

Alternative and Complementary Medicine (CAM) Use in the U.S.

New Data from the National Health Interview Survey (NHIS) Available in the Integrated Health Interview Series (IHIS)

Brian R. Lee – MPH, PhD, Minnesota Population Center

email: leex1412@umn.edu

Miriam L. King – PhD, Minnesota Population Center

Andrew Ward – PhD, MPH, Kansas Health Institute

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Objectives

- CAM usage in the U.S.
- Background to IHIS
- IHIS website content
- Performing a data extraction
- Sample analyses

CAM in the U.S. Population

- Almost 4 out of 10 adults used CAM in past 12 months (NCHS, 2007)
- Modest increases since 2002
 - Acupuncture
 - Massage
 - Meditation
 - Yoga
- Differences in prevalence across multiple factors
 - Education
 - Health status
 - Cultural background
- Important to consider motivational factors and perceived benefits

Overview

- The Integrated Health Interview Series (IHIS) is a NICHD-funded collaboration at the University of MN
 - School of Public Health
 - Minnesota Population Center

- Harmonize, document, and disseminate publicly-available NHIS data from the 1960s to the present

Challenges to NHIS Data Use

- A large number of distinct files per year (range, 6-21 files)
- Managing different survey levels (household, family, person, episode)
- Numerous variables (~33,000 unique variable names between 1969 and 2009)
- Changes in question wording and response categories
- Harmonization of various file structures and variables, sample weighting schemes, and variance estimation

IHIS Data

- IHIS now includes over 7000 integrated variables from:
 - Household and Person files for 1969-2009
 - Sample Adult/Sample Child files for 1997-2009
 - Supplements from 1969-1996
- Household and person-level variables

IHIS Content

- Demographics
- Socio-economic
- Housing characteristics
- Geographical identifiers
- Chronic health conditions
- Healthy behaviors
- Risky behaviors
- Activity limitations
- Access to medical care
- Health insurance coverage
- Mental health
- Primary preventive practices
- Alternative health practices




CAM Topics in IHIS

- Acupuncture
- Ayurveda
- Biofeedback
- Chelation
- Chiropractic
- Lifestyle diet
- Energy healing
- Folk medicine
- Herbal supplements
- Homeopathic treatment
- Hypnosis
- Massage
- Movement therapy
- Naturopathy
- Prayer
- Relaxation techniques
- Vitamins
- Yoga

CAM Measures

- Ever use
- Recent use
- Frequency of use
- Cost
- Reasons for use
- Reasons for not using
- Concordant conventional medicine
- Treatment for specific conditions
- Perceived benefit

IHIS Website (www.ihis.us)

| | | |
|---|--|---|
| MINNESOTA POPULATION CENTER, UNIVERSITY OF MINNESOTA | | |
|  Integrated Health Interview Series | | |
| Home Create an Extract Variables FAQ Contact Us | | |
| <p>Data</p> <p>IHIS Registration Create an Extract Download or Revise Extracts Get Other NHIS Data</p> <p>Documentation</p> <p>FAQ Variables Surveys User Notes Citation IHIS-NHIS Concordance</p> <p>Supplementary Material</p> <p>Links to NCHS Brochure Newsletter Bibliography</p> <p>Contact Us</p> <p>Comments and Questions People</p> | <p>INTEGRATED HEALTH INTERVIEW SERIES</p> <p>Harmonized data and documentation for the U.S. National Health Interview Survey (NHIS)</p> <hr/> <ul style="list-style-type: none"> • Annual data from the 1960s to the present • Easily linked to additional variables in NHIS public use data • Comprehensive on-line documentation • Absolutely free! <hr/> <p>over 40 years of data • over 5000 integrated variables</p>  <p>Harmonizing the leading source of information on the health of the U.S. population</p> | <p>IHIS News</p> <p>New data released for 1969-2009 (08/10)</p> <p>BMICALC and linking keys corrected (08/10)</p> <p>Other MPC Projects</p> <p>IPUMS-International IPUMS-USA IPUMS-CPS NAPP NHGIS ATUS</p> |
| <p>Funding provided by:</p>  <p>National Institute of Child Health and Human Development</p> <p>Copyright © Minnesota Population Center, University of Minnesota.</p> | | |

Variable Availability

| | | | | | |
|----------------------|----------|-------|----------------|------------------|--------------------|
| Integrated Variables | | | Select Samples | Search Variables | Options and Help ▾ |
| Household ▾ | Person ▾ | A-Z ▾ | | | |

Use the menu buttons to browse variables and modify how they are displayed. [More information](#) on using this page.

