

Medical Needs and the Poverty Thresholds

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Background

Perhaps the two most controversial recommendations in the National Research Council's report, Measuring Poverty: A New Approach,¹ are: 1) to allow the thresholds to change in real terms over time; 2) to not include medical needs in the "basic bundle" of food, shelter, and clothing making up the recommended poverty budget. This paper examines the empirical basis and logic of the recommended treatment of medical needs.

To explain the exclusion of medical needs, the panel states, ".such needs are highly variable across the population, much more variable than needs for such items as food and housing. . One would have to develop a large number of thresholds to reflect different levels of medical care need, thereby complicating the poverty measure. Moreover, the predictor variables used to develop the thresholds (e.g., age, or self-reported health status) may not properly reflect an individual's medical needs during any one year: some people in a generally sicker group may not be sick that year and vice versa for people in a generally healthier group. The result would be that it would be very easy to make an erroneous poverty classification." (p.226)

Data from the 1987 National Medical Expenditure Survey (NMES) are presented in tabulations of out-of-pocket medical expenditures (not including health insurance premiums) as a percentage of pre-tax money income. (p.227) They show, for example, that within an age and insurance group (65 years and older with Medicare and no other coverage) 14 percent have no out-of-pocket expenses and 13 percent have expenses that total more than 20 percent of income. From the panel's claim that medical spending is "much more variable than needs for such items as food and housing," we would expect that, by comparison, spending for items the panel proposes to include in the poverty budget would show less variation. However, such expenditure data are not presented in the report.

Elsewhere, the report takes the position that medical expenditures should be classified with costs of earning a living and child support payments as "nondiscretionary" on the grounds that they are "not available for consumption of food, housing, and similar items." (p.206)

The panel notes that some analysts propose including in the poverty budget an amount for medical costs paid out-of-pocket, thereby avoiding the difficult problem of placing an income value on insurance coverage or eligibility for government-funded health services. However, the panel argues that including only out-of-pocket medical costs in the poverty budget does not avoid the problems raised with including all medical costs. (p.236-7)

Plan of the paper

This paper tests the assertion that out-of-pocket medical spending is "much more variable than needs for such items as food and housing." If it is not, then it might not be impractical to include out-of-pocket medical expenditures in the poverty budget underlying new thresholds.

Two tests are performed using 1992-3 data from the Consumer Expenditure Survey that overlaps the reference period of the March 1993 Current Population Survey data used most extensively in the NRC report. Variation in out-of-pocket medical expenditures and spending on shelter plus utilities by consumer units with incomes less than twice their poverty thresholds is examined. Spending by relevant subgroups is examined separately, including couples with two children (the NRC reference family type), units with a head aged 65 or older, and units in which the head or spouse is not working due to illness, disability, or other inability to work.

In addition, grounds for the panel's concern about "erroneous poverty classification" are tested. Families not poor when out-of-pocket health spending is included in the poverty budget and the resource definition, but poor when out-of-pocket health spending is excluded, are counted. They are deemed to illustrate the concern that including out-of-pocket health spending would classify as non-poor some families with resources minus out-of-pocket health spending insufficient to meet their non-medical needs. Then a similar process is followed to count families that are not poor when shelter and utilities are included in the poverty budget, but whose resources minus spending on shelter and utilities leave them with insufficient income for non-shelter needs.

The panel's claim that medical expenditures are "nondiscretionary" is not subject to such straight-forward empirical verification. The paper recaps the issue, and argues that the nondiscretionary nature of health spending has some parallel when it comes to other needs.

Finally, the paper will mention other considerations that tend to weigh against the proposed differential treatment of health needs. The need to model health spending for individual survey families would tend to introduce error and also restrict poverty analysis.

NRC panel recommendations

The NRC panel's report recommended changes from the current official poverty thresholds and changes from the current official definition of income (regular pre-tax money income, not counting capital gains). Noncash food and housing transfers should be included as income, and certain expenditures should be subtracted from income on the grounds that they are not available for spending on food, clothing, and shelter. The recommended deductions from income include direct taxes, child support paid, child care costs necessary for employment, other work expenses, and, most controversially, out-of-pocket medical expenditures (including premiums for medical insurance).²

Consumer Expenditure Survey

The Consumer Expenditure Survey (CE), is an ongoing survey of about 5,000 households representative of the noninstitutional population.³ In the CE interview survey, each household provides quarterly recall information about expenditures covering a year. Demographic and income data are also collected.

