## Kaiser Family Foundation California Longitudinal Panel Survey Wave 3 Attrition Appendix

A unique consideration for panel surveys such as the Kaiser Family Foundation California Longitudinal Panel Survey, is whether those who participate in subsequent waves are different in terms of their attitudes or demographics than those who refuse to participate again or were unable to be re-contacted. Of the total 2,001 respondents who completed Wave 1, 1,219 participated in Wave 2 and 1,105 completed Wave 3 . These completion rates are within an expected range given that the uninsured are already an often difficult to reach population since many are lower income, younger, undocumented immigrants, and members of racial/ethnic minority groups, and may change phone numbers or move more often than the public at large. After data collection was complete, data from Wave 1 and Wave 3 were compared to evaluate the impact of some respondents not completing Wave 3 , referred to as attrition. Wave 3 respondents included those who completed all three waves ( $\mathrm{n}=923$ ) as well as those who completed Waves 1 and 3 only ( $\mathrm{n}=182$ ). The analysis was designed to assess whether: (1) The makeup of respondents differed systematically between the waves; and (2) whether these differences correspond with bias as far as the study's substantive questions.

As detailed below in Table A1, we compared Wave 1 question responses for the total Wave 1 and Wave 3 samples to assess whether Wave 3 consists of respondents who answered Wave 1 differently than the full Wave 1 sample. The table also includes comparisons for the subsample of Wave 3 respondents who have completed all three waves. The weighted columns indicate whether any differences in sample characteristics and substantive responses were minimized through Wave 3 weighting. The comparison indicates that the greatest difference between the complete Wave 1 sample and the Wave 3 sample centers on respondents with lower educational attainment ( 6 percentage points less in Wave 3), respondents under 30 ( 5 percentage points less in Wave 3), cell phone respondents (5 percentage points less in Wave 3), Spanish speaking (4 percentage points less in Wave 3), male respondents (4 percentage points less in Wave 3), and undocumented respondents (4 percentage points less in Wave 3), along with an increase in the share of white respondents and a decrease in the share of Hispanic respondents ( 5 and 4 percentage points, respectively). This seems to indicate that the harder-to-reach (namely undocumented), more transient (cell phone), and younger respondents were slightly less likely to be reached and to complete the Wave 3 interview. These differences are slightly greater for those who completed all three waves of the survey. However, these demographic differences between the samples, did not translate into meaningful differences on the questions of self-reported party identification, selfreported health status, or whether respondents report having a usual source of care. Furthermore, once the sample was weighted as it would be in any case, demographic differences were nearly eliminated, and those variables not included in the weighting were hardly affected by weighting, or became more similar to Wave 1 (Table A2). Overall, this analysis finds fairly small differences between Wave 3 respondents and the full Wave 1 sample as far as Wave 1 responses. Attrition does not appear to introduce significant bias, and most differences are addressed by weighting (that was specifically designed to match the Wave 1 sample, adding parameters such as language of interview and income relative to the federal poverty level (FPL)).

Table A1: Wave 1 To Wave 3 Sample Comparisons For Wave 1 Questions (Weighted And Unweighted)

|  | Unweighted |  |  |  | Weighted |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Wave 1 $\begin{gathered} (n= \\ 2001) \end{gathered}$ | Completed Wave 3 $(n=1105)$ | Completed all 3 Waves ( $\mathrm{n}=923$ ) | Percentage Point Difference (W1 - W3 Total) | Wave 1 | Completed Wave 3 | Completed all 3 Waves | Percentage Point Difference (W1 - W3 Total) |
| Gender |  |  |  |  |  |  |  |  |
| Male | 48\% | 44\% | 42\% | 4 | 54\% | 53\% | 50\% | 1 |
| Female | 52\% | 56\% | 58\% | -4 | 46\% | 47\% | 50\% | -1 |
| Race/ Ethnicity |  |  |  |  |  |  |  |  |
| White | 27\% | 32\% | 35\% | -5 | 26\% | 27\% | 30\% | -1 |
| Black | 7\% | 7\% | 8\% | 0 | 5\% | 5\% | 6\% | 0 |
| Hispanic | 58\% | 54\% | 50\% | 4 | 56\% | 55\% | 53\% | 1 |
| Other Race | 8\% | 7\% | 8\% | 1 | 12\% | 11\% | 11\% | 1 |
| Age |  |  |  |  |  |  |  |  |
| 18 to 29 | 23\% | 18\% | 17\% | 5 | 33\% | 31\% | 27\% | 2 |
| 30 to 39 | 21\% | 19\% | 20\% | 2 | 24\% | 24\% | 25\% | 0 |
| 40 to 49 | 22\% | 21\% | 21\% | 1 | 21\% | 21\% | 22\% | 0 |
| 50 to 64 | 35\% | 41\% | 42\% | -6 | 22\% | 24\% | 26\% | -2 |
| Education |  |  |  |  |  |  |  |  |
| HS or less | 57\% | 51\% | 50\% | 6 | 58\% | 56\% | 55\% | 2 |
| Some college | 28\% | 31\% | 32\% | -3 | 29\% | 30\% | 31\% | -1 |
| College Grad+ | 15\% | 17\% | 17\% | -2 | 12\% | 13\% | 13\% | -1 |
| Phone status |  |  |  |  |  |  |  |  |
| Landline | 49\% | 54\% | 55\% | -5 | 42\% | 45\% | 48\% | -3 |
| Cell | 51\% | 46\% | 45\% | 5 | 58\% | 55\% | 52\% | 3 |
| Marital status |  |  |  |  |  |  |  |  |
| Married | 33\% | 32\% | 32\% | 1 | 37\% | 37\% | 38\% | 0 |
| Not Married | 67\% | 67\% | 68\% | 0 | 62\% | 63\% | 62\% | -1 |
| Family income |  |  |  |  |  |  |  |  |
| <138\% FPL | 60\% | 58\% | 58\% | 2 | 52\% | 53\% | 54\% | -1 |
| $\begin{aligned} & 138 \%-400 \% \\ & \text { FPL } \\ & \hline \end{aligned}$ | 30\% | 32\% | 32\% | -2 | 36\% | 35\% | 34\% | 1 |
| 400\%+ FPL | 5\% | 6\% | 5\% | -1 | 7\% | 7\% | 7\% | 0 |
| Language of interview |  |  |  |  |  |  |  |  |
| English | 63\% | 67\% | 69\% | -4 | 65\% | 66\% | 66\% | -1 |
| Spanish | 37\% | 33\% | 31\% | 4 | 35\% | 34\% | 34\% | 1 |

