**Online supplementary tables**

**Online supplementary Table 1a:** Unadjusted prevalence of stroke symptoms recognition in the United States by cognitive impairment status stratified by living arrangement

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Lives alone** | | | | | |
|  | **Stroke symptom recognition** | | | | | |
| **Sudden confusion or trouble speaking** | **Sudden numbness or weakness of face, arm, or leg, especially on one side** | **Sudden trouble seeing in one or both eyes** | **Sudden trouble walking, dizziness, or loss of balance** | **Severe headache with no known cause** | **All five symptoms** |
| Weighted %  (95% Confidence Interval) | Weighted %  (95% Confidence Interval) | Weighted %  (95% Confidence Interval) | Weighted %  (95% Confidence Interval) | Weighted %  (95% Confidence Interval) | Weighted %  (95% Confidence Interval) |
| **Has cognitive impairment** | 91.7  (89.3, 94.1) | 91.4  (88.9, 93.9) | 78.3  (74.7, 81.9) | 87.0  (84.0, 90.0) | 77.0  (73.3, 80.7) | 55.8  (51.4, 60.2) |
| **No cognitive impairment** | 94.5  (93.9, 95.1) | 95.1  (94.5, 95.7) | 85.6  (84.7, 86.5) | 92.9  (92.2, 93.6) | 83.8  (82.8, 84.4) | 61.9  (60.6, 63.2) |
|  | **Lives with others** | | | | | |
|  | **Stroke symptom recognition** | | | | | |
| **Sudden confusion or trouble speaking** | **Sudden numbness or weakness of face, arm, or leg, especially on one side** | **Sudden trouble seeing in one or both eyes** | **Sudden trouble walking, dizziness, or loss of balance** | **Severe headache with no known cause** | **All five symptoms** |
| Weighted %  (95% Confidence Interval) | Weighted %  (95% Confidence Interval) | Weighted %  (95% Confidence Interval) | Weighted %  (95% Confidence Interval) | Weighted %  (95% Confidence Interval) | Weighted %  (95% Confidence Interval) |
| **Has cognitive impairment** | 92.0  (89.6, 94.4) | 93.5  (91.3, 95.7) | 80.5  (77.0, 84.0) | 90.0  (87.3, 92.7) | 78.8  (75.2, 82.4) | 57.4  (53.0, 61.8) |
| **No cognitive impairment** | 95.2  (94.7, 95.7) | 96.0  (95.6, 96.5) | 87.1  (86.3, 87.9) | 93.5  (92.9, 94.1) | 85.0  (84.1, 85.9) | 64.3  (63.1, 65.5) |

**Online supplementary Table 1b:** Unadjusted prevalence of heart attack symptoms recognition in the United States by cognitive impairment status stratified by living arrangement

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Lives alone** | | | | | |
|  | **Heart attack symptom recognition** | | | | | |
| **Jaw, neck, or back pain** | **Feeling weak, lightheaded, or faint** | **Chest pain or discomfort** | **Pain or discomfort in arms or shoulder** | **Shortness of breath** | **All five symptoms** |
| Weighted %[[1]](#footnote-1)  (95% Confidence Interval) | Weighted %  (95% Confidence Interval) | Weighted %  (95% Confidence Interval) | Weighted %  (95% Confidence Interval) | Weighted %  (95% Confidence Interval) | Weighted %  (95% Confidence Interval) |
| **Has cognitive impairment** | 70.0  (66.0, 74.0) | 75.9  (72.1, 79.7) | 89.6  (86.9, 92.3) | 84.4  (81.2, 87.6) | 84.7  (81.5, 87.9) | 66.9  (62.8, 71.0) |
| **No cognitive impairment** | 73.8  (72.6, 75.0) | 76.9  (75.8, 78.0) | 91.2  (90.4, 92.0) | 88.7  (87.9, 89.5) | 86.2  (85.3, 87.1) | 76.7  (75.6, 77.8) |
|  | **Lives with others** | | | | | |
|  | **Heart attack symptom recognition** | | | | | |
| **Jaw, neck, or back pain** | **Feeling weak, lightheaded, or faint** | **Chest pain or discomfort** | **Pain or discomfort in arms or shoulder** | **Shortness of breath** | **All five symptoms** |
| Weighted %  (95% Confidence Interval) | Weighted %  (95% Confidence Interval) | Weighted %  (95% Confidence Interval) | Weighted %  (95% Confidence Interval) | Weighted %  (95% Confidence Interval) | Weighted %  (95% Confidence Interval) |
| **Has cognitive impairment** | 69.7  (65.6, 73.8) | 74.9  (71.1, 78.7) | 91.0  (88.5, 93.5) | 85.7  (82.6, 88.8) | 85.2  (82.1, 88.4) | 69.7  (65.6, 73.8) |
| **No cognitive impairment** | 75.6  (74.5, 76.7) | 78.0  (77.0, 79.0) | 92.4  (91.7, 93.1) | 90.4  (89.7, 91.1) | 87.9  (87.1, 88.7) | 78.9  (77.9, 79.9) |

