

Household Expenditures on Outpatient Care, Inpatient Care, and Prescription Medication: Trends by Income Quintile

Youn Jung
Associate Research Fellow, KIHASA

Sukyong Jung
Senior Researcher, KIHASA

Introduction

Many years on since its introduction Korea's National Health Insurance (NHI) remains criticized for limiting access to health care and increasing out-of-pocket burdens on households, with its coverage still far below the average of its OECD counterparts (63.4 percent vs. 79.7 percent) even after a couple of mid-term improvement plans.

The first mid-term plan (2005~2008) exempted children aged 6 and below from copayment and lowered out-of-pocket costs for people with cancer, heart disease, and cerebrovascular disorder. The second plan (2009~2013) further lowered out-of-pocket costs for the three diseases, included pneumonia and major burn injuries in the copayment reduction program, and set copayment limits that would apply differentially to different income groups. The previous government also has actively sought to expand the range of covered services and increase the target population especially for those with cancer, heart disease, cerebrovascular disorder, and rare and intractable disease.

Policies of health coverage expansion are aimed primarily at reducing the financial burden families have in paying for their health care and at ensuring that health services are used equitably as medical needs arise. The fact that the same amount of out-of-pocket copayment may carry different weights for households of different income levels may keep medically necessary services from being used equitably. One way to monitor how equitably health care is provided is by looking at differences in household health expenditures across different income groups.

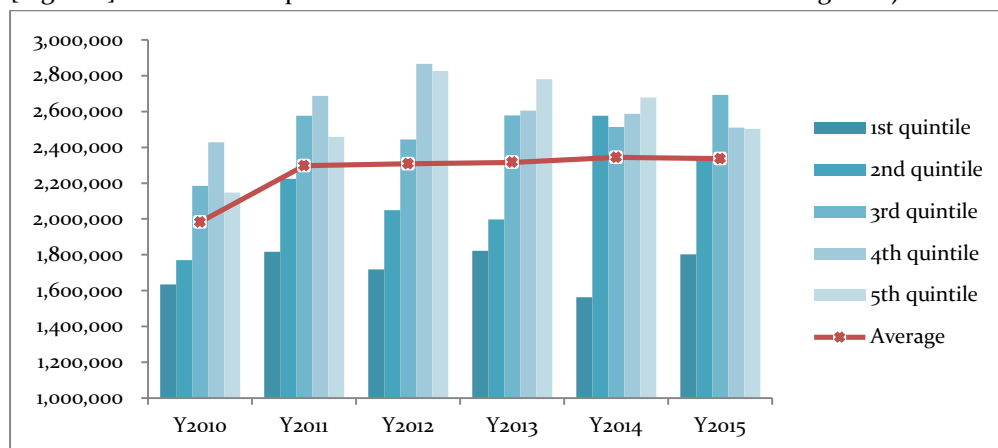
This study examines changes that have occurred over recent years in the out-of-pocket health expenditures of households of different income levels with members having cancer, heart disease, and cerebrovascular disorder, as these are the ones the coverage expansion policy has focused on most in recent years. To better understand if differences in income lead to differences not only in the amount but also in the composition of household health expenditure, this study looks also at household expenditures on inpatient care, outpatient care and prescription medication.

Average annual household health care expenditures, by income quintile

We examined the out-of-pocket health expenditure of households with family members having cancer, heart disease, or cerebrovascular disorder. The data used in this analysis are from the Korean Health Panel Survey for years 2000~2015. Although no perfect linear relationship emerged between household health care expenditure and household income level, higher income levels were associated with higher levels of health care expenditures. For the 1st~3rd

