Medical Expenditure Panel Survey

Agency for Healthcare Research and Quality

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Health Expenditures for Adults by Number of Treated Chronic Conditions, Race/Ethnicity, and Age, 2012

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Introduction

Studying adults with multiple chronic conditions (MCC—with two or more chronic conditions) is important because having multiple chronic conditions is associated with an increased burden on personal health as reflected by higher health care expenditures.[1] In addition, the percentage of adults age 45 and older with multiple chronic conditions has been increasing.[2]

According to the 2012 Medical Expenditure Panel Survey (MEPS), an estimated 25.9 percent of adults have been treated for MCC and they account for an estimated 57.0 percent of all health care expenditures (figure 1).

In this report, a standard classification scheme for multiple chronic conditions is used that was developed by a working group of the Office of the Assistant Secretary for Health (OASH) in the Department of Health and Human Services (DHHS). This classification scheme is consistent with the DHHS strategic framework on MCC.[3,4] Using MEPS, a person was considered to have multiple chronic conditions if they had two or more treated conditions during the year from the OASH list of 20 conditions that was developed by this working group. Expenditures are analyzed by number of chronic conditions, race/ethnicity, and age. Unless otherwise indicated, all differences discussed in the text are statistically significant at the .05 level or better.

Findings

Treated prevalence

As shown in figure 2, the percentage of adults with 2–3 or 4 or more treated chronic conditions increases with age and the percentage of adults with 0 treated chronic conditions decreases with age (from 18–44 to 45–64, and from 45–64 to 65 and older) for the total group and within each of the three race/ethnicity groups —white non-Hispanics, black non-Hispanics, and Hispanics. The percentage of adults with 1 treated chronic condition increases from ages 18–44 to 45–65 for the total group and within each of the three race/ethnicity groups. The percentage of adults with 1 treated chronic condition decreases from ages 45–64 to age 65 and older for the total group and for non-Hispanic whites and for non-Hispanic blacks.

Of adults ages 18–44, 94.4 percent have no, or only one, treated chronic condition. Among adults in this age group, only 5.0 percent have 2–3 treated chronic conditions and only 0.6 percent have 4 or more treated chronic conditions. Of adults ages 18–44, Hispanics were more likely than white non-Hispanics to have no treated chronic conditions (86.6 percent versus 77.5 percent) and less likely to have one (9.5 percent versus 16.2 percent), or 2–3 treated chronic conditions (3.5 percent versus 5.7 percent).

Highlights

- According to the Medical Expenditure Panel Survey (MEPS), an estimated 25.9 percent of adults have two or more treated chronic conditions and they account for 57 percent of all health care expenditures.
- Of adults ages 18-44, 94.4 percent have no treated chronic conditions or only one treated chronic condition. Among adults age 65 and older, only 34.4 percent have no treated chronic conditions or only one treated chronic condition. Of adults age 65 and older, 42.3 percent have 2-3 treated chronic conditions and 23.2 percent have 4 or more treated chronic conditions.
- Average total health care expenditures were higher for adults with 2-3 versus 0-1 treated chronic conditions within each of the age groups for all three race/ethnicity groups.
- For all three race/ethnicity groups, average total expenditures were higher for adults with 4 or more versus 2-3 treated chronic conditions within the age groups 18 and older, 45-64, and age 65 and older.

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[1] Department of Health and Human Services. HHS initiative on multiple chronic conditions. Available from: http://www.hhs.gov/ash/initiatives/mcc/.

[2] Fried V.M., Bernstein A.B., Bush M.A. Multiple Chronic Conditions Among Adults Aged 45 and Older: Trends Over the Past 10 Years. NCHS Data Brief, No. 100. Hyattsville, MD: National Center for Health Statistics, 2012.

[3] Preventing Chronic Disease Public Health Research, Practice and Policy. PCD Collection Multiple Chronic Conditions 2013; 10: April 2013. DOI: http://www.cdc.gov/pcd/collections/pdf/PCD_MCC_Collection_5-17-13.pdf.

[4] Goodman R.A., Posner S.F., Huang E.S., Parekh A.K., Koh H.K. Defining and Measuring Chronic Conditions: Imperatives for Research, Policy, Program and Practice. Prev Chronic Dis 2013; 10: 120239. DOI: http://dx.doi.org/10.5888/pcd10.120239.

Of adults ages 45–64, 68.3 percent have no, or only one, treated chronic condition. Compared to white non-Hispanics, Hispanics are more likely to have no treated chronic condition (51.2 percent versus 43.3 percent) and less likely to have one treated chronic condition (18.7 percent versus 24.8 percent). In this age group, black non-Hispanics are less likely than white non-Hispanics to have no treated chronic condition.