Variable Content

- Each variable on the IHIS website contains
 - Availability (which survey years)
 - Universe statement
 - Codes and frequencies
 - Recommended weights
 - Survey text
 - Comparability over survey years

Variable Description & Comparability

HEALTH

Label: Health status

[Include in extract](#)

[Select samples](#)

Availability [\[hide\]](#)

1972-2009

Universe [\[hide\]](#)

1972-2009: All persons.

Weights [\[hide\]](#)

1972-2009 : [PERWEIGHT](#)

Codes

Survey Text

Description

HEALTH rates an individual's general health (as self-reported by the person in question or evaluated by a family member) on a four-point (1972-81) or five-point (1982 forward) Likert scale, ranging from "excellent" to "poor" (along with an unrated "unknown" category).

For 1997 forward, [HSTATYR](#) reports whether the health status of sample adults and sample children was better, worse, or about the same as one year ago.

Comparability — General

Beginning in 1982, the number of rank-ordered responses for respondents to select from changed from four (excellent, good, fair, and poor) to five (excellent, very good, good, fair, and poor). The relative frequency of responses more favorable than "fair" (i.e., combining "excellent," "very good," and "good" versus combining "excellent" and "good") is similar before and after 1982. Nonetheless, researchers should exercise care in comparing results before and after 1982. For analyses straddling the 1972-81 and 1982 forward divide, analysts may wish to recode HEALTH dichotomously (comparing persons with "poor" or "fair" health to persons whose health is rated "good" or better, or comparing persons whose health is rated "poor" to persons whose health is rated better than "poor.")

Variable Codes and Frequencies

HEALTH

Label: Health status

Include in extract

Select samples

- Category availability view
 Case-count view (unweighted)

| Code | Label | usa 2009 | usa 2008 | usa 2007 | usa 2006 | usa 2005 | usa 2004 | usa 2003 | usa 2002 | usa 2001 | usa 2000 |
|------|---------------------------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| 1 | Excellent | 31,057 | 26,080 | 26,487 | 26,015 | 33,754 | 32,409 | 32,162 | 33,409 | 36,621 | 36,163 |
| 2 | Very Good | 26,429 | 22,073 | 22,464 | 22,677 | 29,938 | 28,585 | 28,374 | 28,108 | 31,068 | 30,948 |
| 3 | Good | 21,803 | 18,484 | 19,183 | 19,366 | 25,009 | 23,743 | 22,348 | 22,442 | 23,239 | 23,877 |
| 4 | Fair | 6,957 | 5,645 | 5,679 | 5,743 | 7,336 | 7,053 | 6,642 | 6,755 | 7,114 | 6,884 |
| 5 | Poor | 2,098 | 1,817 | 1,791 | 1,705 | 2,322 | 2,289 | 2,152 | 2,195 | 2,300 | 2,324 |
| 7 | Unknown-refused | 55 | 91 | 120 | 148 | 210 | 263 | 372 | 334 | 295 | 286 |
| 8 | Unknown-not ascertained | . | 1 | 1 | 1 | . | 6 | . | 1 | . | 4 |
| 9 | Unknown-don't know (pre1997: Unknown) | 47 | 45 | 39 | 61 | 80 | 112 | 98 | 141 | 122 | 132 |

Data Extract: Samples

Data extract, step 2 of 6: Select samples ([help](#))

Select the samples to be included in your extract.

Extract file type

- Rectangular
- Hierarchical

Select samples

- 1997 forward
- 1960s
 - 1969
- 1970s
 - 1970
 - 1971
 - 1972
 - 1973
 - 1974
 - 1975
 - 1976
 - 1977
 - 1978
 - 1979
- 1980s
 - 1980
 - 1981
 - 1982
 - 1983
 - 1984
 - 1985
 - 1986
 - 1987
 - 1988
 - 1989
- 1990s
 - 1990
 - 1991
 - 1992
 - 1993
 - 1994
 - 1995
 - 1996
 - 1997
 - 1998
 - 1999
- 2000s
 - 2000
 - 2001
 - 2002
 - 2003
 - 2004
 - 2005
 - 2006
- All Samples

[Continue to next step](#)

[Continue to next step](#)

Data Extract: Variables

Data extract, step 3 of 6: Select variables – review ([help](#))

Listed below are the variables currently included in your data extract. You can unselect variables, add more variables, or continue with the rest of the extract process.

