

Supplementary Online Content

Zhang Y, Steinman MA, Kaplan CM. Geographic variations in outpatient antibiotic prescribing among older adults. *Arch Intern Med*. Published online September 17, 2012. doi: 10.1001/archinternmed.2012.3717.

eFigure 1. Proportion of older adults using any antibiotic by region and quarter. A, Proportion of patients using cephalosporins. B, Proportion of patients using macrolides. C, Proportion of patients using penicillin. D, Proportion of patients using quinolones. E, Proportion of patients using tetracycline.

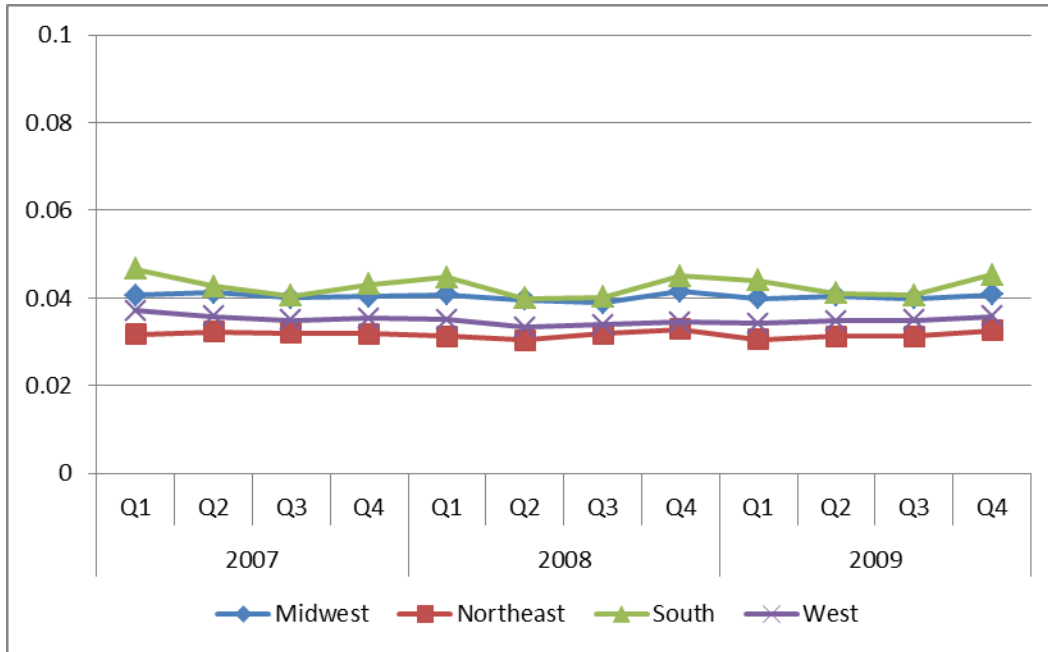
eFigure 2. Prevalence rates of 3 conditions by region and quarter. A, Bacterial pneumonia. Bacterial pneumonia was defined as *ICD-9* codes 481, 482, 483, 485, and 486 that should almost always require antibiotics. B, Acute nasopharyngitis (common cold) and nonspecific upper respiratory infections. Acute nasopharyngitis (common cold) and nonspecific upper respiratory infections were defined as *ICD-9* codes 460 and 465, for which antibiotics typically should not be used. C, Other acute respiratory tract infections. Other acute respiratory tract infections were defined as *ICD-9* codes 461, 462, 463, 466, 473, and 490, including sinusitis (*ICD-9* codes 461 and 473), pharyngitis and tonsillitis (*ICD-9* codes 462 and 463), and bronchitis (*ICD-9* codes 466 and 490). Each of the 4 regions includes the following states: *Northeast*: Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, and Vermont. *Midwest*: Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, and Wisconsin. *South*: Alabama, Arkansas, Delaware, District of Columbia, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, and West Virginia. *West*: Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming.

eFigure 3. Quintiles of adjusted annual antibiotic spending and counts according to hospital-referral region in 2009. A, Variation in adjusted annual antibiotic spending. B, Variation in adjusted annual counts.

