

Disparities in Health Care Spending among Older Adults: Trends in Total and Out-of-Pocket Health Expenditures by Sex, Race/Ethnicity, and Income between 1996 and 2010

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It is well known that older adults spend disproportionately more on health care than the rest of the population and the gap has increased dramatically over time. Trends in health care expenditures *within* the older population, however, are much less clear. The objectives of our paper are three-fold: (1) to examine trends in total and out-of-pocket health care expenditures for the elderly and non-elderly population over the 15-year period starting in 1996; (2) to analyze how the above trends differ across older adults by sex, race/ethnicity, and income; and (3) to explain differences observed above by examining trends in the main conditions for which different groups receive care. Data for the analysis come from the Medical Expenditure Panel Survey (MEPS).

Our preliminary analyses on data up to 2007 reveal important patterns in the trends of total and out-of-pocket expenditures for different groups of older adults. We describe our sample and present some initial results below. In the final paper, we will take advantage of the soon to be released data on health expenditures up to 2010 and provide a more detailed discussion of the key trends observed for the full 15-year study period, offer potential explanations through the analysis of different conditions for which care was received by different groups of older adults, and discuss implications of our findings. Changes in policies related to Medicare, Medicaid, and private supplemental insurance policies will figure prominently in our discussion. For example, one of the most important changes that has taken place during the study period is the introduction of prescription drug coverage to Medicare (Part D) in 2006. As discussed below, out-of-pocket expenditures for many groups, however, seem to decline prior to this. Our final analysis will explore this issue further by examining total and out-of-pocket expenditures on prescription drugs. We will contrast this with trends in inpatient, outpatient, and office-based expenditures. Because sex differences in out-of-pocket expenditures grew rapidly until 2004 as discussed below, a special focus on sex-differences should be particularly enlightening.

Data

Data for the analysis come from 13 panels of the Medical Expenditure Panel Survey (MEPS) spanning 15 years. The MEPS is a large, ongoing nationally representative survey of US households, medical providers, and employers conducted by the Agency for Healthcare Research and Quality (AHRQ). It is uniquely suited for our purpose because

of its ability to link data on individuals to detailed information on their health care expenses. No other survey contains such a wide range of data essential for relating health spending to individual characteristics such as age, race/ethnicity, and household income. It has also been continuously conducted since 1996, making it possible to examine a 15-year trend. All expenditures are presented in 2007 dollars. The number of observation for the analysis ranges from 22,601 to 39,165 per year, for a total sample size of 373,921.

Preliminary Results

Elderly versus non-elderly (Graphs 1a & 1b)

There is a wide gap in the median annual expenditures on health care between elderly and non-elderly persons, likely reflecting both higher medical need and insurance coverage (i.e., Medicare) among the elderly compared to non-elderly. Differences in the median annual expenditures between elderly and non-elderly have increased significantly between 1996 and 2007, especially since 2000. The difference was around \$1,600 in 1996. It increased dramatically between 2000 and 2004 from around \$2,000 to \$3,500. It has then remained stable until 2007, the last year of our preliminary analysis.

There is also a large difference between the elderly and non-elderly in out-of-pocket medical expenditures. Despite the fact that most elderly have health insurance, the elderly have higher out-of-pocket expenditures than the non-elderly. The difference, however, narrowed substantially after 2004. The difference in median out-of-pocket expenditures between elderly and non-elderly persons was around \$400 in 1996, increased to \$900 in 2004, then declined to around \$600 in 2006.

Sex difference (Graphs 2a & 2b)

Women generally have modestly higher annual expenditures than men for most years we observed. Sex differences were relatively small until 2004 when they disappeared entirely. Sex differences quickly reappeared, however, and have grown rapidly since 2004 to around \$900 by 2007. Sex differences in the median out-of-pocket health expenditures, less than \$100 in 1996, grew overtime to about \$300 in 2004, then declined significantly since then to a little over \$100 in 2007.

Race/ethnic difference (Graphs 3a & 3b)

For race/ethnic comparisons, we examine non-Hispanic Whites, non-Hispanic Blacks, and Hispanics (referred to hereafter as Whites, Blacks, and Hispanics, respectively). Expenditures increased over time for the most part until 2004 for Whites and 2005 for Blacks and Hispanics. Expenditures have remained stable for Whites since 2004 and Hispanics since 2005, while they have declined by around \$1000 among Blacks since 2005. Whites have the highest annual expenditures. While Blacks and Hispanics had similar levels until around 2002, the gap widened with Blacks spending about \$900 more than Hispanics in 2005. The two minority groups, however, experienced a convergence of expenditures in 2007 at around \$3000 when spending among Blacks declined as mentioned above. In 2007, Whites spent around \$4200, about \$1200 more than the two minority groups.