**Online supplementary Table 2a:** Unadjusted prevalence of stroke symptoms recognition in the United States by cognitive impairment status stratified by stroke history

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Had a stroke** | | | | | |
|  | **Stroke symptom recognition** | | | | | |
| **Sudden confusion or trouble speaking** | **Sudden numbness or weakness of face, arm, or leg, especially on one side** | **Sudden trouble seeing in one or both eyes** | **Sudden trouble walking, dizziness, or loss of balance** | **Severe headache with no known cause** | **All five symptoms** |
| Weighted %  (95% Confidence Interval) | Weighted %  (95% Confidence Interval) | Weighted %  (95% Confidence Interval) | Weighted %  (95% Confidence Interval) | Weighted %  (95% Confidence Interval) | Weighted %  (95% Confidence Interval) |
| **Has cognitive impairment**  **(n = 224)** | 89.8  (85.8, 93.8) | 92.1  (88.6, 95.6) | 79.7  (74.4, 85.0) | 91.2  (87.5, 94.9) | 76.9  (71.4, 82.4) | 64.4  (58.1, 70.7) |
| **No cognitive impairment**  **(n = 778)** | 95.8  (94.4, 97.2) | 96.0  (94.6, 97.4) | 85.9  (83.5, 88.3) | 94.1  (92.4, 95.8) | 83.9  (81.3, 86.5) | 77.6  (74.8, 80.6) |
|  | **Never had a stroke** | | | | | |
|  | **Stroke symptom recognition** | | | | | |
| **Sudden confusion or trouble speaking** | **Sudden numbness or weakness of face, arm, or leg, especially on one side** | **Sudden trouble seeing in one or both eyes** | **Sudden trouble walking, dizziness, or loss of balance** | **Severe headache with no known cause** | **All five symptoms** |
| Weighted %  (95% Confidence Interval) | Weighted %  (95% Confidence Interval) | Weighted %  (95% Confidence Interval) | Weighted %  (95% Confidence Interval) | Weighted %  (95% Confidence Interval) | Weighted %  (95% Confidence Interval) |
| **Has cognitive impairment**  **(n = 767)** | 92.5  (90.6, 94.4) | 92.5  (90.6, 94.4) | 79.3  (76.4, 82.2) | 87.6  (85.3, 89.9) | 78.2  (75.3, 81.1) | 69.3  (66.0, 72.6) |
| **No cognitive impairment**  **(n = 10861)** | 94.8  (94.4, 95.2) | 95.6  (95.2, 96.0) | 86.4  (85.8, 87.0) | 93.1  (92.6, 93.6) | 84.5  (83.8, 85.2) | 77.9  (77.1, 78.7) |

**Online supplementary Table 2b:** Unadjusted prevalence of heart attack symptoms recognition in the United States by cognitive impairment status stratified by heart attack history