An "X" indicates the variable is available in the sample.

| Variables saved for extract [top] | | | | | | | | | | |
|---|----------------------------|---|------|------|------|------|------|------|------|------|
| Add to Extract | Variable | Label | Type | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 |
| <input checked="" type="checkbox"/> | PSU | Primary sampling unit (PSU) for variance estimation | H | X | X | X | X | X | X | X |
| <input checked="" type="checkbox"/> | SERIAL | Sequential Serial Number, Household Record | H | X | X | X | X | X | X | X |
| <input checked="" type="checkbox"/> | STRATA | Stratum for variance estimation | H | X | X | X | X | X | X | X |
| <input checked="" type="checkbox"/> | YEAR | Survey year | H | X | X | X | X | X | X | X |
| <input checked="" type="checkbox"/> | PERNUM | Person number in household | P | X | X | X | X | X | X | X |
| <input checked="" type="checkbox"/> | PERWEIGHT | Final basic annual weight | P | X | X | X | X | X | X | X |
| <input checked="" type="checkbox"/> | SAMPWEIGHT | Sample adult/sample child weight | P | X | X | X | X | X | X | X |

| | | | |
|---|--|---|--|
| Variables | | | Options and Help  |
| Household  | Person  | A-Z  | |

| Education Variables -- Person [top] | | | | | | | | | | | |
|---|-----------------------------|---|------|-----------------------|----|----|----|----|----|----|----|
| Include in extract | Variable | Variable Label | Type | Codes | 06 | 05 | 04 | 03 | 02 | 01 | 00 |
| <input checked="" type="checkbox"/> | EDUC | Educational attainment | P | codes | X | X | X | X | X | X | X |
| <input checked="" type="checkbox"/> | EDUCREC1 | Educational attainment recode, nonintervalled | P | codes | X | X | X | X | X | X | X |
| <input checked="" type="checkbox"/> | EDUCREC2 | Educational attainment recode, intervalled | P | codes | X | X | X | X | X | X | X |
| <input checked="" type="checkbox"/> | HEADSTAREV | Ever attended Head Start | P | codes | X | X | X | X | X | X | X |
| <input checked="" type="checkbox"/> | HEADSTARNOW | Now attending Head Start | P | codes | X | X | X | X | X | X | X |

Data Extract: Summary

Data extract, step 6 of 6: Submit ([help](#))

Extract File Type and Estimated Size

File Type: Rectangular
Estimated size: 26.3 Mb

Samples

| Sample | Note |
|--------|------|
| 2000 | |
| 2001 | |
| 2002 | |
| 2003 | |
| 2004 | |
| 2005 | |
| 2006 | |

Variables

| Type | Variable | Label |
|------|-----------------------------|---|
| H | YEAR | Survey year |
| H | SERIAL | Sequential Serial Number, Household Record |
| H | STRATA | Stratum for variance estimation |
| H | PSU | Primary sampling unit (PSU) for variance estimation |
| P | PERNUM | Person number in household |
| P | PERWEIGHT | Final basic annual weight |
| P | SAMPWEIGHT | Sample adult/sample child weight |
| P | EDUC | Educational attainment |
| P | EDUCREC1 | Educational attainment recode, nonintervalled |
| P | EDUCREC2 | Educational attainment recode, intervalled |
| P | HEADSTAREV | Ever attended Head Start |
| P | HEADSTARNOW | Now attending Head Start |

Use these buttons to make changes to your extract.

Write a brief description of your extract (optional)

Analysis of Education Variables

Download Data & Documentation



INTEGRATED HEALTH INTERVIEW SERIES

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Download or Revise Extracts

Use the links provided below to download a data extract (right-click the links for the data, command files, and codebook) or to revise an extract (that is, use a previous extract as the basis for defining a new extract). For instructions on downloading and opening an extract on your computer go [here](#). Note: data files will be available for 72 hours, after which they are subject to deletion.

| Extracts for Download or Revision | | | | | | |
|-----------------------------------|----------|----------------------|--|--------------------------|------------------------|---|
| Extract Number | Date | Data | Command Files | Codebook | Revise Extract | Description |
| 00018 | 01-21-10 | data | SPSS SAS STATA | codebook | revise | Analysis of Education Variables |
| 00017 | 01-20-10 | data | SPSS SAS STATA | codebook | revise | Revision of (IHIS worked examples) |
| 00016 | 01-20-10 | data | SPSS SAS STATA | codebook | revise | IHIS worked examples |
| 00015 | 09-01-09 | | | | revise | testing singleton PSUs |
| 00014 | 09-01-09 | | | | revise | Revision of (testing 1969 integrity) |
| 00013 | 09-01-09 | | | | revise | testing 1969 integrity |
| 00012 | 04-17-09 | | | | revise | Revision of 00011 |
| 00011 | 04-16-09 | | | | revise | |
| 00010 | 03-11-09 | | | | revise | IHIS data check |
| 00009 | 01-16-08 | | | | revise | work for SHADAC |
| 00008 | 12-10-07 | | | | revise | Revision of 005 (cohort effect analysis of BMI over time) |
| 00007 | 12-10-07 | | | | revise | Revision of 006 (assessing bmi coding) |
| 00006 | 11-30-07 | | | | revise | assessing bmi coding |
| 00005 | 11-30-07 | | | | revise | cohort effect analysis of BMI over time |
| 00004 | 11-07-07 | | | | revise | Revision of 002 (cohort effects analysis) |
| 00003 | 10-25-07 | | | | revise | data categorizing verification |
| 00002 | 10-24-07 | | | | revise | cohort effects analysis |
| 00001 | 10-04-07 | | | | revise | cohort effects analysis |

Funding provided by: [NICHD](#).