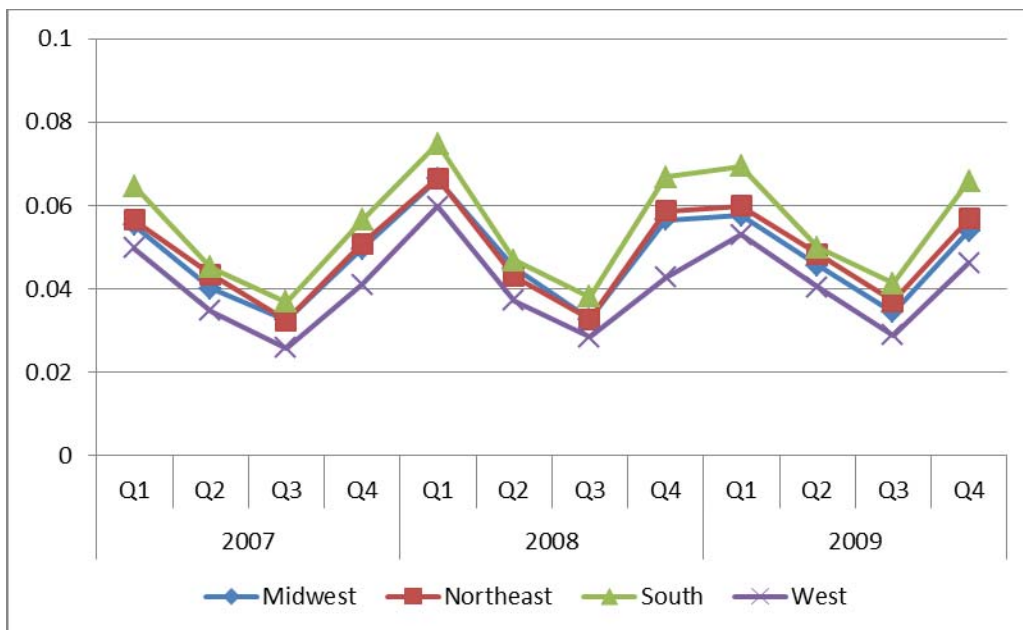
This supplementary material has been provided by the authors to give readers additional information about their work.

eFigure 1. Proportion of Older Adults Using Any Antibiotic, By Region and Quarter

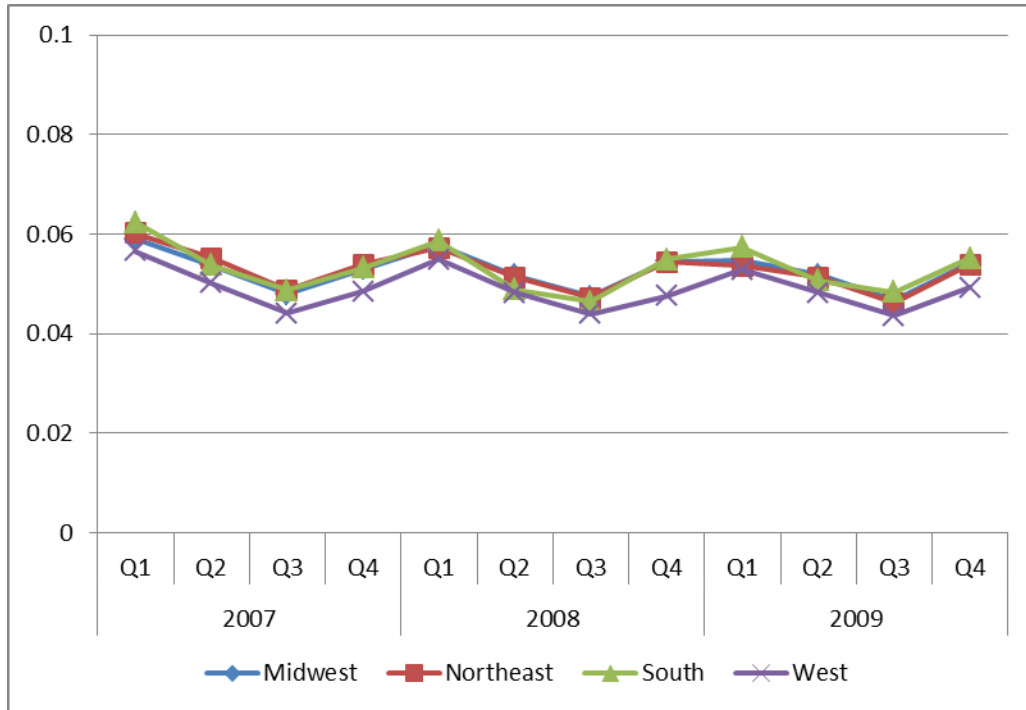
A. Proportion of Patients Using Cephalosporins



