

Racial and Ethnic Disparities in Influenza and Pneumococcal Immunization Rates among Medicare Beneficiaries

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Eighty-five percent of all flu and pneumonia deaths in 2010 occurred among adults age 65 and older. Yet, despite lack of Medicare cost sharing for flu and pneumonia vaccines, significant numbers of older adults don't get immunized and racial and ethnic disparities in immunization rates persist.

Introduction

Influenza (commonly called flu) and pneumonia are infectious respiratory diseases that are vaccine-preventable. Yet together they represented the ninth leading causes of death in the United States among all ages in 2010. During the same year, influenza and pneumonia represented the seventh leading causes of death among people age 65 and older. In fact, more than 85 percent of flu and pneumonia deaths combined occurred among adults age 65 and older.¹

Influenza is responsible for, on average, more than 200,000 hospitalizations each year in the United States,² and together, flu and pneumococcal pneumonia result in thousands of potentially preventable deaths each year.³

Flu and pneumonia immunization rates among *all* older adults are significantly below the Healthy People 2020 goals of 90 percent for each vaccine.⁴ Immunization rates among African Americans and Hispanics are substantially below those of their white counterparts.⁵ These data highlight the need to improve efforts to ensure

that all Medicare beneficiaries receive these important vaccines and especially beneficiaries who are members of racial and ethnic minority groups for which the immunization rates are disproportionately low.

Adult Immunization Recommendations and Medicare Coverage

The Medicare population is especially susceptible to complications associated with flu and pneumonia because both diseases often exacerbate underlying chronic conditions, such as heart or lung disease, asthma, and diabetes.⁶ For example, research suggests that acute respiratory infections, including influenza, may precipitate major cardiovascular events, such as acute coronary syndrome.⁷

The Advisory Committee on Immunization Practices (ACIP) is an expert panel selected by the Secretary of the U.S. Department of Health and Human Services to advise the nation on how to reduce vaccine-preventable diseases. The ACIP, which develops standards for routine

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vaccine administration, including dosage, periodicity schedules, and contraindications for pediatric and adult populations, recommends the following:

- An *annual* influenza vaccine for all people age 6 months and older.
- When vaccine supply is limited, vaccine priority groups to include adults ages 50 and older and all people who live in long-term care facilities.
- A *one-time* vaccination for pneumococcal pneumonia for all adults age 65 and older.⁸

The Medicare program covers pneumococcal and influenza vaccines for people age 65 and older in accordance with ACIP recommendations. Medicare pays for both the cost of the vaccines and their administration by participating providers. No coinsurance or copayments are associated with either vaccine, and beneficiaries are not required to meet the annual Medicare deductible in order to receive them. Finally, when five years have elapsed since the initial pneumococcal vaccine,

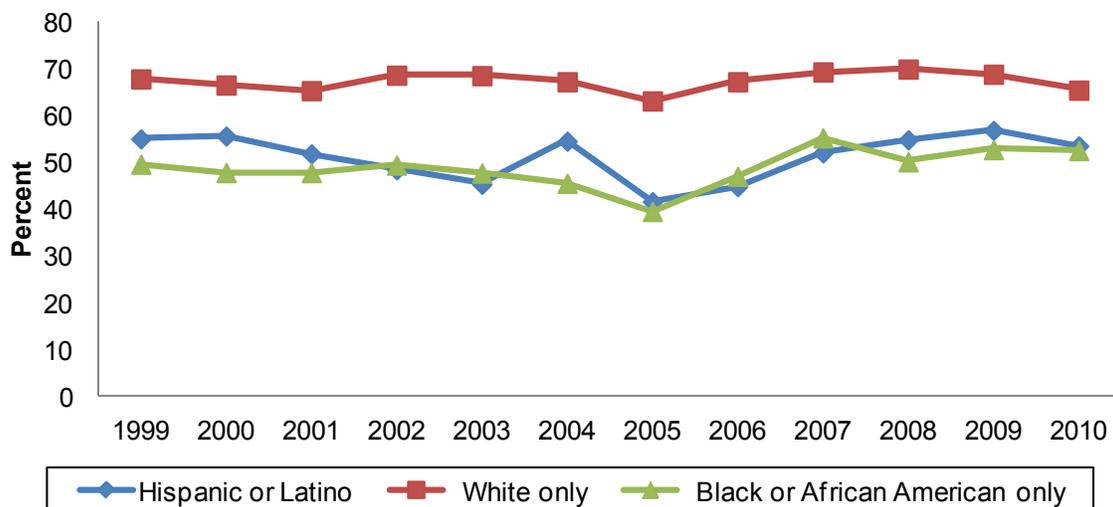
Medicare will cover a booster vaccine for people in high-risk categories.⁹