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Proportion of Reported CAM use Among Adults 18+, by Survey Year

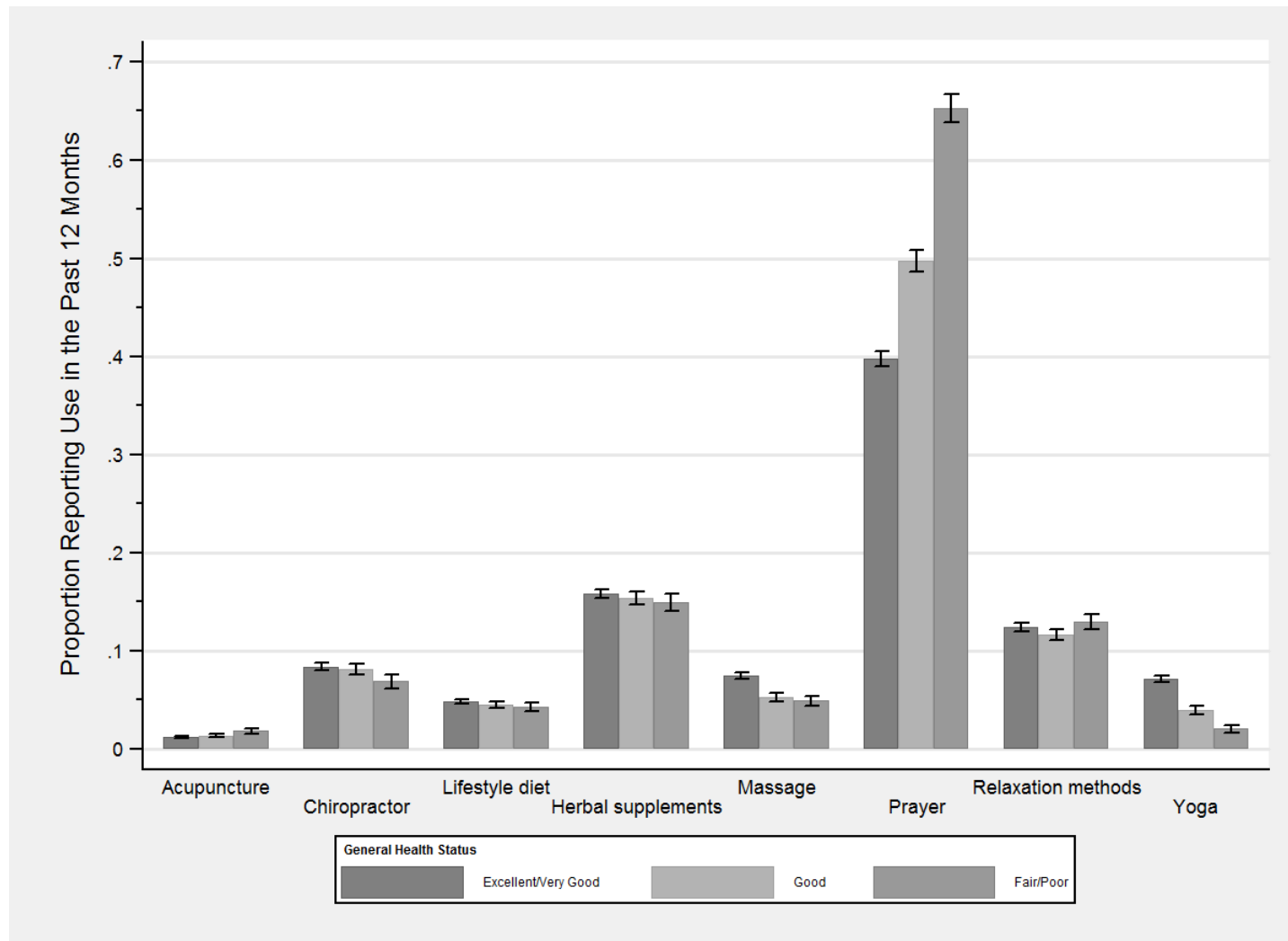
| Class ^a | CAM | 1999 | | 2002 | | 2007 | |
|--------------------|--------------|----------|--------------|----------|--------------|----------|--------------|
| | | Estimate | 95% CI | Estimate | 95% CI | Estimate | 95% CI |
| Ever | Acupuncture | --- | --- | 0.040 | (0.04, 0.04) | 0.064 | (0.06, 0.07) |
| | Chiropractor | --- | --- | 0.199 | (0.19, 0.21) | 0.236 | (0.23, 0.25) |
| | Yoga | --- | --- | 0.076 | (0.07, 0.08) | 0.100 | (0.09, 0.10) |
| Recent | Acupuncture | 0.014 | (0.01, 0.02) | 0.011 | (0.01, 0.01) | 0.014 | (0.01, 0.02) |
| | Chiropractor | --- | --- | 0.075 | (0.07, 0.08) | 0.086 | (0.08, 0.09) |
| | Yoga | --- | --- | 0.052 | (0.05, 0.05) | 0.061 | (0.06, 0.07) |
| Treat | Acupuncture | --- | --- | 0.859 | (0.82, 0.90) | 0.853 | (0.81, 0.90) |
| | Chiropractor | --- | --- | 0.865 | (0.85, 0.88) | 0.802 | (0.78, 0.82) |
| | Yoga | --- | --- | 0.171 | (0.15, 0.19) | 0.137 | (0.12, 0.16) |

