor of Family and Community Medicine
University of New Mexico School of Medicine