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Had a heart attack** | | | | | |
|  | **Heart attack symptom recognition** | | | | | |
| **Jaw, neck, or back pain** | **Feeling weak, lightheaded, or faint** | **Chest pain or discomfort** | **Pain or discomfort in arms or shoulder** | **Shortness of breath** | **All five symptoms** |
| Weighted %[[2]](#footnote-2)  (95% Confidence Interval) | Weighted %  (95% Confidence Interval) | Weighted %  (95% Confidence Interval) | Weighted %  (95% Confidence Interval) | Weighted %  (95% Confidence Interval) | Weighted %  (95% Confidence Interval) |
| **Has cognitive impairment**  **(n = 146)** | 79.9  (73.4, 86.4) | 76.4  (69.5, 83.3) | 94.1  (90.3, 97.9) | 89.1  (84.0, 94.2) | 87.1  (81.7, 92.5) | 62.6  (54.8, 70.4) |
| **No cognitive impairment**  **(n = 1021)** | 77.3  (74.7, 79.9) | 79.0  (76.5, 81.5) | 95.3  (94.0, 96.6) | 90.6  (88.8, 92.4) | 88.9  (87.0, 90.8) | 63.7  (60.8, 66.6) |
|  | **Never had a heart attack** | | | | | |
|  | **Heart attack symptom recognition** | | | | | |
| **Jaw, neck, or back pain** | **Feeling weak, lightheaded, or faint** | **Chest pain or discomfort** | **Pain or discomfort in arms or shoulder** | **Shortness of breath** | **All five symptoms** |
| Weighted %[[3]](#footnote-3)  (95% Confidence Interval) | Weighted %  (95% Confidence Interval) | Weighted %  (95% Confidence Interval) | Weighted %  (95% Confidence Interval) | Weighted %  (95% Confidence Interval) | Weighted %  (95% Confidence Interval) |
| **Has cognitive impairment (n = 845)** | 68.0  (64.9, 71.1) | 75.2  (72.3, 78.1) | 89.5  (87.4, 91.6) | 84.2  (81.7, 86.7) | 84.6  (82.2, 87.0) | 55.4  (52.0, 58.8) |
| **No cognitive impairment**  **(n = 10618)** | 74.5  (73.7, 75.3) | 77.7  (76.9, 78.5) | 91.5  (91.0, 92.0) | 89.5  (88.9, 90.1) | 86.9  (86.3, 87.5) | 63.2  (62.3, 64.1) |

**Online Supplementary Table 3a:** Unadjusted prevalence of stroke and heart attack symptoms recognition in the United States by cognitive impairment status when “don’t know” responses categorized as “No” responses

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Stroke symptom recognition** | | | | | |
| **Sudden confusion or trouble speaking** | **Sudden numbness or weakness of face, arm, or leg, especially on one side** | **Sudden trouble seeing in one or both eyes** | **Sudden trouble walking, dizziness, or loss of balance** | **Severe headache with no known cause** | **All five symptoms** |
| Weighted %[[4]](#footnote-4)  (95% Confidence Interval) | Weighted %  (95% Confidence Interval) | Weighted %  (95% Confidence Interval) | Weighted %  (95% Confidence Interval) | Weighted %  (95% Confidence Interval) | Weighted %  (95% Confidence Interval) |
| **Has cognitive impairment** | 86.6  (84.7, 88.5) | 87.2  (85.3, 89.1) | 71.4  (68.8, 73.9) | 83.7  (81.6, 85.7) | 70.1  (67.5, 72.6) | 59.1  (56.3, 61.8) |
| **No cognitive impairment** | 93.3  (92.9, 93.7) | 93.7  (93.3, 94.2) | 80.7  (80.1, 81.4) | 90.8  (90.3, 91.3) | 78.9  (78.2, 79.6) | 70.1  (69.3, 70.8) |
|  | **Heart attack symptom recognition** | | | | | |
| **Jaw, neck, or back pain** | **Feeling weak, lightheaded, or faint** | **Chest pain or discomfort** | **Pain or discomfort in arms or shoulder** | **Shortness of breath** | **All five symptoms** |
| Weighted %  (95% Confidence Interval) | Weighted %  (95% Confidence Interval) | Weighted %  (95% Confidence Interval) | Weighted %  (95% Confidence Interval) | Weighted %  (95% Confidence Interval) | Weighted %  (95% Confidence Interval) |
| **Has cognitive impairment** | 63.5  (60.8, 66.2) | 69.4  (66.8, 72.0) | 86.6  (84.7, 88.5) | 78.8  (76.5, 81.1) | 79.1  (76.8, 81.4) | 49.6  (46.8, 52.4) |
| **No cognitive impairment** | 71.4  (70.7, 72.2) | 73.6  (72.9, 74.4) | 90.8  (90.3, 91.3) | 87.7  (87.1, 88.3) | 84.6  (84.0, 85.2) | 57.8  (57.0, 58.7) |

**Online Supplementary Table 3b:** Adjusted estimates of stroke and heart attack symptoms recognition by cognitive impairment status when “don’t know” responses categorized as “No” responses