^a Ever: ever use

Recent: use within past 12 month

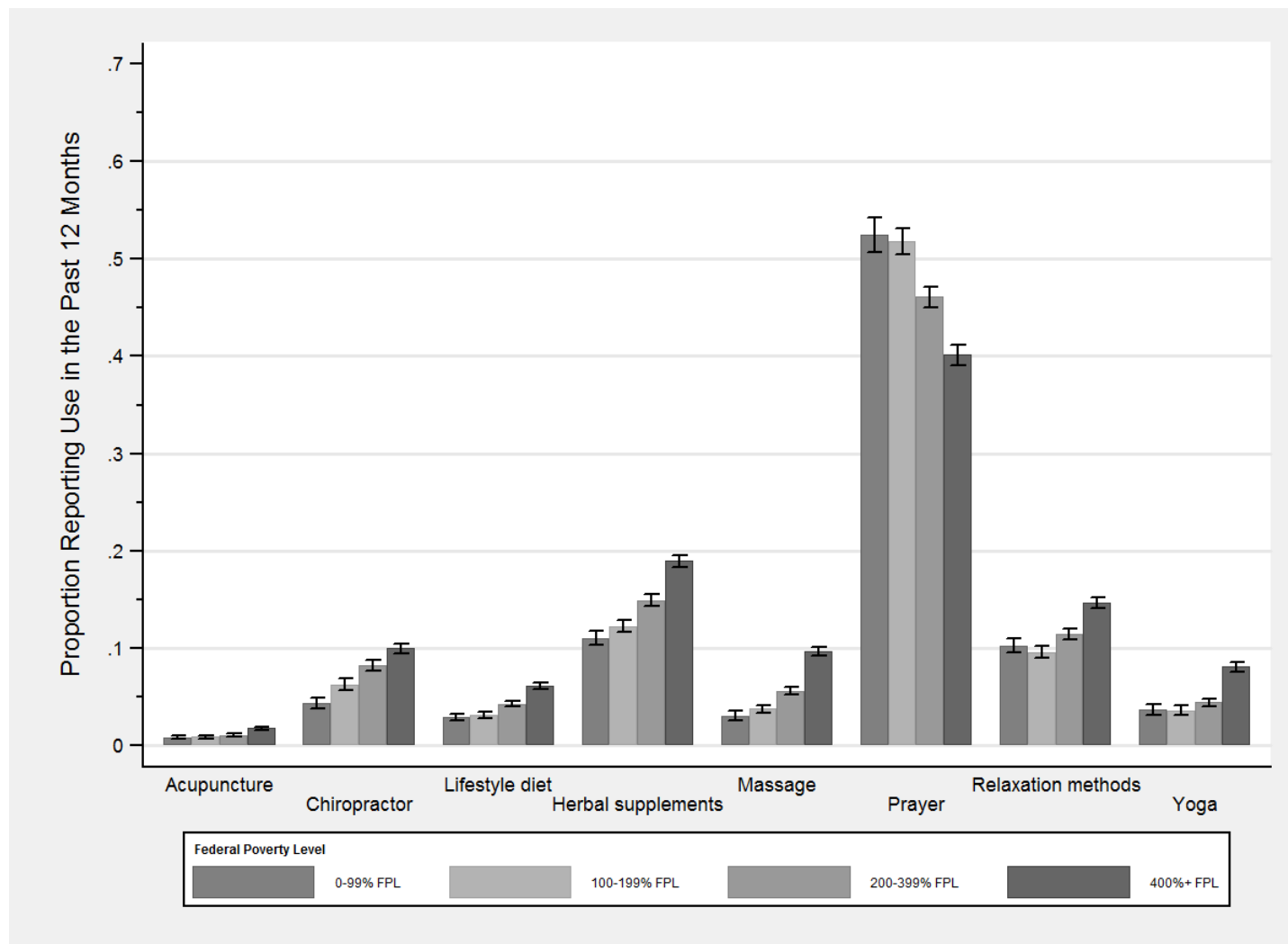
Treat: use within past 12 months, and used to treat a specific health problem

