Asthma Is Usually a Secondary Cause Of Hospitalization; Rate Rises 113%

BY DAMIAN MCNAMARA Miami Bureau

sthma is more often a secondary reason for hospitalization than a principal cause in the United States, and the rate of secondary diagnoses is increasing, said a report from the Agency for Healthcare Research and Quality.

From 1997 to 2005, adult hospital stays specifically for asthma remained stable, whereas the number of secondary asthma diagnoses more than doubled. Asthma hospital stays also varied by socioeconomic status, age, and gender, according to "Hospital Stays Related to Asthma for Adults, 2005," a statistical brief released by AHRQ.

Between 2000 and 2005, hospitalizations for asthma increased 18%, from 247,200 to 290,600. However, the number of hospital stays in which asthma was secondary went from 753,800 to 1,609,200, a rise of 113%.

Pneumonia by far led the list of primary diagnoses for hospital stays with a secondary asthma coding in 2005, accounting for 123,100 or nearly 7.6% of these stays, Chaya T. Merril and colleagues at the agency's Healthcare Cost and Utilization Project (HCUP) reported.

Heart failure and nonspecific chest pain were the next most common principal diagnoses, accounting for 121,100 hospital stays or 7.5% with a secondary asthma diagnosis. Osteoarthritis (specifically, degenerative joint disease) and mood disorders (depression and bipolar disorder) were each noted in 53,000, or 3.3%, of

Hospitalizations increased with age. Compared with younger patients, those aged 65 years and older had more than three times the rate of asthma-related hospitalizations. Rates were about 2.5 times greater in women than in men.

Of the 1.9 million asthma-related adult hospital stays in 2005, asthma was a principal diagnosis for 15% and a secondary diagnosis for the other 85%. Mean length of stay was 4.1 days for the primary asthma group and 4.9 days for the secondary group.

Data came from the 2005 Nationwide Inpatient Sample, similar nationally representative samples from 1997-2004, and supplemental sources. The database includes patients regardless of insurance type or uninsured status admitted to shortterm, nonfederal hospitals, including obstetric and gynecologic facilities; ear, nose, and throat, as well as orthopedic, cancer, public, and academic medical hospitals.

Of the primary asthma inpatient stays, 74% were admissions through an emergency department, compared with 51% of the secondary diagnosis stays, whereas of the more than 30 million hospital stays in 2005 with no mention of asthma, 48% were emergency department admissions.

Asthma hospitalization rates were higher in poorer areas, compared with richer regions. For example, adults living in a zip code with a median annual income below \$36,000 had a 63% higher rate of asthmarelated hospital stays, compared with those residing in a zip code with a higher median income. Medicare and Medicaid were billed for about 60% of asthma-related stays, the report noted.

After accounting for differences in length of stay, hospitalizations principally for asthma cost an average \$1,400 a day, or about \$400 less than the estimated \$1,800 a day for hospital stays with secondary asthma. There was little regional variation in hospital-

The AHRQ has also released a second report on pediatric asthma-related hospital stays. The full report is available at www.hcup-us.ahrq.gov/ reports/statbriefs/sb54.pdf. ■





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References: 1. Centers for Disease Control and Prevention (CDC), Preventing tetanus, diphtheria, and pertussis among adults: use of tetanus toxoid, reduced diphtheria toxoid and acellular pertussis vaccine: recommendations of the Advisory Committee on Immunization Practices (ACIP) and recommendation of ACIP, supported by the Healthcare Infection Control Practices Advisory Committee (HICPAC), for use of Tdap among health-care personnel. *MMWR*. 2006;55(RR-17):21-22. 2. CDC. Preventing tetanus, diphtheria, and pertussis among adolescents: use of tetanus toxoid, reduced diphtheria toxoid and acellular pertussis vaccines recommendations of the Advisory Committee on Immunization Practices (ACIP). MMWR. 2006;55(RR-3):22



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