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Stroke symptom recognition** | | | | | |
| **Sudden confusion or trouble speaking** | **Sudden numbness or weakness of face, arm, or leg, especially on one side** | **Sudden trouble seeing in one or both eyes** | **Sudden trouble walking, dizziness, or loss of balance** | **Severe headache with no known cause** | **All five symptoms** |
| [[5]](#footnote-5)Odds Ratio  (95% Confidence Interval) | [[6]](#footnote-6)Odds Ratio  (95% Confidence Interval) | [[7]](#footnote-7)Odds Ratio  (95% Confidence Interval) | [[8]](#footnote-8)Odds Ratio  (95% Confidence Interval) | [[9]](#footnote-9)Odds Ratio  (95% Confidence Interval) | [[10]](#footnote-10)Odds Ratio  (95% Confidence Interval) |
| **Cognitive Impairment status (ref: No cognitive impairment)** |  | | | | | |
| Has cognitive impairment | 0.66  (0.53, 0.84) | 0.68  (0.54, 0.85) | 0.76  (0.64, 0.91) | 0.72  (0.59, 0.87) | 0.74  (0.63, 0.87) | 0.76  (0.65, 0.88) |
|  | **Heart attack symptom recognition** | | | | | |
| **Jaw, neck, or back pain** | **Feeling weak, lightheaded, or faint** | **Chest pain or discomfort** | **Pain or discomfort in arms or shoulder** | **Shortness of breath** | **All five symptoms** |
| [[11]](#footnote-11)Odds Ratio[[12]](#footnote-12)  (95% Confidence Interval) | [[13]](#footnote-13)Odds Ratio  (95% Confidence Interval) | [[14]](#footnote-14)Odds Ratio  (95% Confidence Interval) | [[15]](#footnote-15)Odds Ratio  (95% Confidence Interval) | [[16]](#footnote-16)Odds Ratio  (95% Confidence Interval) | [[17]](#footnote-17)Odds Ratio  (95% Confidence Interval) |
| **Cognitive Impairment status (ref: No cognitive impairment)** |  | | | | | |
| Has cognitive impairment | 0.87  (0.75, 1.01) | 0.99  (0.84, 1.16) | 0.91  (0.73, 1.12) | 0.73  (0.61, 0.87) | 0.90  (0.76, 1.07) | 0.88  (0.76, 1.01) |

**NHIS data processing**

This Table outlines in which data file all the variables used in the study can be found in.

