

SESSION IV:

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Unlike the previous presentations, mine actually is going to be a little bit more empirical and not focused so much on the concepts of poverty measurement as some of the impacts that we have. So we just focused on how medical out-of-pocket (MOOP) expenditure affects the available resources. I want to thank the Census Bureau, not only for recommending me to this panel but because I originally wrote a paper with Pat Doyle and that was kind of the first step towards this paper. One final note, the paper is being published by the *Journal of Health Care for the Poor and Underserved* and it's supposed to come out sometime next year, I don't know exactly when.

We know that health insurance and being uninsured is obviously going to affect the amount of MOOP that you have but having health insurance is (at least the way the US has implemented it) clearly not the straightforward answer. Eighty four percent of the US population was covered in 1996 and one of the problems we are having is less and less people are actually taking up insurance when they are offered it. The Medical Expenditure Panel Survey (MEPS) is showing that there has been a decline from 88% to 80% of the take a break, meaning fewer people are taking insurance when offered. The primary reason is it's so costly. Health insurance, as it has been mentioned, does not cover or give full protection to events. The cost prescription medication is rising and is often not covered. For example, Medicare does not cover prescription drugs up to this point and higher cost of health care or prescription drugs leads to higher MOOP because every health insurance plan has fixed co-payments and as things become more expensive, your 20% becomes more out of pocket. As David Betson mentioned, under insurance it's a relatively likely event if you actually have any pre-existing conditions or major health events. They are classic examples of lifetime caps, Blue Cross/Blue Shield will pay up to sometimes \$15,000 if you have a mental illness and that does not really cover one institutionalization, but not having health insurance is even worse. Those who don't have health insurance are less likely to use medical services when they are needed, the way treatments are often more expensive for the family and untreated health problems lead to lower work productivity and lower earnings.

Medical services and medications are also more expensive when you are not

insured. Health insurance companies negotiate prices with hospitals, drug companies, everything and non insured persons can face higher cost for the same services and people who buy health insurance are more likely using emergency care which ends up being more expensive for both the family and society.

I am always in the scheme of the National Academy's of Science report since it's been talked about repeatedly, so basically from my point of view what I took from it is that poverty measure should be focused on available resources, and since MOOP must be paid in general they shouldn't be counted as available resources. National Academies of Sciences also came out with a report, I think it was last year on health insurance and how it affects the family and essentially the report in the end concluded that health insurance is essential to financial stability. So, in this paper what I wanted to accomplish is I want to look at whether or not there is a significant impact on family well-being from medical out of pocket expenses. To do that, I used Survey of Income and Program Participation (SIPP) and I used account during the year 1996 for a variety of reasons. Mostly I used the 1996 because it is the largest panel essentially, so it is a larger panel that I have chosen the year later and I also want to focus where every concern is about impoverishment. I will talk about it at the end but I could have chosen a different standard of MOOP by impacting family well-being but impoverishment seemed like a nice easy one because you are not going to spend so much money on plastic surgery and other things that you actually are putting yourself in poverty. At least it is my opinion, contrary to other opinions here, but I don't think that someone is going to put themselves below the poverty line by spending on medical expenses if they are unnecessary.

I am going to use what Kathy Short referred to as the MSI approach of MOOP subtracted from income, so I simply subtract MOOP from total family income compared to the poverty threshold; if it is less, the person is impoverished. I think it is a conservative measure because, again it is relative how the available resources are more of a relative issue than above the actual poverty line, so it might be relative, it might not. There has been more work on under insurance that talks about relative measures.

The population used in the majority of the analysis is all families that are not already in poverty. Because since we were talking about subtraction, people already in

poverty subtract something away from, and they are still in poverty, so I left them out of the majority of the analysis.

The first two tables are from my previous paper of Pat Doyle and those include both people in poverty and people not in poverty. This first table looks at the average MOOP. The first column is for all families, the second column is for people in poverty under the official definition, and the last column is for the impoverished (that means people that are officially in poverty and those that are newly impoverished). I just want to point out what has already been discussed, that as families have older people in them they are more likely of higher expenses so I think that is obvious; prescription drugs and lower health quality as you get older are going to lead to higher expenses or out-of-pocket expenses. Employment status of the family is kind of interesting in terms of the first one; are you a full-time all year? Do you have someone in your family that is a full-time all year worker? In that case, the amount of MOOP that the family is spending is much higher than out of all families in general.

The next table is again, from the previous paper; it's on changes and it looks at changes in the poverty rate. Using SIPP the poverty rate was 12.3% and in the impoverished group the poverty rate would have been 13.8% when you subtract off MOOP and I have "growth" down here but it really should be the percent difference. The percent difference would be 12.2%, so this is also illustrating how quickly given categories grows. If we look at let's say a family with an adult that is 75 or older, the percent difference is going to be 41% so there is a very large impact on families that have older individuals. By employment status of the family, if you have a full time all year worker the percent growth is 21%.