CE includes nearly all of the data elements needed to measure income according to the panel's recommended definition. By contrast, to create the database used to show the consequences of its recommendations, the panel had to supplement data from the March 1993 Current Population Survey by statistical modeling based on information from other surveys.

CE asks about annual income and direct taxes. This income includes the reported value of food stamps received, as well as money income (not including capital gains). CE identifies expenditures for direct taxes (including payroll, income, and personal property taxes), child care, child support, and out-of-pocket health spending. To approximate the NRC panel's recommended resource definition, it is necessary only to calculate the NRC's allowable work expenses⁴ and a rental assistance benefit for those households that report living in public housing or receiving rental assistance.

The small sample size of CE precludes some of the subgroup analysis the panel wished to perform. Moreover, as Appendix B of the panel's report notes, income coverage in CE is less complete than in CPS. In addition to suffering from the kind of under-reporting of income that afflicts all household surveys to some extent, CE does not impute any income amounts as CPS does.

By comparison with other sources of data, it appears that expenditures are under-reported as well in CE. E. Raphael Branch compared 1989-1992 data from the CE to PCE benchmarks.⁵ Over that period, it appears that the CE averaged about 84 percent of aggregate spending on food, clothing, shelter, and utilities in PCE. In a recent study, David M. Betson estimated that CE captured around three-fourths of the out-of-pocket medical expenditures captured in the 1987 National Medical Expenditure Survey. He also found that CE comes very close to an independent estimate of household spending for health insurance⁶. This is not inconsistent with Branch's comparison of CE data on health expenditures to the National Health Accounts.

Other expenditure data needed to calculate income according to the NRC recommendation include taxes, child care, and child support⁷ paid. CE amounts of direct taxes, child care spending, and child support paid all fall short of independent benchmarks.

In sum, under-reporting is a serious problem in CE. In examining variation in spending on different categories, differential coverage needs to be considered.

Variation of expenditures for medical and non-medical needs

To test whether out-of-pocket medical expenditures are "much more variable than needs for such items as food and housing," consumer units from the 1992-3 CE with income that was less than twice their poverty thresholds were identified.⁸ At higher income levels, variation in spending will tend to reflect more discretionary income. To test whether spending on health needs varies much more than spending on shelter needs, examining spending variation among lower-income households is appropriate.

In Table 1, variation is standardized relative to mean values for these types of expenditures.⁹ The standard deviation divided by the mean (i.e., the coefficient of variation divided by 100) is an overall measure of variation. The ratio of the median and various centiles to the mean is shown to give a picture of the shape of the distributions.

This table confirms the intuition underlying the panel's assertion. Out-of-pocket health spending varies more in relation to its mean than spending on shelter and utilities.¹⁰ As the panel would note, everyone has to live someplace every year, but not everyone gets sick. And those who do get sick can incur out-of-pocket medical costs many times the average.

However, variation relative to its mean is not the appropriate measure when considering whether the costs of a necessity vary too much to include in the poverty budget. The appropriate measure is the effect of including the necessity on the whole poverty budget. An item with a large coefficient of variation that constituted a small share

of the poverty budget could be less significant than an item with a smaller coefficient of variation but representing a larger share of the total poverty budget.

The panel's approach to interarea variation of the thresholds illustrates this distinction between item variation and its effects on threshold variation. Interarea shelter costs, based on "fair market rents," are found to vary significantly. The ratio of the lowest to the national mean is .564. The ratio of the highest to the mean is 1.492, or 264 percent of the lowest. (p.197) However, the panel does not recommend that the poverty thresholds vary that much. Rather, it proposes that the share of the poverty budget represented by shelter costs, deemed to be 44 percent in the panel's calculations, be varied by the ratios of the local "fair market rents" to their national mean. The highest of the resulting thresholds are 147 percent of the lowest. (pp.252-3) Put another way, on average, families in locales with the highest shelter costs had shelter needs that the panel determined to be 2.64 times as great as similar families in locales with the lowest shelter needs, but total needs that were only 1.47 times as great.

Now suppose that high-cost shelter areas averaged five times the average in low-cost areas instead of 2.64 times, but shelter costs represented only 10 percent of the poverty budget instead of 44 percent. On average, families in locales with the highest shelter costs would have total needs that were only 1.27 times as great. Variation of shelter needs in this illustration was stipulated to be much greater than the panel found, but the effect on total needs turns out to be less because shelter needs were also stipulated to represent a smaller share of the poverty budget than they actually do.