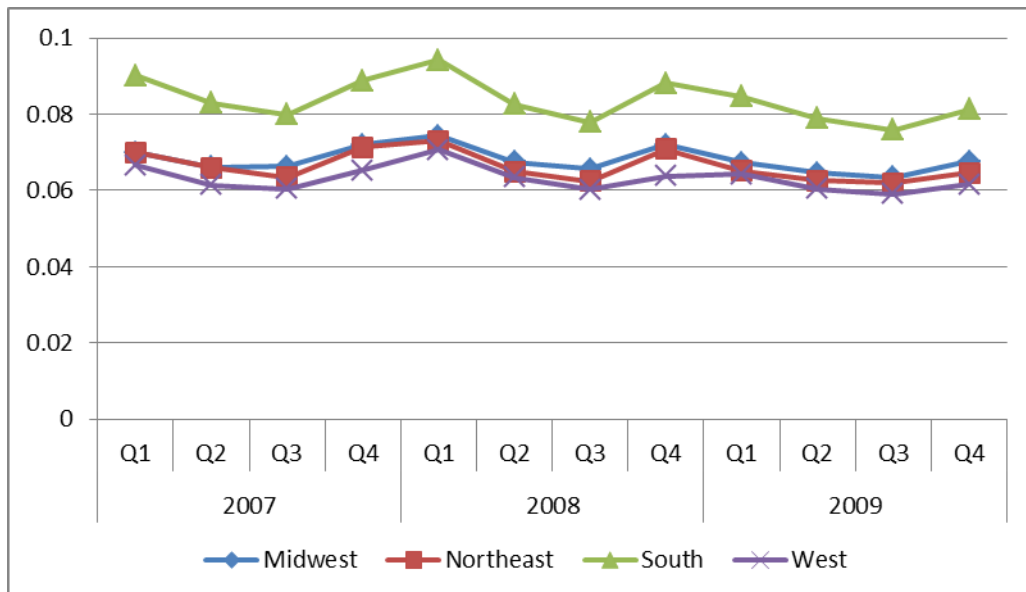
B. Proportion of Patients Using Macrolides



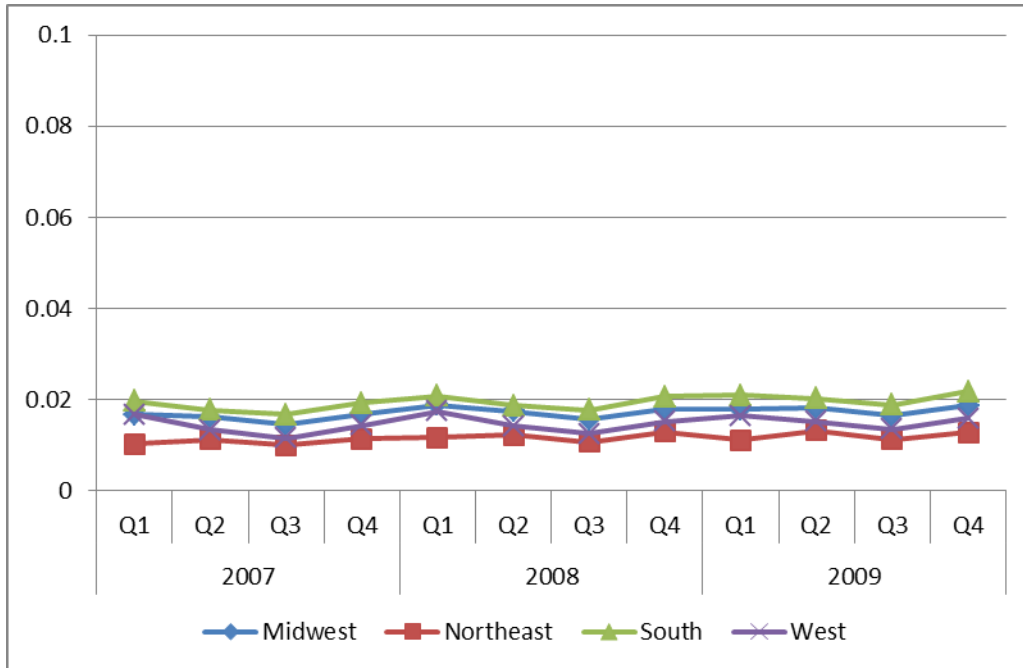
C. Proportion of Patients Using Penicillin



