# Rising Cost of Health Care and Out of Pocket Expenditures 

Veree Ethridge

Professor of Economics

College of Business

University of St. Francis

500 Wilcox St.

Joliet, Illinois 60435
(815) 740-3849
vethridge@stfrancis.edu

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During more than two decades of cost of living measures in relation to consumer expenditures, medical care cost have consistently increased at a higher level than the general level of inflation. With the base years 1982-1984 for the Consumer Price Index with the basket of goods set at 100, the all city average for urban consumers has an index value of 207 for 2007and 215 for 2008. However, the medical care component for 2007 and 2008 has an index value of 351 and 364, respectively. A publication by the Kaiser Family Foundation reported that health care spending in the US has risen about 2.4 percentage points faster than the GDP since 1970. While health care spending is approximately $17 \%$ of the GDP in 2009, by 2018 it is projected to account for nearly $20.3 \%$ of our GDP (www.kff.org). This expenditure is coming from both public and private funds. This paper examines the out of pocket expenditures by consumers using the 2007and 2008 Consumer Expenditure Survey.

Health care cost in the United States

Not only have health care expenditures in the US increased at a rate higher that the general rate of inflation over the past 20 years, health expenditures have also increased as a share
of our GDP at a much greater rate than for other fully developed countries. According to the OECD December 2009 policy paper, the United States spent $16 \%$ of their GDP on health care in 2007 while the average for OECD countries was $8.9 \%$ (see chart below). The United States also ranks ahead of all OECD countries in spending per capita. In 2007 the $\$ 7,290$ per capita in the US was two-and-a-half times greater than the OCED average of \$2,984 (www.OECD.org).


Source: OECD Health Data 2009

As reported by the Kaiser Foundation paper, the Centers for Medicare and Medicaid Services (CMS) predicts that by 2018 health care spending will be nearly $\$ 13,000$ per person. No other OECD country has a percentage of GDP or per capita spending at this high level.

Public funds account for $45 \%$ of US health spending in 2007 much lower than all other OECD countries (OECD, 2009). However, the Medicare program accounts for 20\% of the total health funding in 2007 (OECD, 2008, p. 10). According to Kahan (2009), 60\% of the population in 2007 was covered by employment-based health insurance. That was $7 \%$ fewer than in 2000. By 2007 fewer employees were offered health insurance benefits. Other employers have increased deductibles, co-pays, and insurance premiums over this same time period. Kohan reported that from 2000 to 2007 insurance premiums rose by $78 \%$. This data should indicate that
out of pocket health care expenditures would be increasing for most of the population. Of the private expenditures, $64 \%$ was by private health insurance companies, $13 \%$ other private sources such as philanthropy and the remaining $22 \%$ was out of pocket expenditures by individuals which is the topic examined by this paper.

Study of age groups: 55-65 and 65-74

A BLS working paper examined health expenditures for those 55 and over in regarding to their out of pocket expenditures examining survey data from 1985, 1995, and 2005 (Duetsch, 2008). Duetsch examined the out of pocket (non-reimbursed) expenditures for reference persons 55-64 of age and those 65-74 to compare those not eligible for Medicare with those eligible for Medicare. In 1985, the 55-64 age group spent $5.5 \%$ of their expenditures on health care. While in 1995 and 2005, they spent $5.9 \%$ and $6.9 \%$, respectively. For those $65-74$, they spent $9.2 \%$ of their total expenditures on health care in 1985. By 1995 and 2005, they spent $10.4 \%$ and $10.8 \%$, respectively (p. 2). Duetsch also found that for all three years for both age groups, health insurance took the greater part of the health expenditure dollars. In 1985, the 55-64 age group allocated $1 / 3$ of their health expenditures for insurance; however, by 2005 that percentage was $46 \%$. For the age group 65-74, they allocated $41 \%$ for health insurance in 1985 , and by 2005 , $56 \%$ of their health expenditures were for health insurance (p. 2). Duetsch did not find that much difference in relation to percent of expenditures for drugs or medical supplies between the two age groups. However, percentage of total expenditures for drugs increased for both age groups over the 20 years. The author noted that during that 10 year period 1985 - 1995, prescription drug prices doubled in the United States. Also, Duetsch pointed out that the 2005 change in drug program for Medicare was not in affect when the data was collected. One subcomponent that saw a decline as percentage of expenditures was medical services expenditures which decreased between 1985 and 1995 and then stayed constant as a percent of total expenditures for both groups (p.4).

## Study

Very few studies have been done in regard to out of pocket health care expenditures for the total population. Without any change in how the US finances health spending, rising health care will affect government budgets and family budgets. A Kaiser Family Foundation poll found that one in five households said "they experienced serious financial problems due to family medical bills" (www.kff.org). The Kaiser Foundation did a 2006 Medical Expenditure Panel Survey which tracked out of pocket expenses. They found that for those with health insurance paid about 33\% of their health care cost in 2006. Nonelderly individuals’ and families’ health care cost exceeded about $10 \%$ of their after tax income. However, for families with incomes below poverty the 2004 survey found that share to be about $28 \%$.