In Table 2, the relative weights in the poverty budget of spending on health and shelter are taken into account by making variation in dollars the measure. Spending on shelter plus utilities represents nearly half of all spending on food, clothing, shelter, utilities, plus out-of-pocket medical expenditures, while health spending represents less than one-sixth. So, although out-of-pocket health spending varies more proportionally, variation in spending on shelter plus utilities is much greater when expressed in dollars.¹¹

By all the dollar measures on Table 2, spending on shelter and utilities varies considerably more than out-of-pocket medical expenditures. The pattern holds for subgroups of interest. Couples with two children are the NRC panel's reference family type. Their spending on food, clothing, shelter, and utilities is the basis of the panel's recommended threshold level. Families with an aged head or families with disabled members are of particular interest because their medical needs are greater than others', and their out-of-pocket medical expenditures are assumed to be greater.

Table 2 suggests that if variation in spending on shelter plus utilities is not too great to allow those needs to be included in the poverty budget, then out-of-pocket health spending could be included too. However, it might also be argued that, while variation in spending on shelter plus utilities can be accommodated by varying poverty thresholds based on geography, health spending varies unpredictably. The relevant measure is variation remaining after accommodating adjustments to the thresholds. Accordingly, Table 3 provides a more difficult test of the hypothesis that shelter costs vary more than out-of-pocket medical spending.

In Table 3, each unit's dollar spending on health and shelter plus utilities is divided by poverty thresholds calculated in a way similar to the method the panel followed, but including out-of-pocket medical expenses. In that way, dollar spending is adjusted for family size, and also for differences in housing costs according to the panel's recommendation. As Table 3 shows, even after varying the thresholds for differences in housing costs, and before any attempt to vary the thresholds to similarly accommodate differences in health spending, spending on shelter plus utilities varies more.

Health spending in CE and NMES

As noted above, health expenditures appear to be under-reported in CE. Such under-reporting might understate the variation. Table 4 compares data from CE, NMES, and the dataset used by the panel to examine the impact of its recommendations.

For each dataset, data for all consumer units or families with incomes less than twice their poverty thresholds are displayed in Table 4.¹² The first column displays CE out-of-pocket health spending net of health insurance premiums. NMES does not collect information on premium payments. So comparisons of CE and NMES have to be limited to out-of-pocket spending on health excluding insurance premiums. The second column displays variation of family out-of-pocket expenditures, not including insurance premiums, from 1987 NMES adjusted to 1992 using the medical CPI. The 1992-3 CE mean, without insurance premiums, is about four-fifths the NMES mean adjusted for inflation, consistent with findings of Branch and Betson mentioned above.¹³ Other differences in the distribution of spending in the two surveys are evident as well. Generally, NMES finds more extremely high spending. The ratio of the 90th centile of spending to the mean in CE is very close to NMES. The ratio of the 99th centile to the mean in CE is only about half the ratio in NMES.

Medical out-of-pocket expenditures modeled from 1987 NMES data onto the March 1993 CPS for the NRC to use in their analysis (column four) look reasonably close to reported health expenditures in 1992-3 CE (column three). The NRC values (which, like the CE data, include health insurance premiums) are higher by 10 percent for the median and nearly one-fourth for the mean. The distribution of expenditures in the two sources looks very similar. The difference in ratios of other centiles to the means in the two sources is less than 10 percent.

Whether variation in CE shelter spending is compared to out-of-pocket medical expenditures in NMES or the NRC database, it appears that shelter spending varies more overall at lower incomes. Out-of-pocket health expenditures in CE, while under-reported, perhaps moreso at the highest extremes, are not so under-reported as to undercut the principle observation made above. Even recognizing that CE health spending is under-reported, health spending does not look ".much more variable than needs for such items as . housing."

"Erroneous poverty classification"

First, it is important to understand what the issue of "erroneous poverty classification" is not about. It is not about unfair administrative treatment of individuals. When eligibility determinations are made for means-tested programs, extraordinary expenditures for medical or other needs can be accommodated. For example, the Medicaid program provides aid after otherwise eligible families have "spent down" their income on extraordinary medical expenditures to the point that remaining income is below the eligibility level. The Food Stamp Program subtracts some medical expenditures from gross income before determining eligibility and benefits. The NRC report is not concerned that individuals will be classified erroneously in such administrative determinations. The report's concern is that a significant number of persons could be misclassified as poor statistically, distorting our understanding of the prevalence and distribution of poverty.