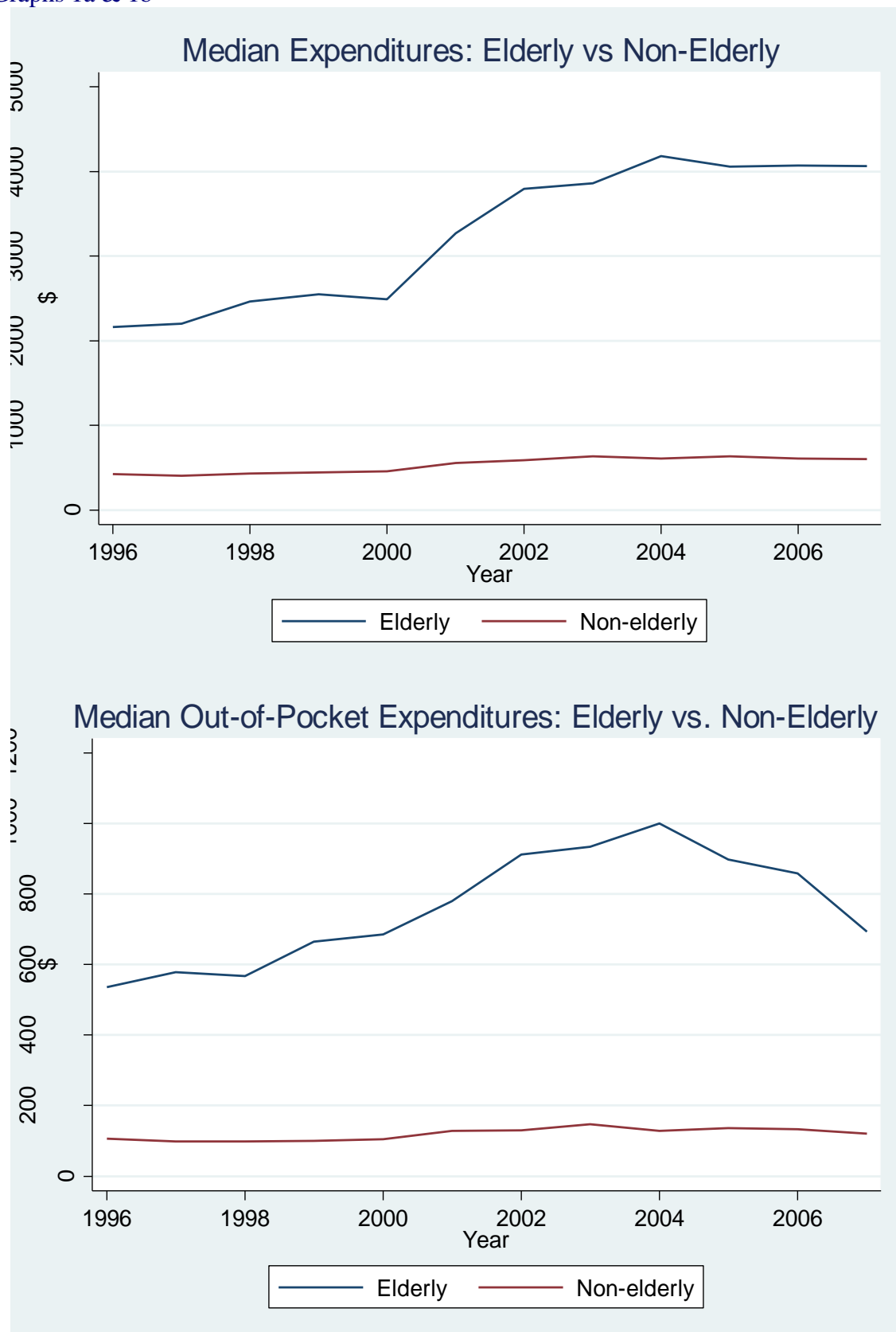
The patterns observed in out-of-pocket expenditures are similar to those for total expenditures, except that out-of-pocket expenditures declined since 2004 for Whites and Blacks and since 2005 for Hispanics. The gap between Whites and the minority groups remained fairly stable over time. Whites spend about \$500 more out-of-pocket on their health care, which is well over 5% more in terms of the percentage of their total health care expenditures than the two other groups. In other words, Whites pay a disproportionately higher percentage of their total health care expenditures out-of-pocket compared to Blacks and Hispanics.

