

FUTURE OF NURSING™

Campaign for Action

AT THE CENTER TO CHAMPION NURSING IN AMERICA



The American Community Survey and Nursing Workforce Data

Webinar Summary

March 25, 2015

Presenters:

Winifred Quinn, PhD Director, Advocacy and Consumer Affairs, Center to Champion Nursing, AARP

Joanne Spetz, PhD Professor, Philip R. Lee Institute for Health Policy Studies, Associate Director of Research Strategy, Center for the Health Professions, University of California, San Francisco

Tim Bates, MPP Senior Analyst, Philip R. Lee Institute for Health Policy Studies, University of California, San Francisco

Webinar Goals

- Demonstrate how the American Community Survey's Public Use Microdata Sample (PUMS) can be used to describe key characteristics of the RN workforce at the state level, including age, race/ethnicity, and educational attainment.

Overview


The American Community Survey (ACS) is a national household survey administered by the US Census Bureau. It's designed to collect social, demographic, and economic information describing the civilian population in the United States.

Across the country, there is a movement to advance the field of nursing so that all Americans have access to high quality, patient-centered care in a health care system where nurses contribute as essential partners in achieving success. This national level [Future of Nursing: Campaign for Action](#) is a result of the Institute of Medicine's landmark 2010 report on the [Future of Nursing: Leading Change, Advancing Health](#).

The *Campaign for Action's* field-based teams, the [Action Coalitions](#) (ACs), are leading this movement and are equipping themselves with knowledge gained from technical assistance provided by the Center to Champion Nursing in America (CCNA), a joint initiative of AARP, the AARP Foundation, and the Robert Wood Johnson Foundation. Such technical assistance comes in the form of webinars, face to face interactions, and other facilitated engagements with public policy leaders, content experts, consultants, and Action Coalition peers across the country.

As the National Sample Survey of Registered Nurses (NSSRN) is no longer conducted, the ACS is the best alternative currently available for analysis of the RN workforce.

Winifred Quinn of CCNA said today's webinar is being recorded. Find the webinar and summary at www.campaignforaction.org/webinars



Contact your university to see if graduate students in economics, for example, might be willing to do a data project for you, said Joanne Spetz.

Tim Bates of the University of California and a data expert gave an overview of ACS and demonstrated how the Action Coalitions could use this tool.

ACS is administered by the US Census Bureau and the data is accessed through the American Fact Finder. There are some 31/2 million households which are part of the annual ACS statistics. The surveys are conducted monthly with the data released annually.

The American Fact Finder website is <http://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml>

Estimates of figures under the Public Use Microdata Sample (PUMS) are recorded for one year, three years and five years. Estimates are compiled by geography – nation, state, county and census tract -- and the availability of figures depends on the size of population. At least 65,000 population or greater is necessary for a yearly estimate.

Important websites are the American Community Survey:

<http://www.census.gov/acs/www>

http://www.census.gov/acs/www/data_documentation/public_use_microdata_sample

“This is a household survey. It's self-reported,” said Bates. The person answering the survey may be talking about someone else in the household. “It might include guesses.”

There are three codes involving nurses – RN, Nursing Anesthetists and Nurse Practitioners.

The following is a screen capture of Public Use Microdata Sample (PUMS):

Census.gov > American Community Survey > Data & Documentation: Public Use Microdata Sample (PUMS)

American Community Survey

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Public Use Microdata Sample (PUMS)

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The American Community Survey (ACS) Public Use Microdata Sample (PUMS) files are a set of untabulated records about individual people or housing units. The Census Bureau produces the PUMS files so that data users can create custom tables that are not available through pretabulated (or summary) ACS data products.

Summary products, such as the tables and profiles accessible via American FactFinder (AFF), show data that have already been tabulated for specific geographic areas.

PUMS files, in contrast, include population and housing unit records with individual response information such as relationship, sex, educational attainment, and employment status.