Some "erroneous poverty classification" is bound to occur, however poverty thresholds and resources are defined. Some families with resources just above the threshold amounts will actually have higher-than-average basic needs. To test whether "erroneous poverty classification" would be any more severe with respect to health needs than other needs, two other thresholds were calculated, generally following the method the NRC panel used to create its recommended thresholds. Thresholds including out-of-pocket health spending were calculated by ranking couples with two children in the 1992 CE by their spending on food, clothing, shelter, utilities, and health. The mean spending of such families between the 30th and 35th centiles was multiplied by 1.2 and adjusted using a version of the panel's suggested equivalence scales.¹⁴ By a similar method, thresholds based on spending for food, clothing, and health needs (and not including spending for shelter and utilities) were calculated and adjusted for family size. (Because it did not include shelter expenses, this threshold did not vary by location.)

Families not poor when resources (including out-of-pocket health spending) were tested against the threshold (including out-of-pocket health spending) then were retested in two ways. First, out-of-pocket health spending was subtracted from their resources and the remainder was tested against the panel's recommended threshold. About 3.0 million households with 5.2 million persons including .3 million children did not have sufficient remaining resources to meet their non-medical needs by that measure. Then shelter plus utilities were subtracted from resources, and the remainder was tested against the thresholds without shelter and utility costs. About 2.6 million households with 4.8 million persons and 1.0 million children did not have sufficient remaining resources to meet their non-shelter needs by that measure.

It appears that including out-of-pocket medical expenditures in the poverty budget is not much more likely to lead to an "erroneous poverty classification" than including shelter plus utilities.

Nondiscretionary character of health spending

Empirical analysis of variation in out-of-pocket health spending above does not lend much support to differential treatment of shelter needs (included in the NRC poverty budget) and out-of-pocket health spending (subtracted from NRC resources). However, the panel also asserts that health spending near the bottom of the income distribution is "nondiscretionary," and so "not available for consumption of food, housing, and similar items." (p.206)

John Cogan's dissent from the panel's report argued that the preponderance of professional opinion views ".health as an economic good, responsive to both income and price changes." (p.389) The panel would respond that, while this may be so in general, near the bottom of the income distribution, any health spending may be deemed a necessity.

In other words, towards the bottom of the income distribution, actual amounts of out-of-pocket health spending do not overstate (though presumably they may understate) an individual family's level of need for medical care.

If, by contrast, actual spending near the bottom of the income distribution on other necessities includes some spending that is discretionary, perhaps the component of total out-of-pocket health spending that represents need varies much more than the component of total spending on shelter plus utilities that represents need.

In the absence of family-specific measures of need for either health care or shelter to use as points of reference, no empirical test of this hypothesis is possible. However, several relevant observations can be made.

As shown above, actual dollar variation of spending on shelter plus utilities is much greater than variation in out-of-pocket health spending. For necessary out-of-pocket health spending to reverse this comparison and vary much more than necessary shelter spending, a much higher proportion of actual health spending than of actual shelter spending by lower-income families must be deemed to be necessary. For example, if only 50 percent of amounts spent on shelter plus utilities at the 90th-99th centiles of all units with resources less than twice their poverty thresholds actually represented need, dollar variation of need for shelter plus utilities from those high centiles to the lowest would approximately equal actual dollar variation for out-of-pocket health spending. To

make a case that necessary out-of-pocket health spending varies more than necessary shelter plus utilities, all actual health spending among lower-income units would have to be regarded as necessary and less than half of shelter plus utility spending at the high end.

The panel's belief that health needs are more "nondiscretionary" than other needs may reflect several intuitions. To a much greater extent than, for example, food expenditures, medical expenditures are dictated by the supplier, the doctor. Relatively little price-shopping and knowledgeable substitution shapes demand. Moreover, medical expenditures for acute care can be life-saving. Even with full information of costs and alternatives, a person could sensibly be said to have no choice but to make such expenditures. For both reasons, at least some health spending may seem to be less discretionary than spending for food, clothing, and shelter.

On closer examination, however, these distinctions between spending on health and other needs grow less sharp. For most families, whether they spend at all on food is no more, and often less, discretionary than whether they spend at all on health services. Conversely, while some out-of-pocket medical expenditures may be life-saving, others, even near the bottom of the income distribution, are not necessary to preserve either life or basic health. Spending may be for minor illnesses or for ineffective treatments. Even near the bottom of the income distribution, people allocate resources to non-medical consumption by deciding not to seek medical services, or not to agree to a recommended course of treatment, or by failing to pay medical bills.