Difference by household income (Graphs 4a & 4b)

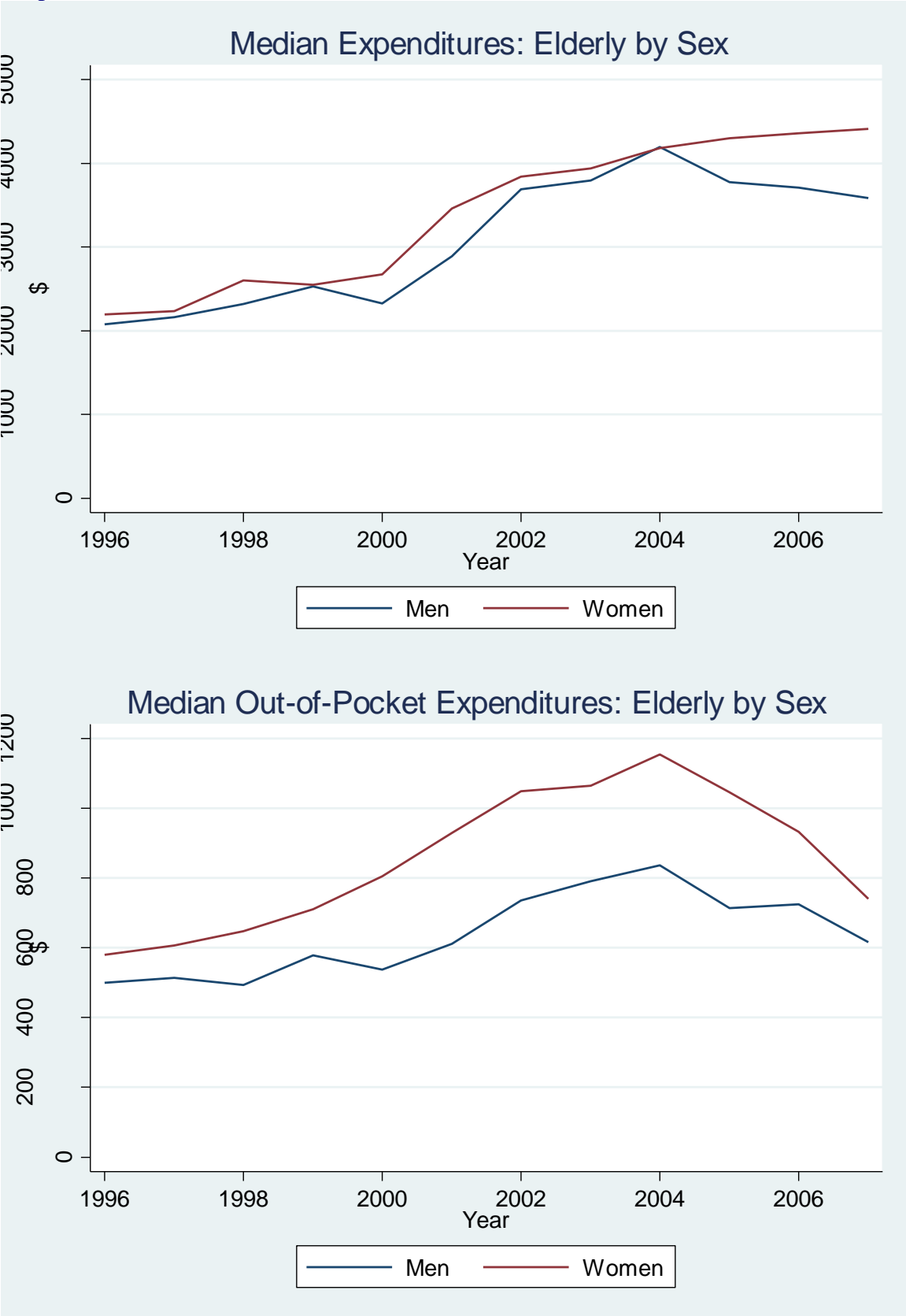
We compare health expenditures of older adults by household income as a percent of the federal poverty line. The following categories are used: (1) below 125% of the poverty line, (2) 125-200% of the poverty line, (3) 200-400% of the poverty line, and (4) over 400% of the poverty line. All income groups experienced large increases in health care expenditures between 2000 and 2004. Expenditures among older adults in the lowest income category increased until 2005 and then began to decline. In 2005, they spent around \$700 more than the income group spending the second largest amount (the second lowest income group). The second lowest income group experienced an increase in the expenditure since 2006, and in 2007, the two lowest income groups spent around \$500 more than the two higher income groups.