D. Proportion of Patients Using Quinolones

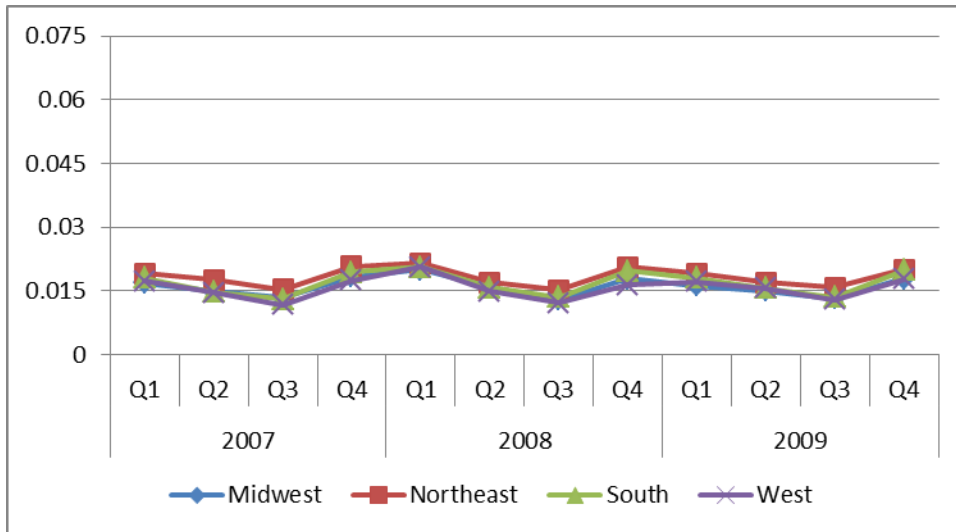


E. Proportion of Patients Using Tetracycline

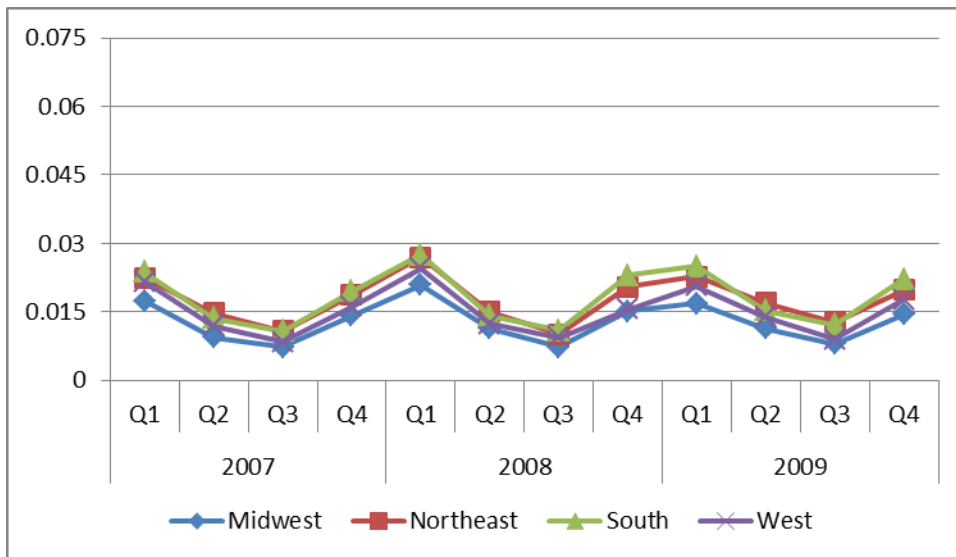


eFigure 2. Prevalence Rates of Three Conditions by Region and Quarter

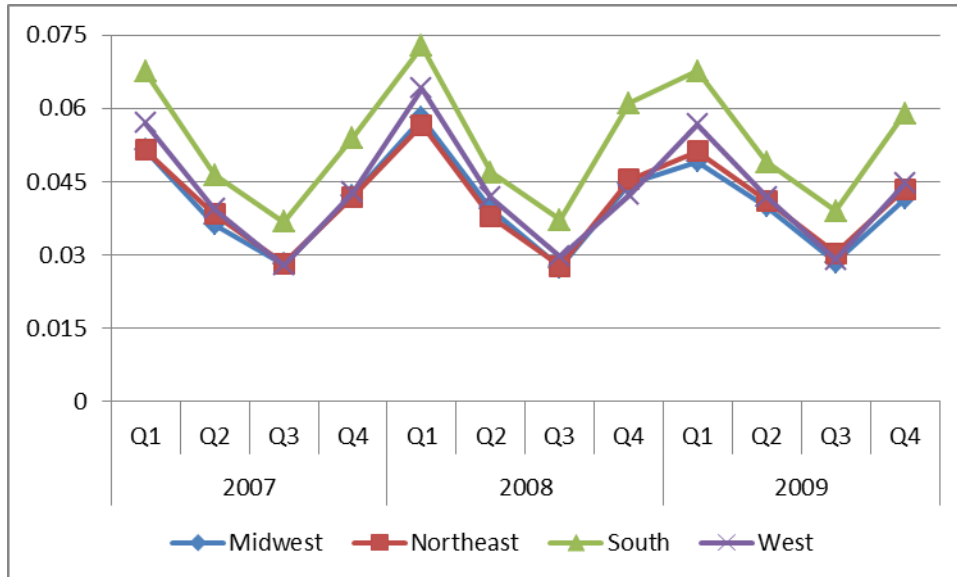
A. Bacterial Pneumonia



B. Acute nasopharyngitis (common cold) and nonspecific upper respiratory infections



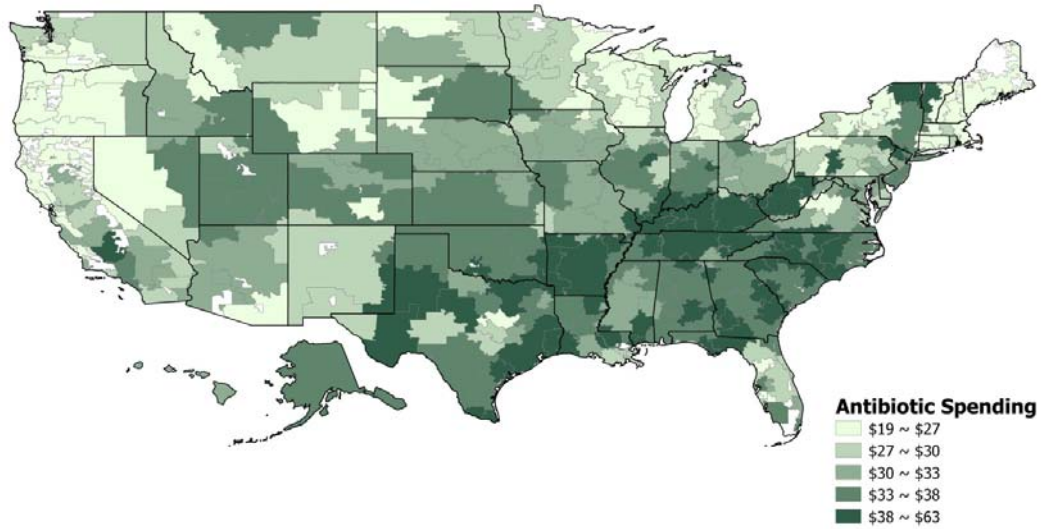
C. Other Acute Respiratory Tract Infections



Prevalence rates of 3 conditions by region and quarter. A, Bacterial pneumonia. Bacterial pneumonia was defined as *ICD-9* codes 481, 482, 483, 485, and 486 that should almost always require antibiotics. B, Acute nasopharyngitis (common cold) and nonspecific upper respiratory infections. Acute nasopharyngitis (common cold) and nonspecific upper respiratory infections were defined as *ICD-9* codes 460 and 465, for which antibiotics typically should not be used. C, Other acute respiratory tract infections. Other acute respiratory tract infections were defined as *ICD-9* codes 461, 462, 463, 466, 473, and 490, including sinusitis (*ICD-9* codes 461 and 473), pharyngitis and tonsillitis (*ICD-9* codes 462 and 463), and bronchitis (*ICD-9* codes 466 and 490). Each of the 4 regions includes the following states: *Northeast*: Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, and Vermont. *Midwest*: Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, and Wisconsin. *South*: Alabama, Arkansas, Delaware, District of Columbia, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, and West Virginia. *West*: Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming.

eFigure 3. Quintiles of Adjusted Annual Antibiotic Spending and Counts According to Hospital-Referral Region in 2009

A. Variation in Adjusted Annual Antibiotic Spending



B. Variation in Adjusted Annual Counts