|  |  |  |
| --- | --- | --- |
| **Variable** | **File** | **Categories** |
| Heart attack symptoms | | |
| Jaw, neck, or back pain:JAWP (2014, 2017) | Adult | 1=Yes,2=No, 7=Refused, 8=Not ascertained, 9=Don’t Know  \*Exclude 7,8,9 |
| Feeling weak, lightheaded, or faint:WEA (2014, 2017) | Adult | 1=Yes,2=No, 7=Refused, 8=Not ascertained, 9=Don’t Know  \*Exclude 7,8,9 |
| Chest pain or discomfort:CHE (2014, 2017) | Adult | 1=Yes,2=No, 7=Refused, 8=Not ascertained, 9=Don’t Know  \*Exclude 7,8,9 |
| Pain or discomfort in arms or shoulder:ARM (2014, 2017) | Adult | 1=Yes,2=No, 7=Refused, 8=Not ascertained, 9=Don’t Know  \*Exclude 7,8,9 |
| Shortness of breath:BRTH (2014, 2017) | Adult | 1=Yes,2=No, 7=Refused, 8=Not ascertained, 9=Don’t Know  \*Exclude 7,8,9 |
| **Stroke symptoms** | | |
| Sudden numbness or weakness of face, arm, or leg, especially on one side:FACE (2014, 2017) | Adult | 1=Yes,2=No, 7=Refused, 8=Not ascertained, 9=Don’t Know  \*Exclude 7,8,9 |
| Sudden confusion or trouble speaking: SPEAKING (2014, 2017) | Adult | 1=Yes,2=No, 7=Refused, 8=Not ascertained, 9=Don’t Know  \*Exclude 7,8,9 |
| Sudden trouble seeing in one or both eyes:EYE (2014, 2017) | Adult | 1=Yes,2=No, 7=Refused, 8=Not ascertained, 9=Don’t Know  \*Exclude 7,8,9 |
| Sudden trouble walking, dizziness, or loss of balance:WALKING (2014, 2017) | Adult | 1=Yes,2=No, 7=Refused, 8=Not ascertained, 9=Don’t Know  \*Exclude 7,8,9 |
| Severe headache with no known cause:HEADACHE (2014, 2017) | Adult | 1=Yes,2=No, 7=Refused, 8=Not ascertained, 9=Don’t Know  \*Exclude 7,8,9 |
| **Cognitive impairment** | | |
| In the person file  Is - - limited by difficulty remembering?:  (PLAREMEM (2014, 2017)) | Person | In the person file  PLAREMEM: 1=Yes,2=No, 7=Refused, 8=Not ascertained, 9=Don’t Know  \*Exclude 7,8,9 |
| **Sociodemographic factors** | | |
| Sex: SEX (2014, 2017) | Person | Variable Codes  1=Male  2=Female |
| Age: AGE\_P (2014, 2017) | Person | 65-74y, 75-84y, 85+  Variable Codes  00=Under 1  01-84=1-84 years  85=85+ years |
| Race: HISCODI3 (2014, 2017) | Person | Variable Codes  1=Hispanic  2=Non-Hispanic White,  3=Non-Hispanic Black  4=Non-Hispanic Asian  5=Non-Hispanic All other race groups  \*You should combine 4 and 5 to make just Other (Non-Hispanic Asian, Non-Hispanic All other race groups) so less categories |
| Poverty Line: RAT\_CAT4 (2014, 2017) | Family | Variable Codes   |  | | --- | | 01=Under 0.50 | | 02=0.50 - 0.74 | | 03=0.75 - 0.99 | | 04=1.00 - 1.24 | | 05=1.25 - 1.49 | | 06=1.50 - 1.74 | | 07=1.75 - 1.99 | | 08=2.00 - 2.49 | | 09=2.50 - 2.99 | | 10=3.00 - 3.49 | | 11=3.50 - 3.99 | | 12=4.00 - 4.49 | | 13=4.50 - 4.99 | | 14=5.00 and over | | 15=Less than 1.00 (no further detail) | | 16=1.00 - 1.99 (no further detail) | | 17=2.00 and over (no further detail) | | 96=Undefinable 99 Unknown |   \*Please recode this as:   * <100% (01=Under 0.50; 02=0.50 - 0.74; 03=0.75 - 0.99; 15=Less than 1.00 (no further detail)) * 100-199% (04=1.00 - 1.24; 05=1.25 - 1.49; 06=1.50 - 1.74; 07=1.75 - 1.99; 16=1.00 - 1.99 (no further detail)) * 200-299% (08=2.00 - 2.49; 09=2.50 - 2.99) * 300-399% (10=3.00 - 3.49; 11=3.50 - 3.99) * >400% (12=4.00 - 4.49; 14=5.00 and over)   \*Exclude 96=Undefinable 99 Unknown |
| Education: FM\_EDUC1 (2014, 2017) | Family | Variable Codes   |  | | --- | | 01=Less than/equal to 8th grade | | 02=9-12th grade, no high school diploma | | 03=GED recipient | | 04=High school graduate | | 05=Some college, no degree | | 06=AA degree, technical or vocational | | 07=AA degree, academic program | | 08=Bachelor's degree (BA, BS, AB, BBA) | | 09=Master's, professional, or doctoral degree | | 97=Refused | | 98=Not ascertained | | 99=Don't know |   \*Please recode this as:   * Less than high school (01=Less than/equal to 8th grade; 02=9-12th grade, no high school diploma) * High school graduate (03=GED recipient; 04=High school graduate) * Some college (05=Some college, no degree; 06=AA degree, technical or vocational; 07=AA degree, academic program) * College graduate (08=Bachelor's degree (BA, BS, AB, BBA), 09=Master's, professional, or doctoral degree)   \*Exclude (97=Refused, 98=Not ascertained, 99=Don't know) |
| Stratification Variables | | |
| Living arrangement: FM\_STRCP (2014, 2017) | Family | Categorize Living alone (11) , Lives with others (12, 21, 22, 23, 31, 32, 33, 41, 42, 43, 44, 45), Exclude 99   |  | | --- | | 11  Living alone | | 12  Living with roommate(s) | | 21  Married couple | | 22  Unmarried couple | | 23  All other adult-only families | | 31  Mother and biological or non-biological child(ren) only | | 32  Father and biological or non-biological child(ren) only | | 33  All other single-adult and child(ren) families | | 41  Married or unmarried parents with biological/adoptive child(ren) only | | 42  Parent (biological or adoptive), step parent, and child(ren) only | | 43  Parent (biological or adoptive), cohabiting partner, and child(ren) only | | 44  At least 1 (biological or adoptive) parent and 1+ child(ren), and other related adults | | 45  Other related and/or unrelated adults, 1+ child(ren), no biological or adoptive parent(s) | | 99 Unknown | |
| Stroke history: STREV (2014, 2017) | Adult | 1=Yes,2=No, 7=Refused, 8=Not ascertained, 9=Don’t Know  \*Exclude 7,8,9 |
| Heart attack history: MIEV (2014, 2017) | Adult | 1=Yes,2=No, 7=Refused, 8=Not ascertained, 9=Don’t Know  \*Exclude 7,8,9 |

