Abstract

The pneumococcal conjugate 7 (PCV7) vaccine provides immunity against seven of the most common serotypes of *Streptococcus pneumoniae* that cause disease such as pneumonia. An evaluation of the long term effectiveness of PCV7 on all-cause pneumonia may help direct immunization policy and practice.

Medicaid data for children less than two years of age, from November 1998 through December 2008, were analyzed for all-cause pneumonia. Segmented regression was used to compare baseline, intervention, and post intervention phases. Inpatient and outpatient rates were analyzed separately by race and age groups.

During the baseline period, overall outpatient and inpatient pneumonia rates experienced a slowly rising trend. These trends were reversed during the intervention segment. During post intervention, overall outpatient and inpatient trends were flat. However, the mean incidence rates of outpatient and inpatient pneumonia increased.

The benefits of PCV7 vaccine may be limited in some populations.