Medical Expenditure Panel Survey

Agency for Healthcare Research and Quality

STATISTICAL BRIEF #348

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Use and Expenditures Related to Thyroid Disease among Women Age 18 and Older, U.S. Noninstitutionalized Population, 2008

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Introduction

The thyroid is a small gland in the lower part of the neck. The thyroid gland is part of the endocrine system. It produces hormones that regulate key body functions and metabolic processes. Thyroid disease is common among women. Women are at substantially greater risk for developing thyroid problems than men. A family history of thyroid disease and age can increase a woman's chances of developing thyroid problems during her lifetime.

This Statistical Brief presents estimates on the use of and expenditures for ambulatory care and prescribed medications to treat thyroid disease among women age 18 and older in the U.S. civilian noninstitutionalized population. The estimates are based on the Household Component of the Medical Expenditure Panel Survey (MEPS-HC). Average annual estimates are shown by type of service and source of payment. All differences between estimates noted in the text are statistically significant at the 0.05 level or better.

Findings

Percentage of women with treatment for thyroid disease, by age
In 2008, 12.6 million adult women aged 18 and older in the U.S. community population reported getting treatment for thyroid disease. Approximately one-fourth (23.1 percent) of women ages 65 and older received treatment for thyroid disease, which was a higher percentage than for women ages 18–44 and 45–64 (3.5 percent and 13.3 percent, respectively) (figure 1).

Percentage of women with treatment for thyroid disease, by race/ethnicity
White non-Hispanic women were most likely to have had treatment for thyroid disease in 2008 (12.9 percent) (figure 2). This was higher than the treatment rates for Hispanic (6.2 percent) or black non-Hispanic (5.1 percent) women.

Total and mean health care expenditures for thyroid disease treatment, by type of service
A total of $4.3 billion was spent on treatment for thyroid disease among adult women in 2008 (figure 3). More than half of expenditures for thyroid disease were spent on ambulatory visits ($2.2 billion), and about one-third of the total ($1.4 billion) was spent on prescription medications. Among women with any expenses for thyroid disease treatment, the average expenditure per person for the treatment of thyroid disease was $343 in 2008. The mean expense per woman for ambulatory care among those with an expense for thyroid treatment was $409 and the mean for prescription medications was $116 (figure 4).

Highlights

- In 2008, an estimated 13 million women, or 10.6 percent of women age 18 and older, received treatment for thyroid disease.
- Almost one-fourth (23.1 percent) of women age 65 and older, received treatment for thyroid disease.
- Medical spending to treat thyroid disease among women age 18 and older totaled $4.3 billion in 2008.
- Annual expenditures for ambulatory care among those with an expense for thyroid treatment averaged $409 per woman in 2008.
- Two-thirds of the ambulatory care expenditures for the thyroid treatment were paid by Medicare for women over age 65.

Distribution of average annual health care expenditures for thyroid disease, by source of payment and type of service
About 58 percent of the total spent for treatment of thyroid disease among adult women ages 18−64 in 2008 was paid by private insurance; with out-of-pocket payments accounting for 27.7 percent (figure 5). For women aged 65 and older, Medicare paid more than half (52.4 percent) of total expenditures for thyroid treatment. For ambulatory visit expenditures for thyroid treatment among women over age 65, Medicare paid two-thirds (67.4 percent). For the prescription medications to treat thyroid disease among women over 65, more than half (55.5 percent) was paid out-of-pocket.

Data Source

The estimates shown in this Statistical Brief are based on data from the MEPS 2008 Full Year Consolidated Data File (HC-121), Medical Conditions Files (HC-120), Office-Based Medical Provider Visits File (HC-118G), Outpatient Visits File (HC-118F), Hospital Inpatient Stays File (HC-118D), Home Health File (HC-118H), Emergency Room Visits File (HC-118E), and Prescribed Medicines File (HC-118A).

MEPS expenditure data are derived from both the Medical Provider Component (MPC) and Household Component (HC). MPC data are generally used for hospital-based events (e.g., inpatient stays, emergency room visits, and outpatient department visits), prescribed medicine purchases, and home health agency care. Office-based physician care estimates use a mix of HC and MPC data while estimates for non-physician office visits, dental and vision services, other medical equipment and services, and independent provider home health care services are based on HC provided data.

Definitions

Thyroid disease
This Brief provides estimates for women, age 18 and older, with thyroid disease reported in connection with reported health care utilization. The conditions reported by respondents were recorded by interviewers as verbatim text, which was then coded by professional coders to fully specified ICD-9-CM codes. These codes were regrouped in clinically homogenous categories known as CCS codes. Conditions with CCS code of 048 were classified as thyroid conditions. A crosswalk of ICD-9 codes and CCS codes is available in the documentation file of the Medical Conditions File (HC-120) for 2008.