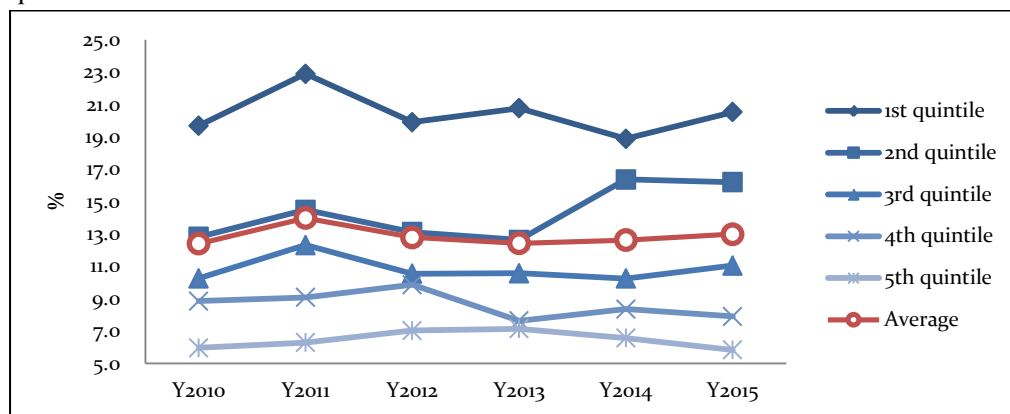
quintiles, out-of-pocket health expenditure increased in step with income. Household health expenditures for the 3rd~5th quintiles converged to similar levels, without rising in step with their income. Those that spent the least out-of-pocket on health care were households in the 1st income quintile (the bottom income group). Their out-of-pocket health expenditure was consistently less than the average. Households with members having one or more of the three diseases spent on average KRW2 million in 2010, KRW2.3 million in 2011, and similar amounts thereafter. The difference in health care expenditure between the 1st and 5th income quintiles has widened since 2010 to a record high of KRW1.116 million in 2014 and narrowed in the year following to KRW0.7 million.

[Figure 1] Health care expenditures of households with members having a major illness



To better understand how varied the burden of out-of-pocket health spending is across households of different income levels, we looked at how much it accounts for in their living expenses. Out-of-pocket health expenditure as a share of living expenses fluctuated only a little over the years, more or less remaining in the 13-percent region on average. A general tendency throughout the years has been that the lower the level of income of households, the larger the percentage of their living expenses they tend to spend on health care. Households in the 1st income quintile spent 20.5 percent of living expenses on health care compared to 5.8 percent spent by those in the 5th quintile.

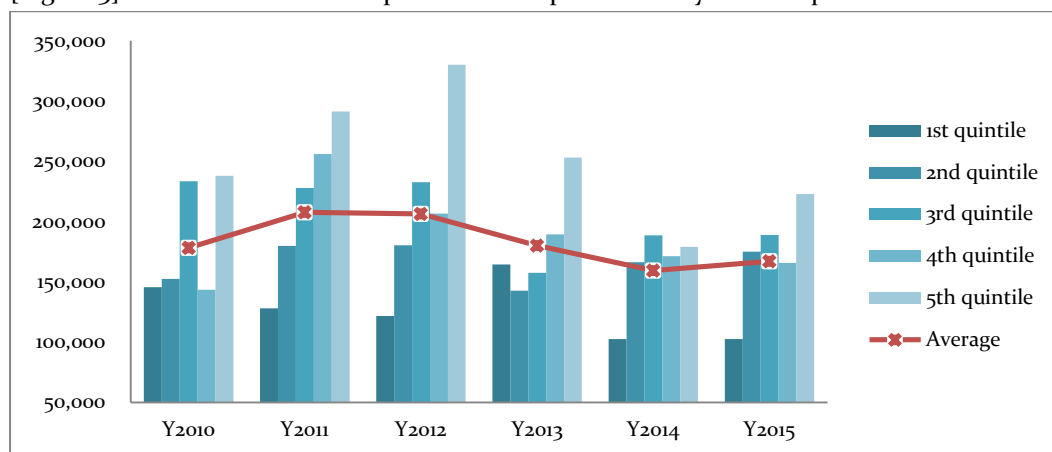
[Figure 2] Health care expenditures of households with members having a major illness, by income quintile