By the time adults are age 65 and older, only 34.4 percent have no, or only one, treated chronic condition. Among adults age 65 and older, 42.3 percent have 2–3 treated chronic conditions and an additional 23.2 percent have 4 or more treated chronic conditions. For adults age 65 and older, there are no significant differences between white non-Hispanics and the other two race/ethnicity groups in percentage with specific number of treated chronic conditions.

Total health care expenditures

As shown in figure 3, average expenditures per person were higher for adults with 2–3 treated chronic conditions compared to those with no, or only one, treated chronic condition within each of the four age groups (18 and older, 18–44, 45–64, and 65 and older) for all three race/ethnicity groups. For all three race/ethnicity groups, average expenditures were higher for adults with 4 or more treated chronic conditions compared to those with 2–3 treated chronic conditions within the age groups 18 and older, 45–64, and 65 and older. For example, the average expenditures in 2012 for white non-Hispanics ages 45–64 increased from $4,000 for those with no, or only one, treated chronic condition, to $10,100 for those with 2–3 treated chronic conditions, to $16,700 for those with 4 or more treated chronic conditions.

For adults with no, or only one, treated chronic condition, average expenditures increased with age for white non-Hispanics from $2,600 for ages 18–44, to $4,000 for ages 45–64, to $5,900 for age 65 and older; and increased for black non-Hispanics from $1,700 for ages 18–44, to $2,700 for adults ages 45–64.

For adults with no, or only one, treated chronic condition who were ages 18–44 or age 65 and older, white non-Hispanics had higher average expenditures than black non-Hispanics and Hispanics.

For adults with no, or only one, treated chronic condition who were ages 45–64, white non-Hispanics had higher average expenditures than black non-Hispanics.

For adults with 2–3 treated chronic conditions, white non-Hispanic adults had higher average expenditures than Hispanics within each of the age groups (age 18 and older, 18–44, 45–64, and 65 and older).

For adults with 4 or more treated chronic conditions, there were no significant differences in average expenditures for white non-Hispanic adults compared with black non-Hispanic adults and Hispanic adults within any of the three age groups. [Estimates for adults ages 18–44 with 4 or more treated chronic conditions are not shown because of small sample sizes.]

Data Source

The estimates in this Statistical Brief are derived from the MEPS 2012 Full Year Consolidated File and the 2012 Medical Conditions File.

Definitions

Age

In this report, age is the last reported age in 2012 for each person in the sampled households. Adult refers to persons age 18 and older.

Race/ethnicity

Classifications by race/ethnicity in this report are based on the following three race/ethnicity groups: white single race non-Hispanic; black single race non-Hispanic; and Hispanic. Classification by race and ethnicity is based on information reported in MEPS for each family member. First, respondents were asked if the person's main national origin or ancestry was Puerto Rican; Cuban; Mexican, Mexican American, or Chicano; Other Latin American; or other Spanish. All persons whose main national origin or ancestry was reported as one of these Hispanic groups, regardless of racial background, were classified as Hispanic. All other persons were classified according to their reported race. The residual category that includes non-Hispanics of other races or multiple races is not shown but is included in the total.

Treated chronic conditions

The condition data used in this report are conditions reported by MEPS respondents in the household component of MEPS as being associated with any reported health services utilization (i.e., home health, inpatient hospital stays, outpatient, office-based, emergency room visits, and prescribed medicines) during the year. The conditions were coded using ICD-9 codes that were translated into CCS codes. A person was considered to have multiple chronic conditions if they had two or more treated conditions and associated CCS codes from the list of chronic conditions developed by a working group of the Office of the Assistant Secretary for Health (OASH) in the Department of Health and Human Services (DHHS).[4] The 20 conditions are: Hypertension, Congestive heart failure, Coronary artery disease, Cardiac arrhythmias, Hyperlipidemia, Stroke, Arthritis, Asthma, Autism spectrum disorder, Cancer, Chronic kidney disease, Chronic obstructive pulmonary disease, Dementia (including Alzheimer's and other senile dementias), Depression, Diabetes, Hepatitis, Human immunodeficiency virus (HIV), Osteoporosis, Schizophrenia, and Substance abuse disorders (drug and alcohol).

Expenditures

Expenditures are defined as payments from all sources for hospital inpatient care, ambulatory care provided in offices and hospital outpatient departments, care provided in emergency departments, home health care, dental care, prescribed medicine purchases reported by respondents in the MEPS-HC and various other miscellaneous services, such as prescription glasses and medical supplies.

About MEPS-HC

The MEPS Household Component (HC) is a nationally representative longitudinal survey that collects detailed information on health care utilization and expenditures, health insurance, and health status, as well as a wide variety of social, demographic, and economic characteristics for the U.S. civilian noninstitutionalized population. It is cosponsored by the Agency for Healthcare Research and Quality and the National Center for Health Statistics.