Confidentiality of PUMS

The confidentiality of ACS respondents is protected through a variety of means, ensuring that it is impossible to identify individuals who provide any response, yet making sure the results are still useful. The PUMS records do not contain names, addresses, or any information that can identify a specific housing unit, group quarter, or person.

Why Use PUMS?

PUMS files are perfect for people, such as students, who are looking for greater accessibility to inexpensive data for research projects. Social scientists often use the PUMS for regression analysis and modeling applications.

What's Available and How Can I Access PUMS?

The Census Bureau produces 1-year, 3-year, and 5-year ACS PUMS files. The 3-year and 5-year PUMS files are multiyear combinations of the 1-year PUMS file with appropriate adjustments to the weights and inflation adjustment factors. The PUMS files are accessible via [American FactFinder](#), the Census Bureau's [FTP site](#), and [DataFerrett](#). Statistical software is needed to use the PUMS files from American FactFinder and the FTP site.

Key variables in the PUMS dataset:

OCCP – census occupation code

SCHL – educational attainment – should exclude anyone without a high school degree

ESR – employment status recode (employed/unemployed/not in labor force)

FOD1P/FOD2P – field of degree for first and second bachelor's degrees

PWGTP – individual person weight

PWGTP1-PWGTP80 – replicate weights used for calculating variance

AGEP – age of person

SEX – male/female

HISP – Hispanic ethnicity

INDP – census industry code

RAC1P – person’s reported race (distinct from Hispanic ethnicity)

The following table shows a sample count of RNs in ACS PUMS:

State	2013 1-year	2011-2013 3-year	State	2013 1-year	2011-2013 3-year
Alabama	596	1,739	Montana	123	325
Alaska	55	146	Nebraska	265	744
Arizona	671	1,881	Nevada	242	657
Arkansas	315	934	New Hampshire	227	656
California	3417	9,804	New Jersey	1,049	3,087
Colorado	543	1,598	New Mexico	155	516
Connecticut	479	1,301	New York	2,233	6,619
Delaware	102	336	North Carolina	1,191	3,374
DC	26	64	North Dakota	86	264
Florida	2,129	6,402	Ohio	1,584	4,492
Georgia	996	2,798	Oklahoma	354	1,085
Hawaii	133	382	Oregon	424	1,246
Idaho	117	407	Pennsylvania	1,687	5,022
Illinois	1,479	4,319	Rhode Island	172	468
Indiana	757	2,333	South Carolina	534	1,638
Iowa	384	1,255	South Dakota	122	363
Kansas	385	1,133	Tennessee	815	2,250
Kentucky	549	1,596	Texas	2,493	6,985
Louisiana	496	1,426	Utah	241	751
Maine	190	570	Vermont	81	261
Maryland	691	2,100	Virginia	989	2,737
Massachusetts	971	2,867	Washington	740	2,196
Michigan	1,189	3,410	West Virginia	208	663
Minnesota	793	2,260	Wisconsin	752	2,209
Missouri	354	1,038	Wyoming	62	172

Bates acknowledged that data understanding is highly technical. He said he would generate a file that users could access. He told the webinar audience that one of the variables they should create is a BA degree in nursing or a higher degree in any other field. As an example, there were 54 percent nurses in California in 2013 who had a BA degree in nursing or a higher degree in another field.

He also recommended not to use any PUMS data prior to 2005.

Joanne Spetz of the University of California of San Francisco, urged the audience to contact departments in universities, like the economics department, to see if there are graduate students who may be willing to assist an Action Coalition with a data project.

The IOM's recommendations include: the need for more advanced education of registered nurses; nurses leading innovations in health care and being appointed to decision making bodies; all nurses practicing to the full extent of their education and training; a more diverse nursing workforce and faculty; and more interprofessional collaboration among nurses, physicians, and other members of the health care team in the educational and clinical environments.

For more information from the Center to Champion Nursing in America about this webinar, technical assistance or other questions related to the Future of Nursing, Campaign for Action contact Michael Pheulpin at MPheulpin@aarp.org or 202-434-3882 or Melissa Marinelarena at mmarinelarena@aarp.org.

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