Disparities in Immunization Rates among Medicare Beneficiaries

Despite Medicare’s coverage of influenza and pneumonia vaccines at no out-of-pocket cost to beneficiaries, the number of beneficiaries who are immunized is less than optimal, with even lower rates noted among African Americans and Hispanics. In 2010, just over half of African American and Hispanic adults age 65 and older (53 percent and 54 percent, respectively) reported receiving the influenza vaccine that year, compared with 65 percent of white adults in the same age group (figure 1).¹⁰ Influenza immunization disparities persist, even after controlling for other factors such as socioeconomic status, health status, and the presence of risk factors for influenza.^{11,12}

The gap is even wider for lifetime pneumonia immunization rates among adults age 65 and older. In 2010, only 46 percent of African Americans and 39 percent of Hispanics reported having

Figure 1
Percent of Adults Age 65 and Older who Received an Influenza Vaccination Within the Past 12 Months, 1999–2010



Source: AARP Public Policy Institute Analysis of National Health Interview Survey, 1999–2010.

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ever received the vaccine, compared with 63 percent of their white counterparts (figure 2).¹³ Although pneumonia coverage rates have modestly improved over the past decade for all racial and ethnic groups, disparities in pneumonia immunization rates persist; with the degree of the disparities observed today almost matching those observed more than a decade ago (figure 2).¹⁴

Factors Associated with Racial and Ethnic Immunization Disparities among Medicare Beneficiaries

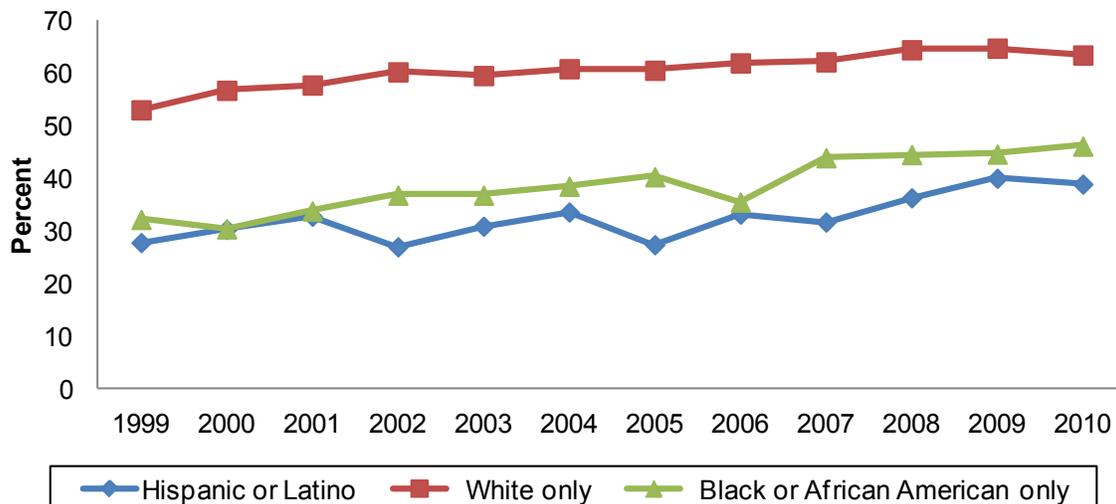
Research shows the following factors are associated with low flu and pneumococcal pneumonia immunization rates among African Americans and Hispanics:

- Cultural and linguistic barriers that limit access to care;¹⁵
- Living in linguistically isolated areas and newer immigrant destinations;¹⁶
- Consumer lack of awareness about the need for the vaccinations;¹⁷
- Consumer fear that the vaccines will cause severe illness;¹⁸
- Distrust of immunizations due to memories of the Tuskegee syphilis experiments;¹⁹
- Few consumer-initiated visits to providers to receive the vaccines;²⁰
- Provider underestimation of the safety and efficacy of the vaccines;²¹
- Provider lack of familiarity with age-based immunization recommendations;²²
- Provider failure to recommend age-appropriate immunizations to older adults;²³ and
- Provider failure to institute ACIP recommendations for standing-order programs that authorize nurses or pharmacists to administer vaccinations according to an institution- or clinician-approved protocol.

Conclusion

Although the Medicare program pays for influenza and pneumococcal

Figure 2
Percent of Adults Age 65 and Older who Have Ever Received a Pneumococcal Vaccination, 1999-2010



Source: AARP Public Policy Institute Analysis of National Health Interview Survey, 1999–2010.