Other considerations in the treatment of health spending

Given that the data available do not lend much support to the assertion that out-of-pocket health spending is too variable to include in the poverty budget, and would lead to an unacceptable level of "erroneous poverty classification," what other considerations deserve attention in assessing the panel's recommendation of differential treatment? Public understanding and acceptance probably weigh in favor of including health needs in the poverty budget. (p.236) A related set of issues is not ignored by the panel's report, but is perhaps not given the attention it requires.

At present, the Bureau of the Census is moving forward to develop experimental series of poverty statistics implementing the panel's recommendations. The current strategy is to use statistical modeling for a wide range of values including noncash benefits, direct taxes, work expenses, and out-of-pocket health spending, because gathering such values directly has proven to be difficult. Arguably, use of extensive modeling to add or subtract from income amounts collected in household surveys in order to create a special resource definition for assessing poverty status would introduce inaccuracy and imprecision and constitute a perennial grounds for skepticism and controversy. Moreover, sources of poverty statistics would be fewer, and fewer analysts would be able to work competently with them.

At present, official poverty statistics come from the annual income supplement to the March Current Population Survey. However, poverty status is calculated in a wide range of surveys. This is possible because the current official definition of income (regular pre-tax money income) is relatively simple and easy for household surveys and administrative databases to collect. So, social and economic statistics not gathered in the March CPS are often analyzed and presented according to the poverty status of families. Detailed statistics on health care utilization, housing characteristics, assets and debts, educational financing, program participation, and employment histories, just to name a few, currently are available reflecting poverty status.

Although even uncontroversial modifications to the official definitions of the thresholds and resources, such as counting food stamps as income, probably would require modification of a wide range of surveys, the necessity of modeling some resource elements to determine poverty status would constitute an entirely different kind of problem. While it is arguable that modeling out-of-pocket health expenditures is more subject to error than modeling of either direct taxes or necessary (and so capped) child care expenditures, the broader point is that any modeling requires additional resources and involves the potential for error. In some cases of prime interest to poverty policy, the proportions of income that would be modeled are large.

Consider a single parent working at a low wage job with gross wages of \$8,000. Her family's food stamp benefits might amount to one-fourth of that. Rental assistance, if her family receives it, might too. The Earned Income Tax Credit would amount to around one-fourth of her earnings. Amounts of these types of benefits are estimated by Census for sample cases in CPS, simulating calculations according to each program's rules. If this single mother pays for child care, the cost might amount to one-quarter of her earnings.¹⁵ Out-of-pocket medical expenses might average only 10-15 percent of the earnings amount. But as noted, there is considerable variation. When it comes to child care and medical expenses, program rules do not determine amounts to the extent they do with food and housing benefits and direct taxes. Statistical modeling must be more elaborate.

In order to achieve more precision in our definition of resources, it becomes necessary to base poverty determinations more and more on amounts that we do not obtain from respondents, but calculate subsequently. The necessary calculations may be intuitive and easy to explain, such as payroll taxes. However, when significant amounts of income are estimated with complex and sophisticated methods, and result in many changes in poverty status, as with the panel's recommendations for out-of-pocket medical expenses, we should be concerned about the credibility and utility of the poverty statistics produced. Moreover, where surveys

concentrate on other subjects, and gather income data mainly for use as an independent variable, there will tend to be less interest in, and resources for, adequate modeling of income modifications.

Conclusions

The analysis above did not find a strong case for treating medical needs differently than needs for food, clothing, shelter, and a little more. The NRC panel's recommended approach, to subtract out-of-pocket medical expenses from income rather than include them in the poverty budget, is based on empirical assertions that do not appear to be supported by the data. Considered by the relevant measure, which is the effect that variation in expenditures for an item has on the whole poverty budget, variation of out-of-pocket health spending appears less significant than variation in spending on shelter plus utilities. Nor is it much more likely to lead to "erroneous poverty classification."

Conceptually, the "nondiscretionary" nature of medical spending does not appear to be different in kind from spending on other needs. And, practically, modifications to the thresholds and resource definition that require elaborate statistical modeling would tend to increase error and restrict poverty analysis, especially in surveys designed for other purposes.

ENDNOTE

1/ Citro, Constance F. and Robert T. Michael (eds.), National Academy Press, Washington DC, 1995. Subsequent references to this volume appear in the text as parenthetical page references.