Age
Age refers to age at the end of the year or age at previous rounds if end of the year age is missing.

Expenditures
Expenditures in MEPS 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, and purchase of prescribed medications. Sources include direct payments from individuals, private insurance, Medicare, Medicaid, Workers′ Compensation, and miscellaneous other sources. These expenditures do not include 'over-the-counter' medications used for the treatment of any conditions.

Sources of payment

- Private insurance: This category includes payments made by private insurance plans (excluding payments from Medicare, Medicaid, and other public sources), Medigap plans, and TRICARE (Armed Forces-related coverage).
- Medicaid/CHIP: This category includes payments made by the Medicaid and CHIP programs which are means-tested government programs financed jointly by federal and state funds that provide health care to those who are eligible. Medicaid is designed to provide health coverage to families and individuals who are unable to afford necessary medical care while CHIP provides coverage to additional low income children not eligible for Medicaid. Eligibility criteria for both programs vary significantly by state.
- Out of pocket: This category includes expenses paid by the user or other family member.
- Other sources: This category includes payments from Medicare, other miscellaneous federal sources (Indian Health Service, military treatment facilities, and other care

provided by the Federal government); various state and local sources (community and neighborhood clinics, state and local health departments, and state programs other than Medicaid/CHIP); various unclassified sources (e.g., automobile, homeowner's, or other liability insurance, and other miscellaneous or unknown sources); Medicaid/CHIP payments reported for persons who were not reported as enrolled in the Medicaid or CHIP programs at any time during the year; and private insurance payments reported for persons without any reported private health insurance coverage during the year.

Racial and ethnic classifications
Classification by race and ethnicity was based on information reported for each family member. Respondents were asked if each family member's race was best described as American Indian, Alaska Native, Asian or Pacific Islander, black, white, or other. They also were asked if each family member's main national origin or ancestry was Puerto Rican; Cuban; Mexican, Mexicano, Mexican American, or Chicano; other Latin American; or other Spanish. All persons whose main national origin or ancestry was reported in one of these Hispanic groups, regardless of racial background, were classified as Hispanic. Since the Hispanic grouping can include black Hispanic, white Hispanic, Asian and Pacific Islanders Hispanic, and other Hispanic, the race categories of black, white, Asian and Pacific Islanders, and other do not include Hispanic.

MEPS respondents who reported other single or multiple races and were non-Hispanic were included in the other category.

About MEPS-HC

MEPS-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) 427-1656 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 errors, 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. Design Strategies and Innovations in the Medical Expenditure Panel Survey. *Medical Care*, July 2003: 41(7) Supplement: III-5–III-12.

Ezzati-Rice, T.M., Rohde, F., Greenblatt, J. *Sample Design of the Medical Expenditure Panel Survey Household Component, 1998–2007*. Methodology Report No. 22. March 2008. Agency for Healthcare Research and Quality, Rockville, MD. http://www.meps.ahrq.gov/mepsweb/data_files/publications/mr22/mr22.pdf

Machlin, S.R. and Dougherty, D.D. *Overview of Methodology for Imputing Missing Expenditure Data in the Medical Expenditure Panel Survey*. Methodology Report No. 19. March 2007. Agency for Healthcare Research and Quality, Rockville, MD. http://www.meps.ahrq.gov/mepsweb/data_files/publications/ mr19/mr19.pdf

For more information about thyroid disease, see the following publications:

Thyroid Disease: http://thyroid.about.com/
Thyroid Diseases: http://www.nlm.nih.gov/medlineplus/thyroiddiseases.html

Thyroid Disease: http://www.medicinenet.com/thyroid_disease/article.htm
Thyroid Problems Overview: http://www.emedicinehealth.com/thyroid_problems/article_em.htm

Suggested Citation

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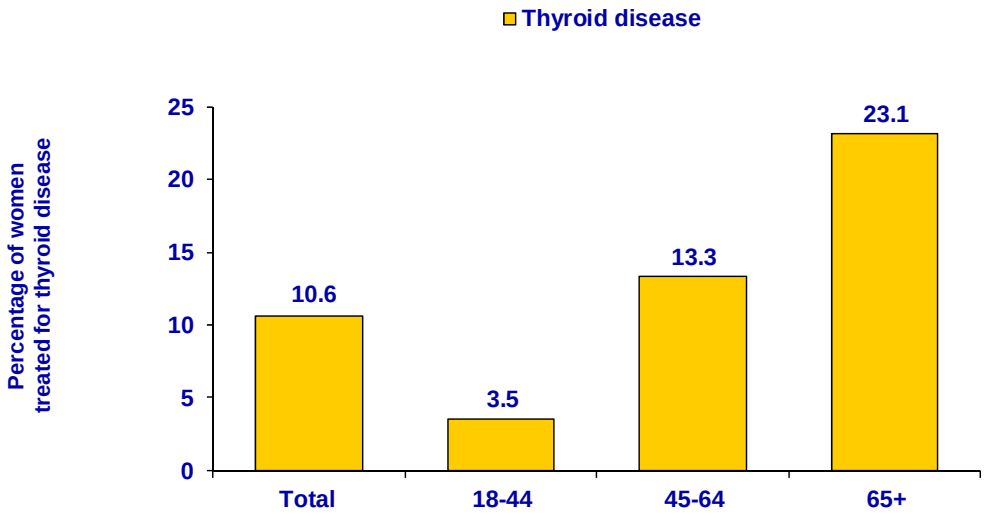
AHRQ welcomes questions and comments from readers of this publication who are interested in obtaining more information about access, cost, use, financing, and quality of health care in the United States. We also invite you to tell us how you are using this Statistical Brief and other MEPS data and tools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