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vaccinations for all beneficiaries, racial and ethnic disparities persist among African Americans, and Hispanics. The challenge of increasing the take up of vaccines is twofold:

- Educating patients in culturally competent, linguistically appropriate

ways about the benefits of vaccination so they can engage in responsible disease prevention; and,

- Educating providers and health systems about the importance of prioritizing adult vaccination, especially among racial and ethnic minorities.

Endnotes

¹ S. Murphy, J. Xu, and K. Kochanek, “Deaths: Preliminary Data for 2010,” *National Vital Statistics Reports* 60 (4), January 11, 2012.

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³ Murphy et al., op. cit.

⁴ Healthy People 2020 is a set of health objectives for the nation to achieve over the second decade of the century. Healthy People 2020 was developed through a broad consultation process, built on the best scientific knowledge, and designed to measure progress over time. U.S. Department of Health and Human Services, Office of Disease Prevention and Health Promotion, *Healthy People*, <http://www.healthypeople.gov/About/whatis.htm>

⁵ U.S. Department of Health and Human Services, Office of Disease Prevention and Health Promotion, *Healthy People*, op. cit.

⁶ K. L. Nichol, J. Wuorenma, and T. von Sternberg, “Benefits of Influenza Vaccination for Low-, Intermediate-, and High-Risk Senior Citizens,” *Archives of Internal Medicine* 158 (September 14, 1998): 1769–76; Centers for Disease Control and Prevention, “Influenza and Pneumococcal Vaccination Coverage among Persons Age ≥ 65 Years and Persons Aged 18–64 Years with Diabetes or Asthma—United States, 2003,” *Morbidity and Mortality Weekly Review* 53 (43), November 5, 2004.

⁷ Acute coronary syndrome is a term used for any condition brought on by sudden reduced blood flow to the heart. American Heart Association, “Acute Coronary Syndrome,” June 2011, http://www.heart.org/HEARTORG/Conditions/HeartAttack/AboutHeartAttacks/Acute-Coronary-Syndrome_UCM_428752_Article.jsp; A. Phrommintikul et al., “Influenza vaccination reduces cardiovascular events in patients with acute coronary syndrome,” *European Heart Journal* 32 (February 2011): 1730–5.

⁸ Centers for Disease Control and Prevention, National Immunization Program, Advisory Committee on Immunization Practices, 2010, <http://www.cdc.gov/vaccines/recs/default.htm>.

⁹ People who receive a pneumococcal vaccine before age 65 should receive another dose after they turn age 65 and after five years have elapsed since their first dose. People who are immunocompromised should receive a follow-up vaccine. Centers for Disease Control and Prevention, “Recommended Adult Immunization Schedule—United States, October 2006–September 2007,” *Mortality and Morbidity Weekly Report* 55(40) (October 13, 2006): Q1–Q4, <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5540a10.htm>; Centers for Medicare and Medicaid Services, Adult Immunization, 2009–2010 Immunizers’ Question and Answer Guide to Medicare Coverage of Seasonal Influenza and Pneumococcal Vaccinations: Steps to Promoting Wellness Adult Immunizations, <http://www.cms.hhs.gov/adultimmunizations/>.

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¹¹ P. L. Herbert et al., “The Causes of Racial and Ethnic Differences in Influenza Vaccination Rates among Elderly Medicare Beneficiaries,” *Health Services Research* 40(2), April 2006.

¹² A. M. Haviland, M. N. Elliott, K. Hambarsoomian, and N. Lurie, “Immunization Disparities by Hispanic Ethnicity and Language Preference,” *Archives of Internal Medicine* 24;12(2) (January 2011): 158–65.

¹³ AARP Public Policy Analysis, op. cit.

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¹⁴ Ibid.

¹⁵ A. M. Haviland et al., op. cit.

¹⁶ Ibid.

¹⁷ The Council of State Governments, “Protecting Our Communities: Programs to Reduce Adult Immunization Disparities,” *Healthy States Brief* 1(8) (August 2006); C. A. Winston, P. M. Wortley, and K. A. Lees, “Factors Associated with Vaccination of Medicare Beneficiaries in Five U.S. Communities: Results from the Racial and Ethnic Adult Disparities in Immunization Initiative Survey, 2003,” *Journal of the American Geriatric Society* 54 (2006): 303–10.

¹⁸ Centers for Disease Control and Prevention, “Racial/Ethnic Disparities in Influenza and Pneumococcal Vaccination,” op. cit.; Winston et al., op. cit.

¹⁹ “African Americans Leery of vaccine,” University of Buffalo, *UB Reporter*, October 21, 2009.

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