This study used 2007 and 2008 Consumer Expenditure Surveys to examine expenditures by various consumer unit classifications. Out of pocket health care expenditures were examined as a percentage of total expenditures. The four subcomponents under health care expenditures include: health insurance cost, medical services, medical supplies, and drugs. Medical expenditures as a percentage of total expenditures are examined based on age, region of residence, income, race, occupation of reference person, household composition and number of earners in the household. The largest percentage of all health care expenditures in 2007 and 2008 was for the subcomponent, health care insurance, $54 \%$ and $56 \%$ respectively for 2007 and 2008. This component will also be examined as related to age, region of residence, income, race, occupation of reference person, household composition and number of earners in the household. The author will be identifying those consumer unit characteristics that are significantly related to a higher than average out of pocket health care expenditure as percentage of total expenditures.

Sample

|  | 2007 | 2008 |
| :---: | :---: | :---: |
| Number consumer units | 120,171 | 120,770 |
| Income before taxes | $\$ 63,091$ | $\$ 63,563$ |
| Age of reference person | 48.8 | 49.1 |
| Ave annual expenditures | $\$ 49,638$ | $\$ 50,486$ |
| Ave. expenditure Health Care | $\$ 2,853$ | $\$ 2,976$ |
| \% expenditures Health Care | $5.7 \%$ | $5.9 \%$ |
| \% expenditures Health Insur | $3.1 \%$ | $3.3 \%$ |
| \% expenditures Med. Services | $1.4 \%$ | $1.4 \%$ |
| \% expenditures Drugs | $1 \%$ | $1 \%$ |
| \% expenditures Med. Supplies | $.2 \%$ | $.2 \%$ |
| Expenditures as \% of after tax <br> income | $4.69 \%$ | $4.82 \%$ |

## Findings

Age

Only two age groups were found to have significantly higher than average health care expenditures: 55-64 and 65+. The age 55-64 spent $6.5 \%$ and $7 \%$ of their total expenditures on health care for 2007 and 2008, respectively*. For the age group, $65+$, the percentage of total
expenditures for health care for the two years were $12.7 \%$ and $12.5 \%$, respectively. The health care expenditures as percent of total expenditures increased consistently with age.

## Region of Residence

Regions examined were Northeast (NE), Midwest (MW), South, and West. Only two regions had percent of total expenditures for health care significantly higher than the average, MW and South. The MW had $6.5 \%$ and $6.4 \%$ for 2007 and 2008, respectively. The South had $6.2 \%$ and $6.1 \%$, respectively.

Income

The average percent of health care expenditures for consumer units with income ranges from $\$ 10,000$ to $\$ 70,000$ were significantly higher than the average percent of health care expenditures. The highest percentage of expenditures for health care was found for the income group $\$ 15,000-\$ 19,999$ as the percentage for 2007 was $8.5 \%$ and 2008 was $8.3 \%$.

Race

When examining health care expenditures by race of reference person, only one group, White, had a higher that average percent of expenditure for health care at $6.1 \%$ for both years. Hispanic, Black, and Asian all had lower that the average expenditure for health care.

Household composition, Occupation of reference person, and Number of earners

There was no category under household composition that showed a significantly higher average expenditure for health care when compared to the all consumer unit average. Only one group was found to have a significantly higher percentage for health expenditures by occupation, "retired". The higher percentage can be explained by the higher average age in this category.
*As there was no significant difference between the percentages for 2007 and 2008 health care expenditures in all categories examined, the means were combined for t-test to determine significance of .05 or higher.

Self-employed had an average expenditure of $6.3 \%$ for 2008 which is higher than the average; however, 2007 average expenditure was not significant with only $5.6 \%$ for health care expenditures. Only one category for number of earners had a significant higher percent of expenditures for health care, "no earners". As with the retired occupation reference persons this classification had a higher than average age. Percent of expenditures did decrease with increased number of earners from 1 earner to $3+$ earners.

Examination of Health insurance and income

The findings when examining health care expenditures as percent of income rather than total expenditures had very similar results. Further, examining percent of expenditures for health insurance separately had similar results for higher significance as when examining total health care expenditures.

## Summary

Findings as to significantly higher average expenditures of total expenditures for health care

|  | 2007 | 2008 |
| :---: | :---: | :---: |
| Age |  |  |
| 55-64 | 6.5\% | 7.0\% |
| 65 + | 12.7\% | 12.5\% |
| Region of Resid |  |  |
| MW | 6.5\% | 6.4\% |
| South | 6.2\% | 6.1\% |
| Income |  |  |
| \$10-\$14,999 | 7.8\% | 7.9\% |
| \$15-\$19,999 | 8.5\% | 8.3\% |
| \$20-\$29,999 | 8.4\% | 7.9\% |
| \$30-\$39,999 | 7.2\% | 7.5\% |
| \$40-\$49,999 | 6.8\% | 6.8\% |
| \$50-\$69,999 | 6.1\% | 6.4\% |
| Race |  |  |
| White | 6.1\% | 6.1\% |


| Occupation of Ref. person |  |  |
| :---: | :---: | :---: |
| Retired | $12.4 \%$ | $12.7 \%$ |
| Self-employed |  | $6.3 \%$ |
| Number of earners |  |  |
| No earners | $7.7 \%$ | $7.6 \%$ |

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