2/ Although the panel's report usually talks of subtracting out-of-pocket medical expenditures from income, the reasoning also excludes the income value of government spending to provide health insurance coverage or direct health services. A significant advantage to the panel's recommended treatment of medical needs is that no solution needs to be reached to the knotty problem of assigning an income value to such contributions. Including only out-of-pocket medical expenses in the poverty threshold would avoid this problem as well.

3/ The Consumer Expenditure Survey is funded by the Bureau of Labor Statistics to provide data necessary for calculations of the Consumer Price Index. For a complete description of the survey, see "BLS Handbook of Methods." Bulletin 2414, U.S. Department of Labor, Washington, DC, 1992, pp.170-175. The data used here are from the quarterly interview portion.

4/ The CE collects detailed information about some work expenses, but the calculations in this paper employ an approximation of the simplified work expenses estimates used by the NRC panel.

5/ "The Consumer Expenditure Survey: a comparative analysis." Monthly Labor Review. December 1994. pp.47-55.

6/ "In Search of a Elusive Truth 'How Much do Americans Spend on their Health Care?'" April 7, 1997, available at <http://aspe.os.dhhs/poverty/papers/moop.pdf>

7/ CE began asking about child support received separately in 1993. While the total amount of child support reported received in the 1994 CE (\$15.2b) is close to the amount in the March 1995 CPS (\$17.2b), the amount reported paid in CE (\$2.9b) is much smaller. Nearly four-fifths of child support received in CE is categorized as lump sum payments. Presumably a lot of this is arrearage payments. The amount of child support paid in a lump sum form is not asked directly in CE, which may account for some of the difference between amounts reported received and paid. The amount received in other than a lump sum in CE (\$3.2b) is close to the amount reported paid.

8/ Health spending was included in both resources and thresholds. Only complete income respondents (RESPSTAT=1) were included. Spending on shelter and health by units with incomes less than 125 percent of their poverty thresholds was compared with similar results. The findings in the paper do not appear sensitive to the income ceiling that determines the lower-income analysis group. The steps followed to estimate the thresholds is sketched in the section headed "Erroneous poverty classification" below.

9/ The health spending variables used were HEALTHPQ and HEALTHCQ. Shelter and utilities spending variables were SHELTPQ, SHELTCQ, UTILPQ, UTILCQ. A conventional use of CE data annualizes quarterly expenditures. With some categories of expenditures, including health and shelter, spending is not spread evenly over the year, and reliance on quarterly data can be misleading. To approximate annual expenditures, each CE household's data for all quarters of data collection in 1992 and 1993 were combined. The maximum number of quarters of data reported by a household during these years is four. However, not all households in the sample at any point during the two years reported four quarters of data. To increase the available sample size by more than half, the analysis includes households with three or four quarters of data. The expenditures of cases with only three-quarters of data are increased by one-third to approximate four quarters of expenditures.

10/ If all health expenditures were included, the total dollar amounts would be higher than for out-of-pocket spending alone, and the ratio of the highest values to the mean would be greater too. However, in the National Medical Expenditure Survey, the coefficient of variation of out-of-pocket spending for the whole population (which does not include health insurance premiums) is about the same as the coefficient of variation for total medical spending.

11/ A similar picture of the relative shares that shelter and health spending contribute to total inequality of expenditures by all units is presented on Table 7 in an unpublished paper by David Johnson, Stephanie Shipp, and Eva Jacobs, "Expenditure Trends and Measures of Inequality: 1960 to 1992, Paper prepared for the 23rd General Conference for the International Association for Research in Income and Wealth," July 18, 1994.

12/ Data from CE reflect thresholds calculated according to the NRC recommended method, but including medical out-of-pocket expenditures. NMES data reflect official poverty thresholds. NRC data reflect the NRC's recommended thresholds.

13/ Comparing CE and NMES Betson notes, "...the first glaring difference between the two surveys is in the percentage of families reported as not having OOP payments. 11 percent of all families... report in the 1987 NMES survey not having any OOP payments. In the 1994 CEX survey the percentage of families not reporting OOP payments is significantly higher, 34.6 ..." However, when CE households with four quarters of reported data over 1992-93 are examined, only 15.3 percent do not report any out-of-pocket medical expenditures (not including insurance premiums).

14/ $(A + (.7 * K))^{.65}$ where A equals the number of adults in the family and K equals the number of children.

15/ Who's Minding the Kids?, Current Population Reports, P70-36, U.S. Bureau of the Census, 1994, p.4.