For more information about MEPS, call the MEPS information coordinator at AHRQ (301) 427-1406 or visit the MEPS Web site at http://www.meps.ahrq.gov/.

References

For a detailed description of the MEPS-HC survey design, sample design and methods used to minimize sources of nonsampling error, see the following publications:

Cohen, J. *Design and Methods of the Medical Expenditure Panel Survey Household Component*. MEPS Methodology Report No. 1. AHCPR Pub. No. 97-0026. Rockville, MD. Agency for Health Care Policy and Research, 1997. http://www.meps.ahrq.gov/mepsweb/data_files/publications/mr1/mr1.pdf

Cohen, S. *Sample Design of the 1996 Medical Expenditure Panel Survey Household Component*. MEPS Methodology Report No. 2. AHCPR Pub. No. 97-0027. Rockville, MD. Agency for Health Care Policy and Research, 1997. http://www.meps.ahrq.gov/mepsweb/data_files/publications/mr2/mr2.pdf

Cohen S.B. *Sample Design of the 1997 Medical Expenditure Panel Survey Household Component*. Rockville (MD): Agency for Healthcare Research and Quality, 2000. MEPS Methodology Report No. 11, AHRQ Pub. No. 01-0001.

Cohen, S.B. Design Strategies and Innovations in the Medical Expenditure Panel Survey. *Medical Care*, July 2003: 41(7) Supplement: III-5–III-12.

Suggested Citation

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AHRQ welcomes questions and comments from readers of this publication who are interested in obtaining more information about access, cost, use, financing, and quality of health care in the United States. We also invite you to tell us how you are using this Statistical Brief and other MEPS data and tools and to share suggestions on how MEPS products might be enhanced to further meet your needs. Please email us at MEPSPD@ahrq.gov or send a letter to the address below:

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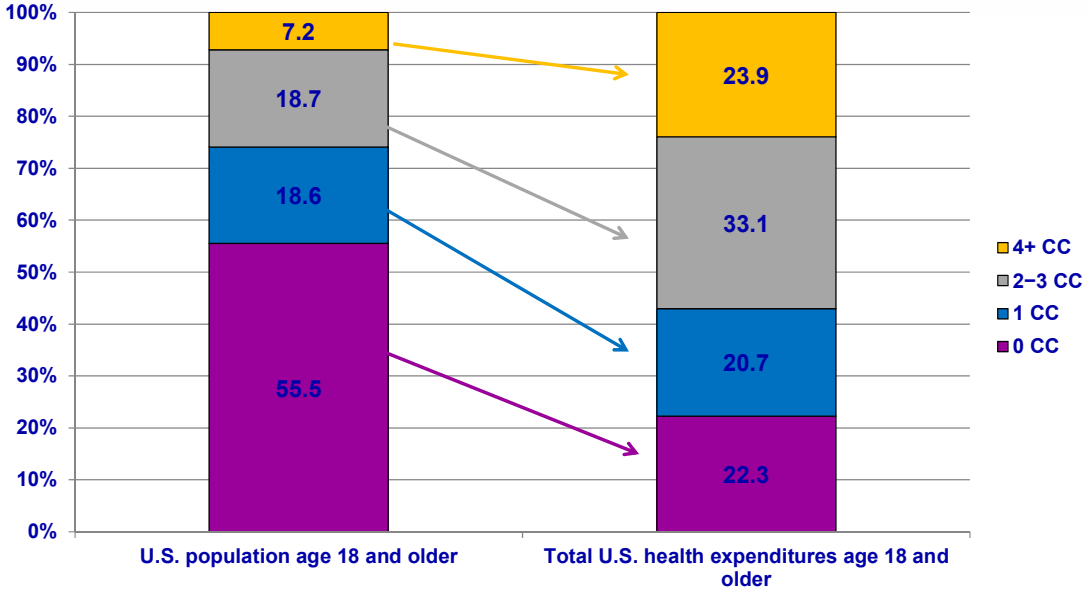
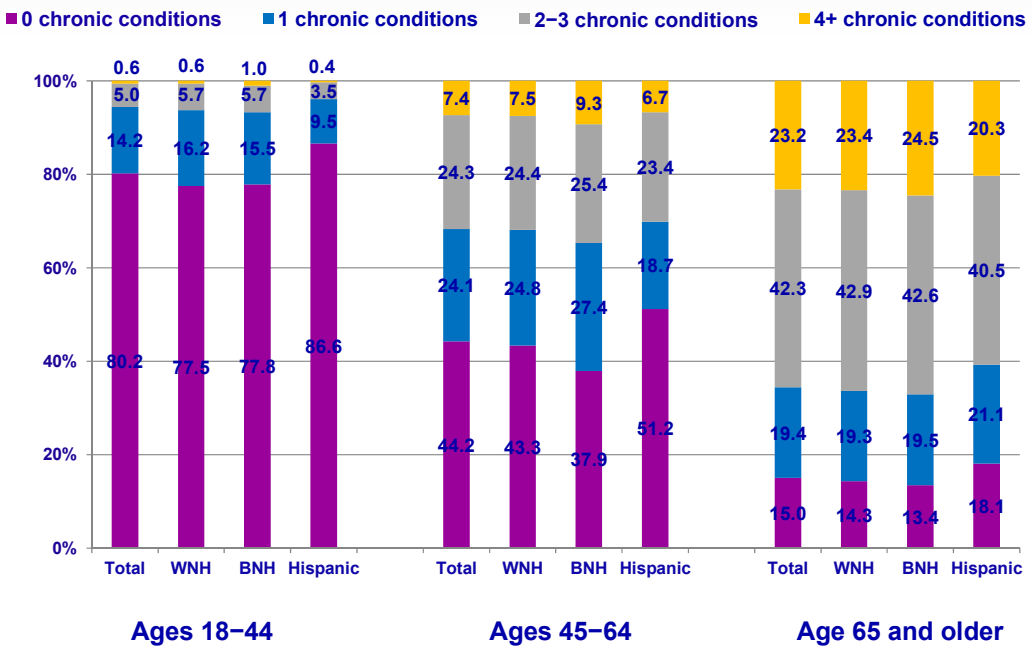
Figure 1. Distribution of the adult population and distribution of total adult health expenditures by number of treated chronic conditions (CC): U.S., 2012