Recent CAM use Among Adults 18+, by General Health Status



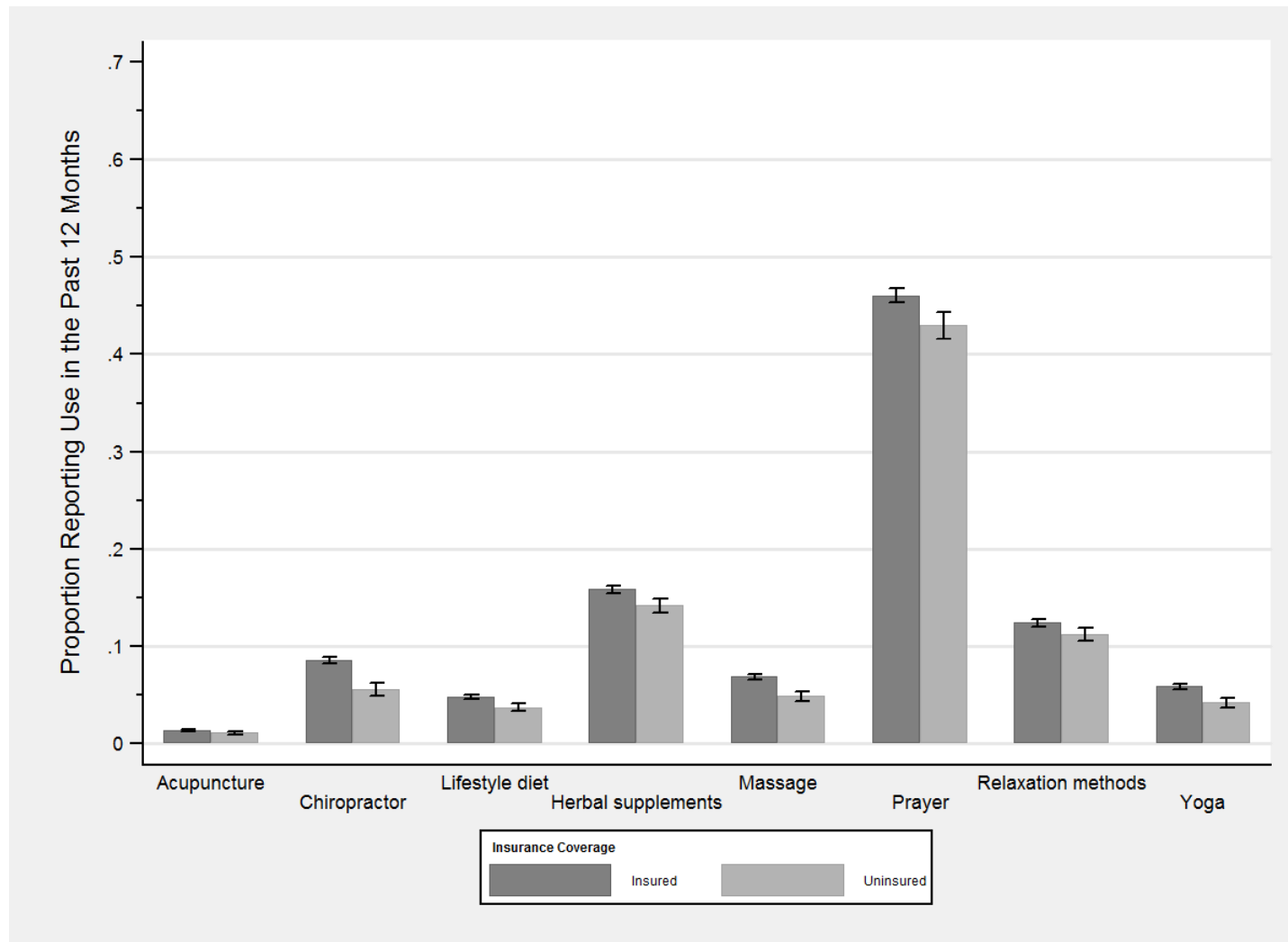
Source: 1999, 2002, and 2007 IHIS data

Recent CAM use Among Adults 18+, by Poverty Status



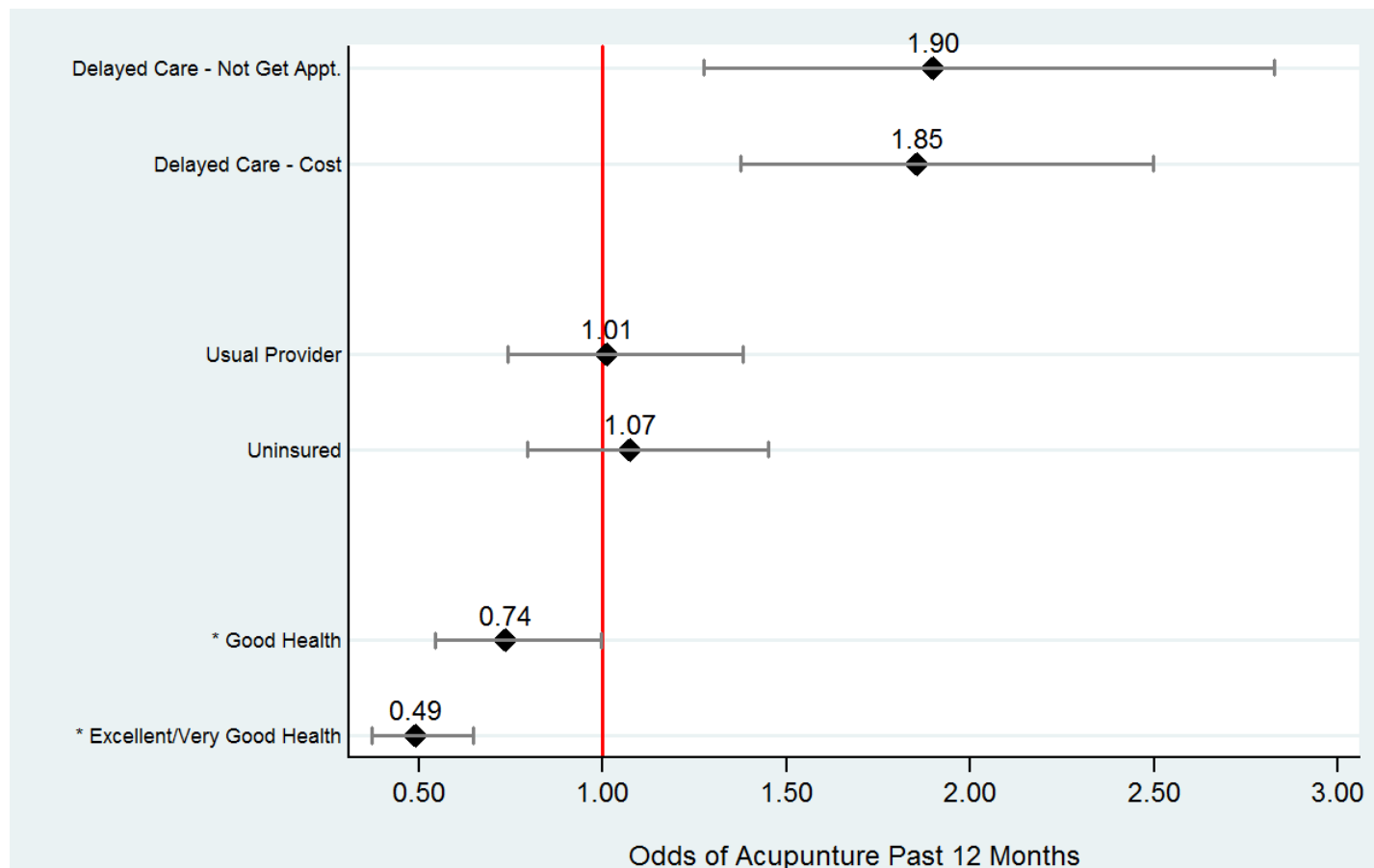
Source: 1999, 2002, and 2007 IHIS data

Recent CAM use Among Adults 18+, by Insurance Status



Source: 1999, 2002, and 2007 IHIS data

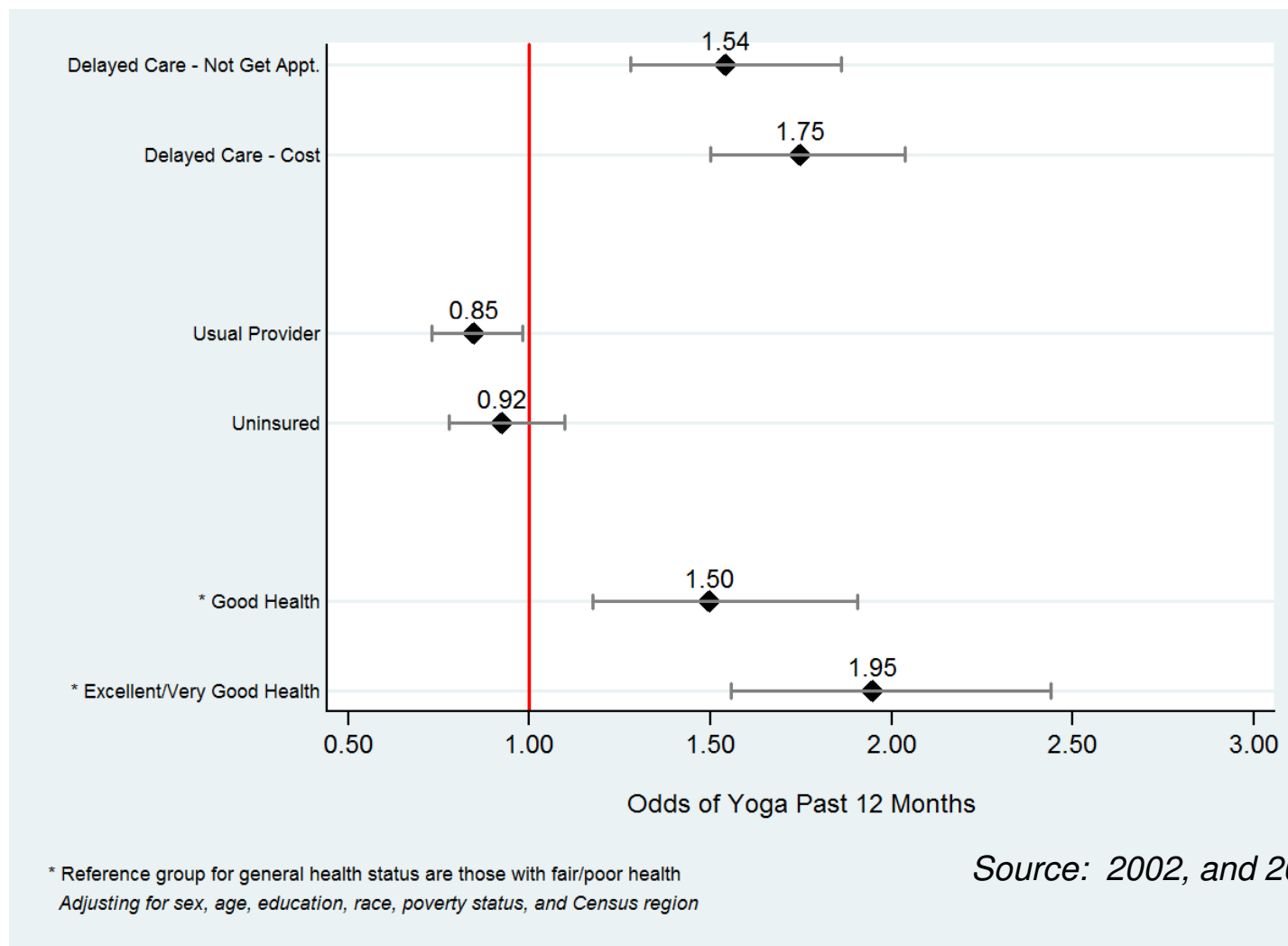