Out of pocket expenditures increased for all groups between 1996 and 2004 by around \$500. The poorest income group, despite its relatively high total expenditures as discussed earlier, spent the least out-of-pocket probably due to high rates of Medicaid coverage.

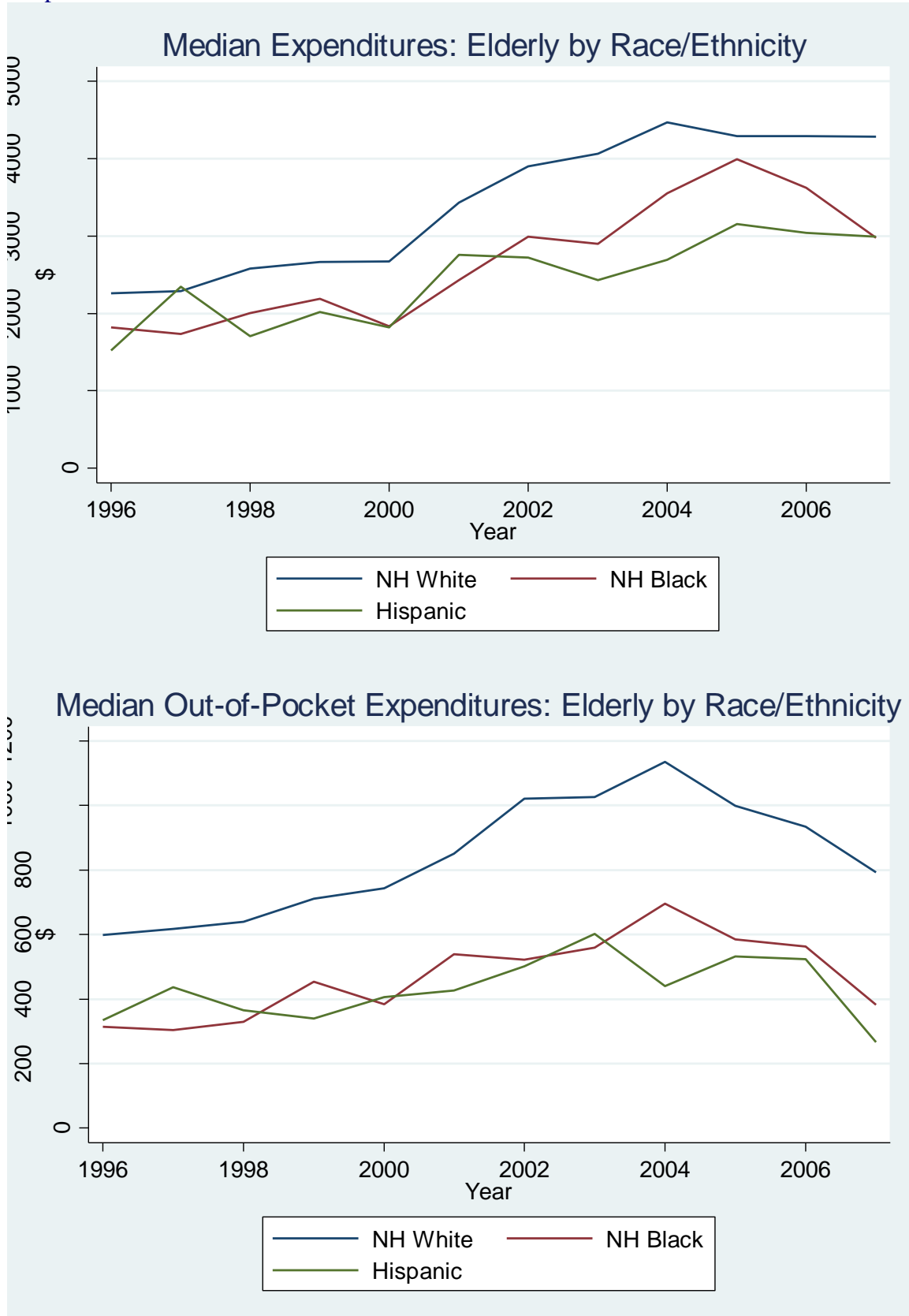
Graphs 1a & 1b



Graphs 2a & 2b



Graphs 3a & 3b



Graphs 4a & 4b