Household expenditures on selected health services, by income quintile

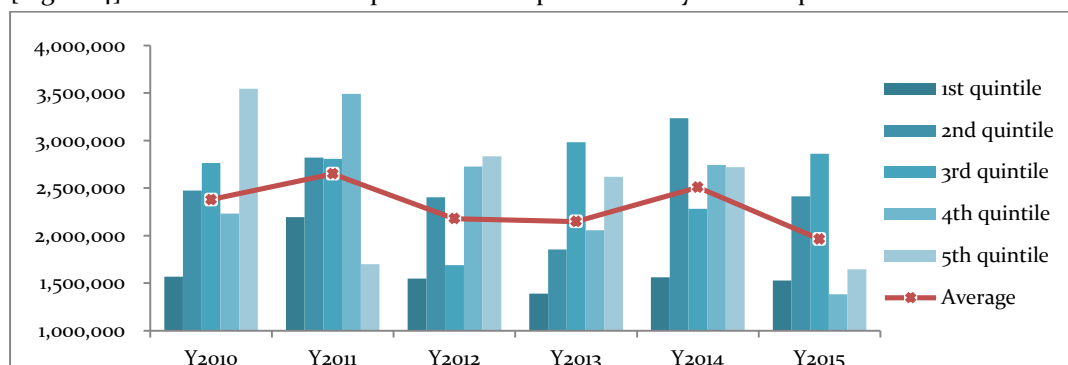
We looked at how much households with members having a major disease—cancer, heart disease, or cerebrovascular disease—spent on outpatient care. In general, higher income was associated with higher outpatient care expenditures, with households in the 1st income quintile spending consistently less than the average. The 1st quintile was all along the lowest spender on outpatient care except in 2012. Conversely, the 5th quintile remained the highest spender over the observed years barring 2014. The average outpatient care expenditure rose to KRW207 thousand in 2012 from KRW178 thousand in 2010 and fell to KRW167 thousand in 2015. The outpatient care expenditure for the 1st quintile has been trending down over the years except for 2013. The 1st quintile on average spent KRW92 thousand less on outpatient care than the 5th quintile in 2010. The gap increased greatly to KRW208 thousand in 2012, reduced in 2014 to KRW76 thousand, and again widened in 2015. The 5th income quintile spent 2.2 times as much on outpatient care as—or about KRW120 thousand more than—those in the 1st income quintile.

[Figure 3] Annual household outpatient care expenditures by income quintile



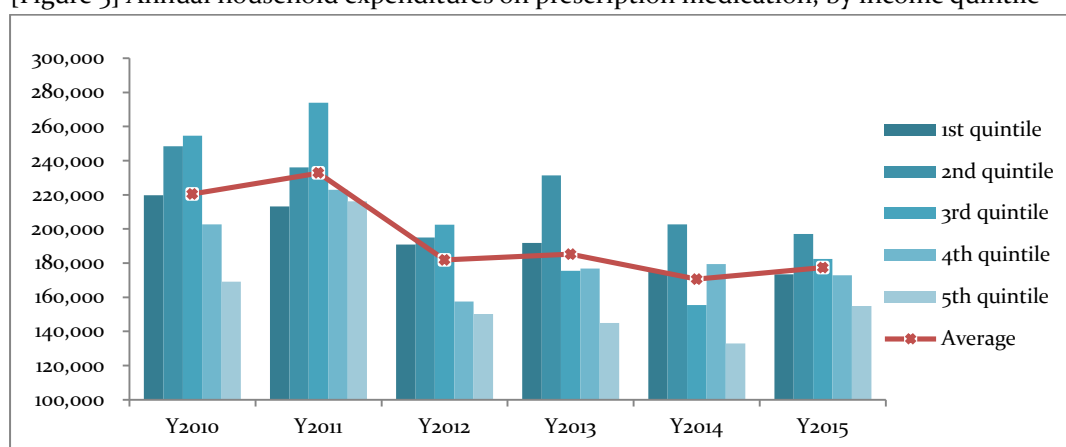
Although the number of cases under examination was nowhere large enough to derive differences of any significance between different income quintiles, it was clear that the 1st quintile spent far less than the average on inpatient care through the years. The difference between the out-of-pocket expenditure on inpatient care of the 1st income quintile and the average increased since 2011 to KRW940 thousand in 2014 and fell to KRW430 thousand in 2015.