|  |  |  |
| --- | --- | --- |
| Cognitive impairment | N | **Weighted %**[[18]](#footnote-18)  **(95% Confidence Interval)** |
| Yes | 1345 | 8.3 (7.9, 8.8) |
| No | 14627 | 91.6 (91.2, 92.0) |
| Missing (Includes Refused, Not Ascertained, and Don’t Know) | 6 | 0.04 (~0, 0.09) |

**Stroke and heart attack symptoms recognition for individuals >65 years with cognitive impairment information in the 2014 and 2017 NHIS surveys**

|  |  |  |
| --- | --- | --- |
| Symptom | **n** | **Weighted %**[[19]](#footnote-19) |
| Stroke Symptoms | | |
| **Sudden confusion or trouble speaking** |  |  |
| Yes | 14713 | 92.4 |
| No | 822 | 5.0 |
| Missing (includes Refused, Not ascertained, and Don’t Know) | 437 | 2.6 |
| **Sudden numbness or weakness of face, arm, or leg, especially on one side** |  |  |
| Yes | 14798 | 92.8 |
| No | 715 | 4.4 |
| Missing (includes Refused, Not ascertained, and Don’t Know) | 459 | 2.8 |
| **Sudden trouble seeing in one or both eyes** |  |  |
| Yes | 12642 | 79.5 |
| No | 2141 | 13.2 |
| Missing (includes Refused, Not ascertained, and Don’t Know) | 1189 | 7.3 |
| **Sudden trouble walking, dizziness, or loss of balance** |  |  |
| Yes | 14308 | 89.7 |
| No | 1110 | 6.9 |
| Missing (includes Refused, Not ascertained, and Don’t Know) | 554 | 3.4 |
| **Severe headache with no known cause** |  |  |
| Yes | 12348 | 77.6 |
| No | 2520 | 15.6 |
| Missing (includes Refused, Not ascertained, and Don’t Know) | 1104 | 6.8 |
| Heart attack Symptoms | | |
| **Jaw, neck, or back pain** |  |  |
| Yes | 11254 | 70.4 |
| No | 3975 | 25.0 |
| Missing (includes Refused, Not ascertained, and Don’t Know) | 743 | 4.6 |
| **Feeling weak, lightheaded, or faint** |  |  |
| Yes | 11655 | 72.8 |
| No | 3541 | 22.4 |
| Missing (includes Refused, Not ascertained, and Don’t Know) | 776 | 4.8 |
| **Chest pain or discomfort** |  |  |
| Yes | 14394 | 90.1 |
| No | 1279 | 8.1 |
| Missing (includes Refused, Not ascertained, and Don’t Know) | 299 | 1.8 |
| **Pain or discomfort in arms or shoulder** |  |  |
| Yes | 13799 | 86.6 |
| No | 1731 | 10.7 |
| Missing (includes Refused, Not ascertained, and Don’t Know) | 442 | 2.7 |
| **Shortness of breath** |  |  |
| Yes | 13357 | 83.7 |
| No | 2073 | 12.9 |
| Missing (includes Refused, Not ascertained, and Don’t Know) | 542 | 3.4 |

