

SESSION IV:

Gary Burtless [revised by the author on September 21, 2003]

I want to talk briefly about a paper that I wrote with Sarah Siegel. She is now a graduate student at MIT, but she was working with me a few years ago on the issue of measuring poverty to take into account medical care spending and insurance coverage of people in the United States. My own background is that I am an economist specializing in poverty measurement here in the United States. I do a lot of cross national research, too, but this paper was focused on the issue of measuring poverty in the United States in light of our very complicated medical insurance system.

The paper offers a non technical introduction to some of the main issues involved when you try to include medical spending requirements and health insurance in a plausible measure of poverty. I assume a lot of that has already been discussed at this conference. Secondly, the paper shows the actual effects of including health needs and insurance coverage in the measurement of US poverty in 1998. First, we show the effects of treating the issue in the way it is treated in the official United States poverty measure as developed by the Department of Health and Human Services. Second, we show the effects of using a measure proposed by the National Academy of Sciences panel. And third, we show the effects of using an alternative measure that was proposed by an informal working group which was dissatisfied with the National Academy of Sciences recommendation. In the next few minutes I want to offer you my simple minded interpretation of a couple of the main issues. Then I will describe the results of our empirical analysis. And finally I will step back and offer an observation about practical poverty measurement given the excruciatingly difficult problems with obtaining good information about the individual insurance coverage and health spending needs of individual families.

Let me start with a couple of basics. Poverty is the inadequacy of material resources to cover some defined set of basic needs. The original idea in the United States was that income requirements to cover food needs can be measured with some precision. That's because we can come up with an estimate of the cost of a minimally adequate diet and because we can adjust that estimate of a minimally adequate diet and its cost to reflect the number and ages of people in a household. At the time the original

poverty measure was developed, about one-third of a typical household's budget in the United States was devoted to food. Therefore, the material resources to cover basic needs must require three times the cost of a minimally adequate diet. If we can keep track of the cost of a minimally adequate diet, it then follows that we can keep track of the spending needed to buy a minimally adequate consumption basket.

Well, how does medical care spending and health insurance fit into this assessment of basic needs? When the poverty thresholds were developed in the early 1960s, health care spending accounted for a bit less than 7% of household outlays in the United States, or roughly one fifth of a typical household's spending on food. By the logic of the original U.S. poverty lines, the basic need standard allowed for spending on medical care that was roughly 7% of the minimally adequate consumption basket. That's how much of the poverty budget, by the logic of the early 1960s, was to be allocated to medical care spending. I am not claiming that the architects of the original poverty thresholds had this specific amount in mind. I am just saying that the estimate just given of health care spending needs is implicit in the way the architects of the original poverty thresholds went about doing their business. Minimum annual spending on food must be at least, let's say, \$2,000 a year. Food is one-third of a typical household spending. Thus, \$4,000 of additional dollars are needed to cover all of the family's basic needs, including spending on medical care.

By the early 1990s, when the National Academy of Sciences panel started to think about the problem, many things about the United States had changed. One thing that changed was that American outlays on medical care accounted for 13% of national income instead of just 5% of national income. This means that medical care consumption loomed much, much larger in overall U.S. consumption, and it seemed to the NAS panel as though the nation's measurement of poverty should take this fact into account.

But another thing happened too, and that is that health insurance (financed either by the government or by employer sponsored insurance plans) was paying for a lot more medical consumption in the United States. Personal out-of-pocket spending on insurance premiums and drugs and doctors bills and hospital bills paid for a much smaller share of all the medical consumption of U.S. households. So the combination of

these two trends meant that out-of-pocket spending of American households on medical care was actually lower (as a percentage of total household spending) at the end of the 1990s than it was at the beginning of the 1960s. Strangely enough, we spent just 5.3% of household outlays for out-of-pocket spending on medical care in 1999 versus 6.7% of total household expenditures back in 1960. It nonetheless is the case that the explosion in spending on medical care consumption in total spending could have widely different effects on families depending on two things: First, the family's insurance coverage, and, second, the family's health needs (how healthy or unhealthy family members might be). Obviously, a family which is covered by a comprehensive health insurance plan which it doesn't have to pay for –a common kind of health plan in the United States- is in a much better situation than a family which has no access to subsidized health insurance at all. Now, the difference in insurance coverage might or might not make a very big difference to family's well being depending on something else, namely, is there someone in the household who is very sick and thus requires heavy spending on medical care? If a well-insured family has a very sick family member - even if the family is covered by a very generous insurance plan-, that family might be required to pay a lot of money for necessary medical care. On the other hand, a family with no access to subsidized health insurance, if it has all healthy members, might have very little need to spend money on health care.

Now, it seemed to the NAS panel and to many other clear thinking people that it no longer made sense to assume that roughly 7% of the poverty line budget should be devoted to medical care and that 7% of the poverty budget would be everywhere and always enough to cover necessary medical spending. So, what should we do? The NAS panel solution was to essentially ignore the problem of measuring health spending needs and instead focus on families' actual health spending as a subtraction from the resources they had available to pay for all of the other necessities which the panel identified -food, clothing, shelter and "a little bit extra." The virtue of this approach is that it is straightforward to implement assuming our survey file contains enough information, both about family income and about family spending on medical care. Of course, no timely survey that we have in the United States includes these data, and that's a problem I will turn to in a second.