The following tables are for people that are newly impoverished only and there is going to be a means table on a larger table. Just for sake of the whole, see they are divided up. So, the family head is not for fair or poor health, 43.5% of them have bad health; only 14% of the families that are not impoverished have good health. We see that as you get older the people that are newly impoverished are more likely to be old they are less likely to be married. Thus they have smaller families. If we go down to one or more family members working full time all year, we see that the people that are not impoverished are far more likely to have a family member that works full-time, full year

and they are also far more likely to have other workers in the household.

When we go down to health insurance, the status percent of adults covered for one month or more. The reason why I chose one month as opposed to all year is because just the way the SIPP data. You have no idea if the expense occurred while you were insured or not insured because it's one year retrospective questions on your medical utilization. So you don't know if the medical expense incurred while you were covered by health insurance. I didn't see any value in breaking that up although they are statistically different; there is not a big difference between the same covered in the households by adults with children. This also is a small subset of the results.

The medical utilization by adults, those impoverished were less likely to go to the dentist. Going to the dentist in the US is a good indicator for preventive care, because it seems is when everyone pays out-of-pocket for going to the dentist. If you go two times to the dentist in the year that is a good preventive health; if you go less, it indicates that you are not as proactive in your health. If you are impoverished, you are more likely go to the doctor, more likely to spend the night in the hospital and have more sick days and for the children there is the same pattern.

The following results are the *logit* estimates and they are broken up by families without children and families with children. Because *logit* results don't make a lot of sense inherently it is just a positive sign of just saying that you are more likely to be impoverished and if they get assigned insurance, less likely to be impoverished in a multivariate setting. So we see that families without children versus families with children, in both cases if your family has bad health you are more likely to be impoverished; the older the family head gets, the more likely to be impoverished; being married doesn't make a difference. Family size is interesting across families with or without children; if you don't have children you are less likely to be impoverished as your family size increases and if you have children, as your family size increases you are more likely to be impoverished and if you have kids even more so as the number of kids you have increases. Which kind of makes sense at the basic level if you have children and you have more people in your household to distribute any medical expenses that is a good thing, but when you have more children, you have more essential liabilities in terms of medical expenses to pay for out-of-pocket.

If the family member works full-time, full year, you are far less likely to be impoverished and the same thing with two or more children. Health insurance is kind of interesting, across family cost whether or not you have children or not, health insurance for adults is important but it's not important if your children are uninsured in terms of this prediction. I will talk about this in limitations. You would expect there is going to be a strong correlation between whether the adults are insured and whether the children aren't insured because mostly, insurance was employer provided, but this was 1996, before SCHIP. So if this was a year later, we might expect there to be a difference for low income families; that's the children could possibly be insured while the adults could not, but that's just the limitation of the year I chose. Medical utilization of adults as we would expect from the means that if you visit the dentist, you are less likely to be impoverished, but if you go to the doctor, stay overnight at the hospital and you are sick a lot, the more likely you will be impoverished. With the children, the results are kind of the same, but less significant in general.

The conclusions from the paper are straightforward. When you just look at the data, 4% of non poor families become poor as a result of just subtracting off MOOP and families are more likely to be impoverished if the head of the family is in poor health or is older; if some older adults are without health insurance or if your family is without a person that works full time for the entire year.

The policy implications tend to fall around if you don't have adequate insurance, or if you don't have insurance you are not protected. This is particularly in the US situation. Tomorrow, I believe someone will talk about catastrophic coverage. I glanced at the paper and I took it off my list of policy implications when I went to publication but catastrophic coverage is a good example of something that I personally believe should be a basic insurance coverage because no insurance plan, I am aware of, covers very well if you have catastrophic coverage. One plan that we have done to expand the health insurance program for low income families so they don't get impoverished by MOOP, is SCHIP; which again, isn't covered in this data. Currently, SIMA Medicare/Medicaid services, they are currently offering the State Medicaid infrastructure grants, so the State can pick up these plans and say why it covers specific low income population. But that is not going with great success because the States have to pay for

half of it.

There are several limitations. The main limitation in the data is that there is not measured medical debt. That to me is a great limitation that was mentioned by the previous speaker that there is no reason to assume that all the expenses you are incurring now from medical expenses, you are paying now. I mean, you might be paying it over several years which is often the case when you have a catastrophic event, and also as a result mentioned which I didn't have down here but I thought it was a good point that unmet needs are measured in this measure. The data is limited in the fact that it does not cover SCHIP which was implemented in 1997.

Analytically, I didn't take account that according to US tax policy, MOOP for over 7.5% of your gross income can be deducted. I didn't take account for that. Federal savings accounts cannot be taken into account with the SIPP data whether you have one or don't have one. Although there are some questions that get to the point in SIPP and the definition of impoverishment could have been more expanded which I would get to more of a relative definition is how much might you actually have to lose and not have it available to you to be count to consider yourself impoverished.