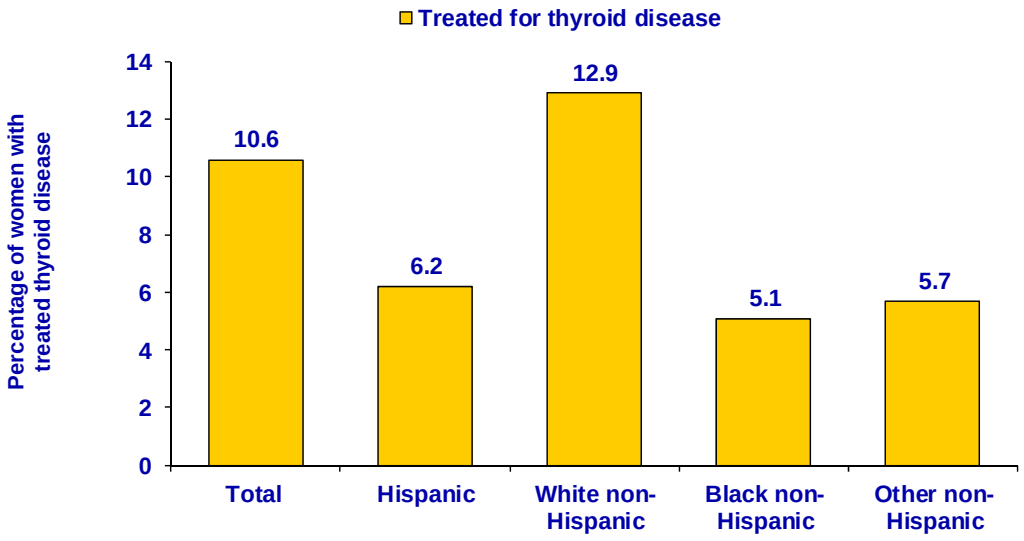
Steven B. Cohen, PhD, Director
Center for Financing, Access, and Cost Trends
Agency for Healthcare Research and Quality
540 Gaither Road
Rockville, MD 20850

Figure 1. Percentage of adult women treated for thyroid disease, by age, 2008



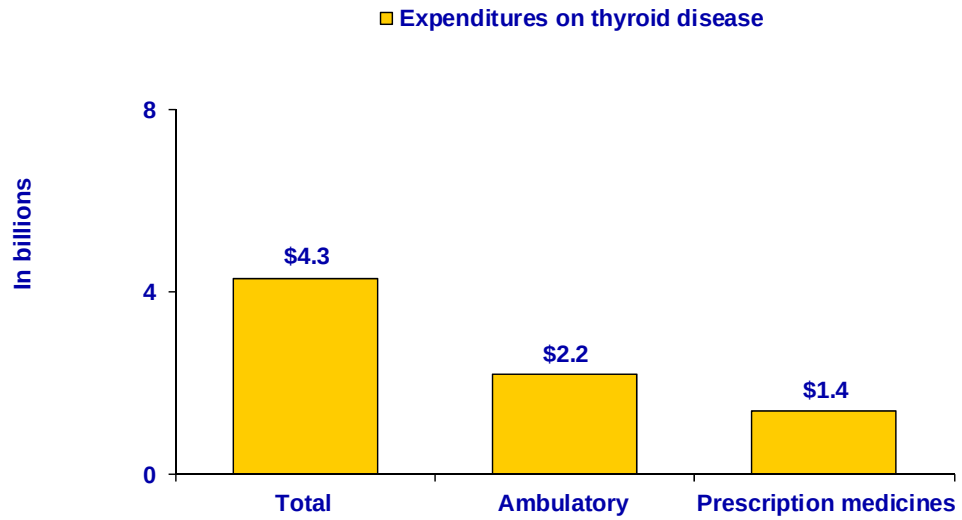
Source: Center for Financing, Access, and Cost Trends, AHRQ, Household Component of the Medical Expenditure Panel Survey, 2008

