

(192) The Burden of RSV and Bronchiolitis in the US Infant Medicaid Population Extends Beyond the Inpatient Setting

Sunday August 27, 2023

8:00 AM – 1:30 PM ADT

Poster Session C – Respiratory Diseases

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Background: The recent surge in RSV among infants in the US has reenergized interest in this infectious disease. Prior studies have shown that the burden of RSV is higher in Medicaid infants, compared to infants with private insurance. However, much of the RSV literature is focused on the inpatient (IP) setting. Little is known of the extent to which management of RSV in other settings occurs among Medicaid infants.

Objectives: This study describes diagnoses of RSV and bronchiolitis among Medicaid infants in 7 states in the US across all settings from 2016-2018.

Methods: Medicaid claims were obtained for infants born and residing in AZ, CA, FL, MI, NC, NY, and TX from 2016-2018, the most recent years in which data were available, with ICD-10 diagnoses of RSV (B97.4, J12.1, J20.5, J21.0) or bronchiolitis (RSV codes plus J21.8, J21.9) in any setting before age 1. Bronchiolitis was considered an upper estimate of RSV because laboratory testing of RSV is not broadly recommended. Initial encounters for each infant's first RSV or bronchiolitis episode(s) were characterized by the setting utilized (IP, outpatient [OP], emergency department [ED]) and results were summarized by state. Statewide Medicaid birth totals, obtained from the National Center for Health Statistics birth data files, were used to calculate state-wide proportions of infants diagnosed with RSV before age 1.

Results: From 2016-2018, there were 291,112 infants with Medicaid coverage diagnosed with RSV or bronchiolitis before age 1 across the seven states, accounting for 33% of statewide Medicaid births in TX, 27% NC, 23% AZ, 20% NY, 18% FL, 13% MI, and 9% CA. Infants' first RSV encounters occurred most often in the ED in 5 states (61% AZ, 65% CA, 52% FL, 69% MI, 55% NY). In NC and TX, the first RSV encounter occurred most often in the OP setting (68% and 57%, respectively), while OP encounters for RSV ranged from 28-47% for the other 5 states. IP treatment for the first RSV encounter occurred in 9-29% of episodes. In contrast, initial bronchiolitis encounters were most often treated in the OP setting in all states, ranging from 52-69% of episodes, followed by ED (28-44%), and IP (4-12%).

Conclusions: To our knowledge, this study of 7 geographically diverse states provides pre-Covid, state-level Medicaid data that are not in the current RSV literature. RSV is a major public health concern with up to one third of Medicaid-covered infants born in each state diagnosed with RSV before age 1 during the period 2016-2018. This study highlights the need to consider all settings to describe the complete burden of RSV in the infant Medicaid population.