

Measuring Income and Poverty in Federal Health-Related Surveys

Constance F. Citro, *Director Committee on National Statistics* NCVHS – Hyattsville, MD – March 8, 2012

BOTTOM LINE



Critical (but challenging) to include good income measures in federal health/health care surveys and to be able to approximate the new Supplemental Poverty Measure Just as critical not to reinvent the wheel interagency collaboration is key My remarks are informed by my work at CNSTAT on measuring income and poverty

What is the Committee on National Statistics?

Established in 1972 at the National Academies to improve the statistical methods and information on which public policy decisions are based

Carries out studies to foster better measures of the economy, crime, poverty, and other domains, and serves as coordinating force in the highly decentralized U.S. federal statistical system

CNSTAT Reports on Measuring Income & Poverty







1995



2005

THE NATIONAL ACADEMIES Advisers to the Watton on Science, Engineering, and Medicing

CNSTAT Reports on Relevant Surveys









1998





THE NATIONAL ACADEMIES Advisers to the Nation on Science, Engineering, and Medicing

Uses of Income Statistics— To describe the population

Annual income is one of the most commonly used measures of the economic condition of the population nationwide and for geographic areas and subgroups

- Descriptions often focus on median household or family income and/or on multiples of the poverty threshold (<100%,<200%, etc.)
- The Gini coefficient is another, although not as often cited, statistic on income inequality

Uses of Income Statistics— To evaluate programs



Federal agencies use income statistics to evaluate how effectively their programs reach the target population (e.g., USDA Food and Nutrition Service regularly estimates SNAP "take-up rates") DHHS will be using poverty statistics and, hopefully, a new measure of medical care economic risk to evaluate take-up rates and economic effects of expanded health insurance coverage under ACA Medicaid eligibility and Medicare Part D and ACA copays/subsidies key off income as percent of poverty

Uses of Income Statistics— To understand relationships



- A mixed bag: Jim Smith et al. have addressed complex relationships of health with current income and with income when growing up
- Key findings:
- >health shocks in later life reduce income
- >education and childhood poverty status (not current income or wealth) positively affect health over the life course

Bottom Line



Income may be less needed than education for some research (e.g., on causal pathways between SES and health), but it is key for research on disparities in health care access, the economic effects of episodes of illness, the economic impact of ACA, and similar topics

Income also needed in federal health surveys for descriptive and program evaluation purposes

Income Is Difficult to Collect

- Unfortunately, income is hard to measure in surveys—
- >Income is underreported for many income types, sometimes by substantial amounts
- >Income amounts are often left blank
- Poverty measurement using the new Supplemental Poverty Measure is complicated by the need for additional information

Underreporting



Total annual income is underreported in surveys relative to administrative benchmarks:

- >The underreporting is about 10% in CPS/ASEC
- >The underreporting is 5-10% worse in SIPP, MEPS, and NHIS compared with CPS (and worse in NHIS for lower-income)
- (from National Research Council, *Reengineering SIPP*, 2009; Czajka and Denmead, 2009)

Underreporting, cont'd



- Earnings is well reported in surveys , BUT in SIPP and CPS/ASEC (our best income surveys):
- >TANF benefits are underreported by 40-50%
- >Social Security (OASI) is well reported, but Soc Sec Disability is underreported by 15-20%
- >Unemployment insurance is underreported by 25-30%

And on it goes (from Meyer, Mok, and Sullivan, 2009)

Imputation for Missing Data



- Substantial fractions of the income amounts in major surveys are imputed—as much as 32-34% in CPS, SIPP, and NHIS, and 43% in MEPS
- In the CPS, three sources contribute to such high imputation rates: nonresponse to the main CPS questionnaire; nonresponse to the income supplement; and item nonresponse (from Czajka and Denmead, 2009)

SPM Complications



- The new Supplemental Poverty Measure (SPM) is a much better tool for policy analysis and research than the official measure, but it needs lots of input, not just cash income—
- —Family relationships, employment status of parent(s), in-kind benefits, taxes, medical out-of-pocket expenses (MOOP), child care and child support payments

Income Is Essential— So What Do We Do?



Some principles—

- >Health-related surveys are just that and should not burden respondents with the detail that is included in income surveys
- >Goal is minimum question set to produce reasonable estimates (perhaps a longer set when more detail would add analytic power)
- >Use the same (tested) format and wording there is no reason for idiosyncratic differences

Income Is Essential— So What Do We Do?



Implementation—

>Interagency group (including Census and BLS) should develop minimum set of questions that research shows produce reasonably accurate amounts—for instance, the ACS has 8 questions (plus total income) that have worked well (see Czajka and Denmead, 2009)

>Income should be obtained for the entire family and not just an individual respondent

Approximating the SPM Is Essential—So What Do We Do?

Go after KEY information—

>Family size and composition (include cohabitors and their kids as part of family, also foster children)

- >Employment status of parent(s)
- >Participation in major in-kind programs
- >MOOP (two new questions in CPS on premiums and other out-of-pocket work well)

Approximating the SPM, cont'd

Ask the Census Bureau to develop an easy-touse calculator for estimating the SPM with information on family size and composition, cash income, in-kind benefit participation, employment status of parent(s), and MOOP From this info, the calculator should be able to estimate the other components of the SPM—

child care, other work expenses, and net taxes

Other Thoughts



Work with the Census Bureau on methods for using administrative records to improve income estimates in CPS and SIPP (see *Reengineering SIPP*, 2009—there is really no excuse not to have better estimates, particularly for lower income families)

From this work, generate adjustment factors to apply to health survey income reports

Other Thoughts, cont'd



Obtain neighborhood estimates of median income and poverty for small geographic areas from ACS to append to health survey data records (see *Neighborhood Poverty: Context and Consequences for Children,* Duncan, Brooks-Gunn, and Aber, 2000)

Thank You for Your Attention



Contact information

Connie Citro ccitro@nas.edu

http://www7.nationalacademies.org/cnstat/