Odds of Acupuncture for Adults 18+, Based on General Health Status and other Health-related Factors



* Reference group for general health status are those with fair/poor health
 Adjusting for sex, age, education, race, poverty status, and Census region

Source: 2002, and 2007 IHIS data

Odds of Yoga for Adults 18+, Based on General Health Status and other Health-related Factors



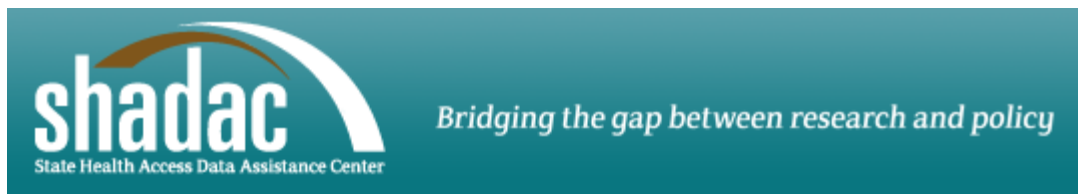
Why Use the IHIS System

- Available FREE online
- Easy to use
- Saves time
- Consistent coding
- Online documentation
- Comparisons over four decades
- Online tabulator
- Customizable extracts
- Syntax files (SAS, SPSS, Stata)
- Variable search engine
- User support
ihis@pop.umn.edu

For Additional Information



- <http://www.ihis.us>
- ihis@pop.umn.edu



- <http://www.shadac.org>



- <http://www.pop.umn.edu>