[Figure 4] Annual household inpatient care expenditures by income quintile



Unlike the case was with inpatient and outpatient care, lower expenditures on prescription medication were associated with higher income levels, with the 5th quintile being the smallest spender. The 4th income quintile also was, except for 2014, a below-average spender on prescription medication over the years. The 1st quintile spent about the average on prescription medication. The differences in these measures between the income quintiles remained rather small. In 2010, the difference between the 1st and 5th quintiles in household expenditure on prescription medication was just KRW50 thousand. The figure further reduced to KRW18 thousand in 2015. Household expenditures on prescription medication decreased over time, with the average declining from KRW230 thousand in 2011 to KRW180 thousand in 2012 and tending to plateau thereafter.

[Figure 5] Annual household expenditures on prescription medication, by income quintile



Differences in health care expenditure across households of different income levels: their policy implications

A close relationship emerged between health care expenditures and income in households with members having a major disease. Their health expenditure increased with income, but the higher their income level, the smaller their health expenditure was as a percentage of their living expenses. This is in line with many studies conducted in the past of household health expenditures across different income groups. The result of this study points to the fact that even in cases of such serious illnesses as those selected here, households' health care expenditures varied more than expected across different income levels. Also, low-income people with the selected diseases tended to have more frequent outpatient visits and spend more inpatient days than their higher-income counterparts, although the number of inpatient cases showed no significant differences across different income levels. This is to say that insofar as the quantitative aspect of health care use is concerned, there was little inequality tilting, if at all, toward low-income households. When it came to the qualitative aspect, however, there was a certain degree of inequality in favor of higher-income groups. Future research attempts should take into account not only disease severity but also how health service items (essential and non-essential elective services alike) that constitute out-of-pocket health expenditures vary across different income strata.

The differences in household expenditures on different areas of health care show that income

level affects patterns of health care use as well as how much health care is used. For example, both outpatient and inpatient services are less accessible for low-income groups, as we have seen, while prescription medication is not. A health care expenditure survey conducted in 2015 by the National Health Insurance Service revealed the coverage rate of the public health insurance to be 65.7 percent for inpatient care, 54.5 percent for outpatient care, and 69.1 percent for prescription medication. Smaller than either of inpatient or outpatient care in expenditure terms and given the high coverage it comes with, prescription medication is likely to be the least out-of-pocket burden on low-income households. On the other hand, in outpatient care (where coverage is low) and inpatient care (where coverage is low and services come expensive), it is likely that there is a gap in health care use between low-income and high-income households.

The recent narrowing of the differences in out-of-pocket health expenditures on the selected diseases between households of different income levels is a welcome improvement in the equity of health care use. Still, the findings that the gap in outpatient care expenditures, after having narrowed in recent years, has again widened since 2015, and that household expenditure on health care increased to a lesser extent in the 1st income quintile than in the rest, suggest a need for close analyses of what relationships there are between increases in the coverage of the National Health Insurance and changes in overall household health expenditures and in expenditures related to different areas of care. Which income groups get benefited most from the coverage increases should also be thoroughly examined. The findings of this study imply the need for active policies that further expand the coverage of National Health Insurance to help low-income families meet their unmet health care needs. Also, close monitoring is needed of what impact the new administration's coverage expansion policy plays in raising equity in health care use.