From the point of view of its critics though, the NAS panel solution to the health

spending insurance problem is deeply flawed. Suppose we treat spending on housing in exactly the same way that the panel proposed that we treat the problem of health spending. Take a family in an extreme situation. Suppose it is homeless; it spends nothing on shelter. Using the NAS approach to medical care spending, we would say that no subtraction from family resources is needed to account for its outlays on housing, so all the remaining family income is available to pay for necessary spending on food and clothing and “a little bit extra.” But another point of view is that the reason that the family is homeless is because it’s so poor that it cannot afford to rent an apartment. Now, take another extreme, a family that rents its house for \$1,000 every week. Using the NAS panel’s reasoning on health care spending, we would subtract \$52,000 from this family’s other annual resources before figuring out how much income it has available to pay for food, clothing, and “a little bit extra.” Now, the fact that the family has \$1,000 every week to spend on its housing might be an excellent clue that the family is pretty well off. But using the NAS approach to medical care spending, all the family’s spending on housing represents a subtraction from the family’s resources to buy the other necessities of life.

The NAS panel’s proposed treatment of medical care spending is probably the most controversial element of its proposal from the stand point of the expert community in the United States. (I’m thinking here of the expert community that thinks about poverty and its measurement.) The alternative approach that some experts came up with is to form an estimate of the reasonable medical outlays that families in different kinds of situations would have to make for medical care and then add that amount to the poverty thresholds. In other words, the alternative recommendation is to derive an estimate for necessary medical spending that is in some sense comparable to the NAS panel’s proposed approach to measuring necessary spending for food, clothing and shelter. However, this estimate of medical spending needs would take account of the health status and the health insurance coverage of individual families, so those kinds of differences would be taken into account. People in poor health who require greater medical outlays and families with poor coverage under a health plan would be imputed higher medical spending needs than people in good health and people enrolled in excellent health insurance plans.

I will say no more about the basic issues. I can summarize the empirical findings

of this research paper very briefly. First, if you take explicit account of health spending and insurance coverage, it makes a big difference in the overall level of poverty and in the distribution of poverty across different subgroups in the population. There is no doubt about it. If you take account of medical spending needs, either in the way the NAS proposes to do or using the alternative methodology, you get more sick people being poor, and you get more old people being poor. There is no way around this conclusion. Also, the new approaches will show rising poverty rates among the sick and elderly compared with the healthy and the non-elderly, so long as outlays on medical care continue to rise in importance.

Speaking for myself now and setting aside what the other experts say, I think this represents a fundamental misrepresentation of the true situation of a country's sick and elderly population so long as medical care is improving and producing better health. If the increased outlays of the sick and elderly on health care are producing substantial improvements in their health and longevity, then it is very hard to argue that this spending has made them poorer. But that is one implication of the revised poverty measures.

The second finding of my paper is that as a practical matter it doesn't make much difference whether you subtract medical care spending from family incomes or you add plausible estimates of necessary medical spending to your estimate of the poverty threshold. Either approach is going to show a lot more poverty amongst the sick and the aged. You can get almost identical estimates on the distribution of poverty across these kinds of groups using either approach. So, which approach you want to take depends on your theoretical preferences and on the practical problems of collecting data.

Now, let me turn to my last thought. If you have read the paper I wrote or if you've read the Census Bureau's papers that attempt to implement the National Academy of Sciences proposals, you will eventually fall into a stupor which has the technical, scientific name MEGO, or "my eyes glaze over". The reason is that the surveys which tell us how much income families have and the surveys that tell us how much they spend on medical care are not, unfortunately, the same surveys. Consequently, you have to come up with intricate brain numbing calculations of predicted medical spending or reasonable medical spending needs, then you must come

up with a plausible procedure for imputing those estimates onto the surveys where we have reliable income measures. After devoting the better part of six months to doing exactly those things, I concluded that the government might want to consider simpler approaches if they wish to come up with straightforward, timely, and understandable approaches to measuring who is poor and who is not poor.

I would be happy later on to describe such proposals. One idea is to calculate people's non medical needs and to come up with a "non medical poverty index." Second, researchers must derive an estimate based on administrative data of the cost of an adequate insurance plan. What is a minimally adequate health insurance plan? What does it cost in each jurisdiction in the country and for each family type? How much it will cost for an uninsured family to purchase an adequate policy? A family is poor if it does not have enough cash and near-cash income to purchase non medical necessities and medical necessities. If the family has an adequate insurance plan, then of course its cash and near-cash income will be more likely to cover the cost of medical and non medical necessities. If the family is not enrolled in an adequate insurance plan, then its cash income would have to be high enough to purchase coverage under an adequate plan. Thus, researchers must obtain an estimate of how much it costs to get the minimal medical insurance plan plus estimates of the other medical spending that goes along with that plan. If a family has health insurance coverage on a subsidized basis under a government plan or under a employer-sponsored plan, fine. That means the family will find it cheaper to pay for necessary medical spending.

For timely, annual measurement of poverty we probably need something more straightforward than the measures proposed either by the NAS panel or by many of the critics of the panel. The alternative poverty measures analyzed in our paper require complicated data on people's actual health spending, and such data are only rarely available in combination with income data. A simpler approach to poverty measurement is needed.