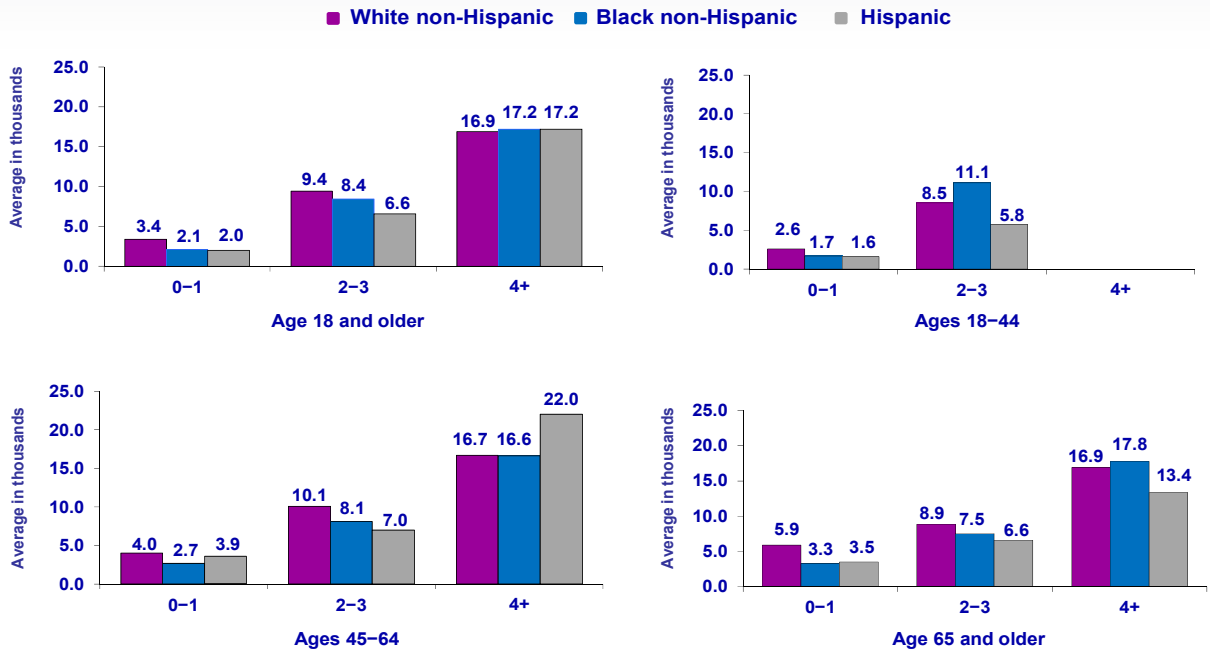
Source: Center for Financing, Access, and Cost Trends, AHRQ, Household Component of the Medical Expenditure Panel Survey, 2012

Figure 2. Distribution of the adult population by age, race/ethnicity, and number of chronic conditions: U.S., 2012



Source: Center for Financing, Access, and Cost Trends, AHRQ, Household Component of the Medical Expenditure Panel Survey, 2012

Figure 3. Average total health expenditures in thousands of dollars for the adult population by age, race/ethnicity, and number of chronic conditions: U.S., 2012



Source: Center for Financing, Access, and Cost Trends, AHRQ, Household Component of the Medical Expenditure Panel Survey, 2012