Figure 2. Percentage of adult women treated for thyroid disease, by race/ethnicity, 2008



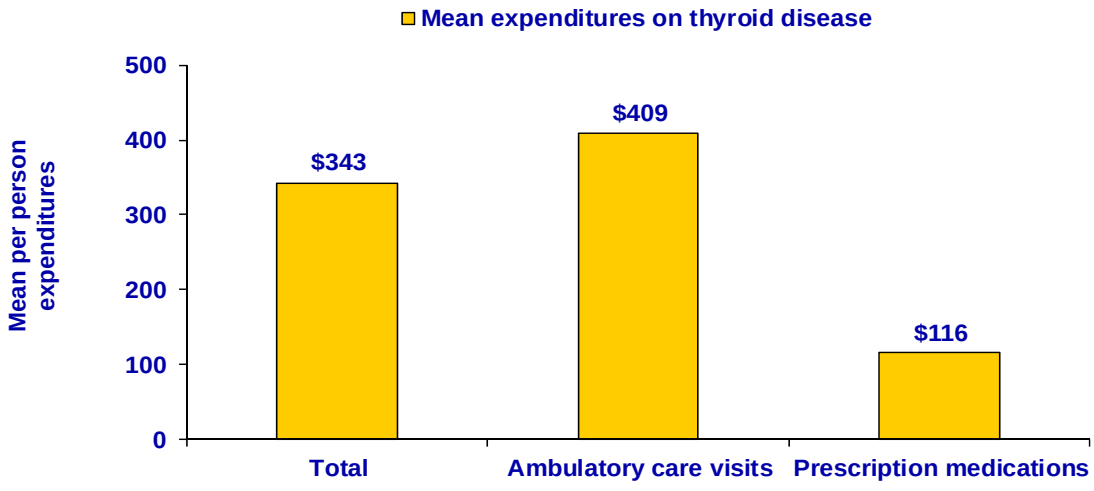
Source: Center for Financing, Access, and Cost Trends, AHRQ, Household Component of the Medical Expenditure Panel Survey, 2008

Figure 3. Annual expenditures on thyroid disease among adult women, by type of service, 2008



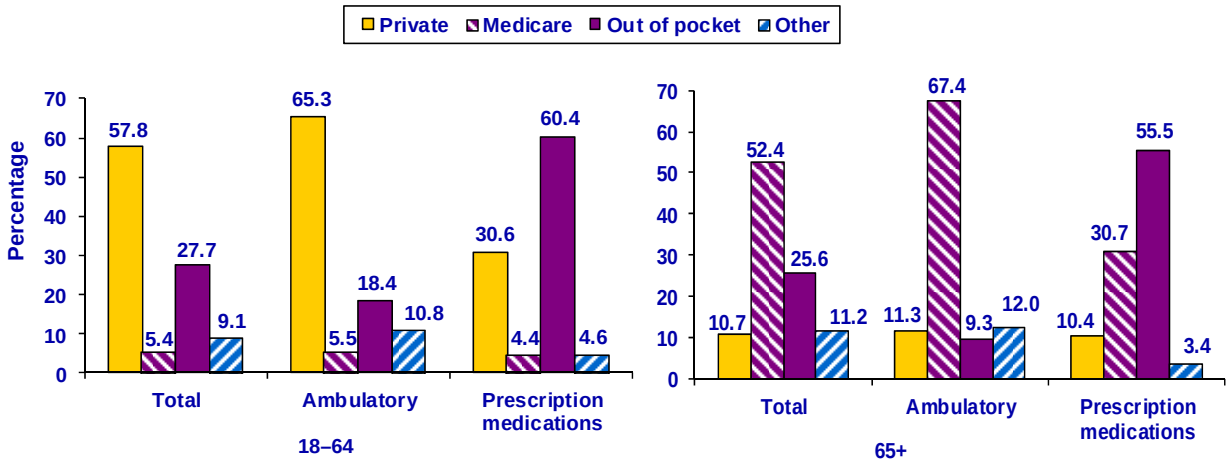
Source: Center for Financing, Access, and Cost Trends, AHRQ, Household Component of the Medical Expenditure Panel Survey, 2008

Figure 4. Mean expenditures on thyroid disease among adult women for those with an expense for treatment of thyroid disease, by type of service, 2008



Source: Center for Financing, Access, and Cost Trends, AHRQ, Household Component of the Medical Expenditure Panel Survey, 2008

Figure 5. Distribution of expenditures on treatment of thyroid disease among adult women, by source of payment and type of service, 2008



Source: Center for Financing, Access, and Cost Trends, AHRQ, Household Component of the Medical Expenditure Panel Survey, 2008