Table A2: Wave 1 And Wave 3 Sample Comparisons For Wave 1 Questions Not Used In Weighting (Weighted And Unweighted)

|  | Unweighted |  |  |  | Weighted |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Wave 1 $\begin{gathered} (n= \\ 2001) \end{gathered}$ | Completed Wave 3 $(n=1105)$ | Completed all 3 Waves $(n=923)$ | Percentage Point Difference (W1 - W3 Total) | Wave <br> 1 | Completed Wave 3 | Completed all 3 Waves | Percentage Point Difference (W1 - W3 Total) |
| Resident Status |  |  |  |  |  |  |  |  |
| Citizen/ legal immigrant | 79\% | 83\% | 84\% | -4 | 78\% | 80\% | 81\% | -2 |
| Undocumented immigrant | 20\% | 16\% | 15\% | 4 | 21\% | 19\% | 18\% | 2 |
| Party Identification |  |  |  |  |  |  |  |  |
| Republican | 11\% | 12\% | 13\% | -1 | 11\% | 12\% | 13\% | -1 |
| Democrat | 35\% | 36\% | 36\% | -1 | 32\% | 32\% | 31\% | 0 |
| Independent | 35\% | 35\% | 34\% | 0 | 37\% | 39\% | 38\% | -2 |
| Other | 9\% | 8\% | 8\% | 1 | 9\% | 8\% | 8\% | 1 |
| Length of time uninsured prior to ACA |  |  |  |  |  |  |  |  |
| 2 months to less than a year | 12\% | 12\% | 11\% | 0 | 13\% | 14\% | 13\% | -1 |
| 1 year to less than 2 years | 12\% | 13\% | 13\% | -1 | 14\% | 14\% | 15\% | 0 |
| 2 years or more | 48\% | 52\% | 54\% | -4 | 44\% | 45\% | 46\% | -1 |
| Never insured | 28\% | 23\% | 22\% | 5 | 29\% | 27\% | 26\% | 2 |
| Self-reported health status |  |  |  |  |  |  |  |  |
| Excellent/Very good/Good | 59\% | 60\% | 60\% | -1 | 62\% | 63\% | 64\% | -1 |
| Fair/Poor | 41\% | 40\% | 39\% | 1 | 38\% | 37\% | 36\% | 1 |
| Debilitating Chronic Condition |  |  |  |  |  |  |  |  |
| Yes | 16\% | 18\% | 19\% | -2 | 13\% | 14\% | 14\% | -1 |
| No | 84\% | 82\% | 81\% | 2 | 87\% | 86\% | 85\% | 1 |
| Usual place for care |  |  |  |  |  |  |  |  |
| Yes | 61\% | 63\% | 63\% | -2 | 56\% | 59\% | 59\% | -3 |
| No | 39\% | 37\% | 37\% | 2 | 43\% | 41\% | 41\% | 2 |

An indicator consistent with this observation is the mean Wave 1 Weight of the Wave 3 sample. This value, 0.976 ( $\mathrm{SE}=0.030$ ), indicates that the measure to which Wave 3 respondents further accentuated Wave 1 nonresponse patterns (corresponding with smaller weights) was relatively small, about $2 \%$. For those who responded to all three waves, this value was slightly smaller ( 0.974 ; $\mathrm{SE}=0.033$ ), but still indicative of overall similarity between responders and non-responders.

We also compared the unweighted demographics for those who completed Wave 3 with those who didn't (a typical nonresponse analysis) and there are some differences between these two groups. Those who did not participate in Wave 3 were somewhat more likely than Wave 3 respondents to be younger, male, Hispanic, undocumented, have lower levels of education, report never having had health insurance, or prefer taking the survey in Spanish. On the other hand, they are somewhat less likely to report having a disability. In order to
further isolate the demographic factors associated with completing the Wave 3 survey or not, we conducted a logistic regression analysis. After controlling for demographic characteristics such as income, race/ethnicity, and party identification, the factors associated with completing Wave 3 include being interviewed on a landline telephone, having higher levels of education, and being older. The factors associated with not completing Wave 3 are never having had insurance and being male. This pattern is similar when looking at those who completed all 3 waves as well as those who have not participated since taking the initial baseline survey. As noted above, weighting sufficiently corrects for these differences and no bias in results is expected.

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Filling the need for trusted information on national health issues, the Kaiser Family Foundation is a nonprofit organization based in Menlo Park, California.