**For individuals >65 years with cognitive impairment and stroke and heart attack symptoms recognition information in the 2014 and 2017 NHIS surveys**

|  |  |  |
| --- | --- | --- |
| Income Categories | **n** | **Weighted %**[[20]](#footnote-20)  **(95% Confidence Interval)** |
| <100% | 1626 | 11.0; 9.6 |
| 100-199% | 3561 | 24.1; 21.3 |
| 200-299% | 2269; 2792 | 15.8; 17.5 |
| 300-399% | 1619; 1971 | 11.4; 12.5 |
| >400% | 3906; 4755 | 28.5; 31.0 |
| Missing (includes undefinable and unknown) | 1267 | 9.1; 8.1 |

|  |  |  |
| --- | --- | --- |
| **Covariates** | **>65 years** with cognitive impairment and stroke and heart attack symptoms recognition information  (n = 13637) | |
| **n** | **Weighted %**[[21]](#footnote-21)  **(95% Confidence Interval)** |
| **Sex** |  | |
| Male | 5603 | 40.9 (40.1, 41.7) |
| Female | 8034 | 59.1 (58.3, 59.9) |
| Missing | 0 | 0 |
| **Race** |  | |
| White | 10421 | 78.8 (78.1, 79.5) |
| Black | 1472 | 9.7 (9.2, 10.2) |
| Hispanic | 1078 | 7.5 (7.1, 7.9) |
| Other Race | 554 | 3.5 (3.2, 3.8) |
| Missing | 112 | 0.6 (0.5, 0.7) |
| **% of Poverty Line (imputed)** |  | |
| <100% | 1303 | 9.1 (8.6, 9.6) |
| 100-199% | 2992 | 20.9 (20.2, 21.6) |
| 200-299% | 2397 | 17.5 (16.9, 18.1) |
| 300-399% | 1744 | 12.9 (12.3, 13.5) |
| >400% | 4230 | 32.4 (31.6, 33.2) |
| Missing (Undefinable and Unknown) | 971 | 7.3 (6.9, 7.7) |
| **Education** |  | |
| Less than high school | 1699 | 11.8 (11.3, 12.3) |
| High school graduate | 3281 | 23.7 (23.0, 24.4) |
| Some college | 3922 | 28.4 (27.6, 29.2) |
| College graduate | 4701 | 35.9 (35.1, 36.7) |
| Missing () | 34 | 0.3 (0.2, 0.4) |
| **Living arrangement** |  |  |
| Lives alone | 6542 | 47.4 (46.6, 48.2) |
| Lives with others | 7185 | 52.6 (51.8, 53.4) |
| **Stroke history** |  |  |
| Had a stroke | 1079 | 8.0 (7.5, 8.5) |
| Never had a stroke | 12539 | 91.9 (91.4, 92.4) |
| Missing | 19 | 0.1 (0.05, 0.2) |
| **Heart attack history** |  |  |
| Had a heart attack | 1255 | 8.9 (8.4, 9.4) |
| Never had a heart attack | 12367 | 90.9 (90.4, 91.4) |
| Missing | 15 | 0.1 (0.05, 0.2) |

1. Survey weights in the National Health Interview Survey have been used to obtain the weighted percentages. [↑](#footnote-ref-1)
2. Survey weights in the National Health Interview Survey have been used to obtain the weighted percentages. [↑](#footnote-ref-2)
3. Survey weights in the National Health Interview Survey have been used to obtain the weighted percentages. [↑](#footnote-ref-3)
4. Survey weights in the National Health Interview Survey have been used to obtain the weighted percentages. [↑](#footnote-ref-4)
5. [↑](#footnote-ref-5)
6. [↑](#footnote-ref-6)
7. [↑](#footnote-ref-7)
8. [↑](#footnote-ref-8)
9. [↑](#footnote-ref-9)
10. [↑](#footnote-ref-10)
11. [↑](#footnote-ref-11)
12. Logistic models had NHIS survey weighting applied to them and included cognitive impairment status, age, sex, race, % of poverty line, and education as covariates. [↑](#footnote-ref-12)
13. [↑](#footnote-ref-13)
14. [↑](#footnote-ref-14)
15. [↑](#footnote-ref-15)
16. [↑](#footnote-ref-16)
17. [↑](#footnote-ref-17)
18. Survey weights in the National Health Interview Survey have been used to obtain the weighted percentages. [↑](#footnote-ref-18)
19. Survey weights in the National Health Interview Survey have been used to obtain the weighted percentages. [↑](#footnote-ref-19)
20. Survey weights in the National Health Interview Survey have been used to obtain the weighted percentages. [↑](#footnote-ref-20)
21. Survey weights in the National Health Interview Survey have been used to obtain the weighted percentages. [↑](#footnote-ref-21)