

## PALIVIZUMAB UTILIZATION UPDATE: 2015-16 THROUGH 2017-18 SEASONS

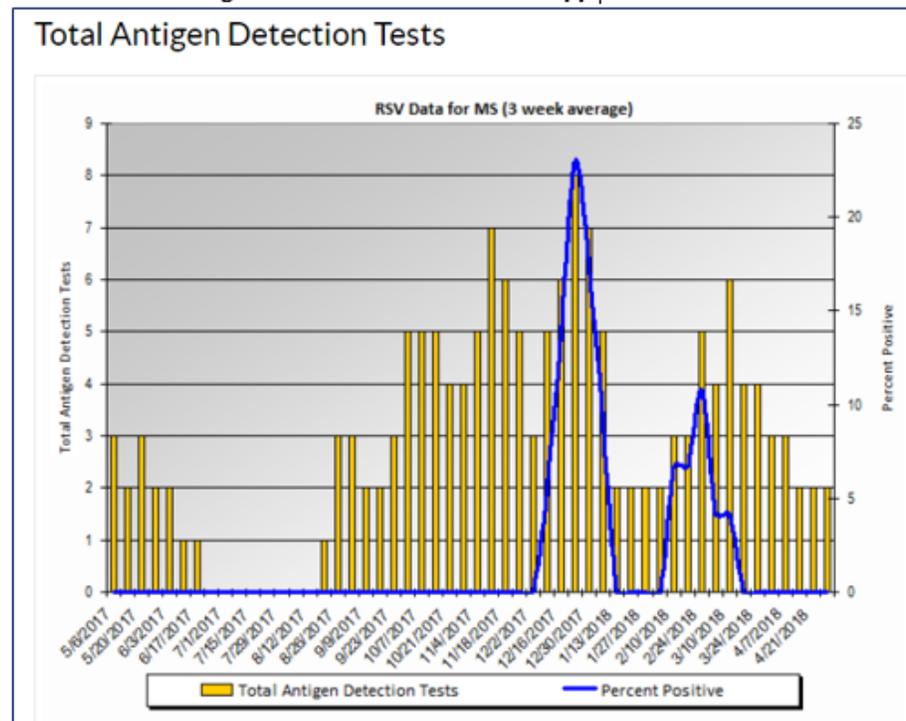
### BACKGROUND

Palivizumab (Synagis®) was licensed in June 1998 by the Food and Drug Administration for the reduction of serious lower respiratory tract infection caused by respiratory syncytial virus (RSV) in children at increased risk of severe disease. The Mississippi Division of Medicaid (DOM) supports the administration of Synagis® for children meeting the American Academy of Pediatrics (AAP) criteria for RSV immunoprophylaxis. On July 28, 2014, the AAP published their latest policy statement, “Updated Guidance for Palivizumab Prophylaxis Among Infants and Young Children at Increased Risk of Hospitalization for Respiratory Syncytial Virus Infection” on-line in *Pediatrics*<sup>1</sup>. At the August 2014 DUR Board Meeting the board voted to adopt the new guidelines as the criteria to be used by DOM for the 2014-15 Season.

In the United States, RSV infections typically occur at the time of annual community outbreaks, during late fall, winter, and early spring. There may be variation in the timing of outbreaks between regions and between communities in the same region. The recommended beginning and ending dates for the RSV season in Mississippi is determined by monitoring the antigen detection test and when applicable, the PCR (polymerase chain reaction) results reported by the Centers for Disease Control (CDC) National Respiratory and Enteric Surveillance System (NREVSS).

Participating laboratories report weekly to CDC the total number of RSV tests performed that week, and the number of those tests that were positive. For example, the antigen detection test results for Mississippi are shown in Figure 1.<sup>2</sup> Each point on the trend graph displays the average number of RSV tests that were performed, and the average percent of those that were positive from three adjacent weeks: the specified week, and the weeks preceding and following it. This is also known as a centered 3-

FIGURE 1: RSV Antigen Detection Data for Mississippi



<sup>1</sup> American Academy of Pediatric Committee on Infectious Diseases and Bronchiolitis Guidelines Committee. Updated Guidance for Palivizumab Prophylaxis Among Infants and Young Children at Increased Risk of Hospitalization for Respiratory Syncytial Virus Infection. *Pediatrics*. Available at <http://pediatrics.aappublications.org/content/early/2014/07/23/peds.2014-1665>.

<sup>2</sup> <https://www.cdc.gov/surveillance/nrevss/rsv/index.html>. (accessed 5/3/2018).

week moving average. There was insufficient data reported for MS during the 2017-2018 season to utilize PCR data. DOM also considers regional trend data, specifically the South region. In addition, DOM uses data from HHS Regional Trends. Mississippi is included in the Atlanta HHS 4 region. The DOM Office of Pharmacy consults with an infectious disease physician to determine the appropriate timeframe using the aforementioned CDC NREVSS data for determining the RSV season timeframe for Mississippi.

## PALIVIZUMAB UTILIZATION

Table 1 shows a summary of palivizumab utilization for the last three seasons. The total number of beneficiaries treated has dropped slowly over the last 3 years. The average number of pharmacy claims per beneficiary rose slightly between the 2015-16 season and the 2016-17 season, but decreased to 3.3 for 2017-18 season. The average paid amount per beneficiary treated has fluctuated slightly and was \$8,014 this last season. This lower amount is due to the slight decrease in the average number of claims per beneficiary during the last season.

| <b>TABLE 1: Palivizumab Utilization Summary by Season and Pharmacy Program</b> |  |             |             |              |
|--|--|-------------|-------------|--------------|
| <b>Season</b>  | <b>Pharmacy Program</b>                  |             |             |              |
|  | <b>FFS</b>                               | <b>UHC</b>  | <b>MAG</b>  | <b>TOTAL</b> |
|  | <b>Number of Unique Beneficiaries</b>    |             |             |              |
| 2015-16  | 70                                       | 144         | 157         | 371          |
| 2016-17  | 24                                       | 152         | 153         | 329          |
| 2017-18  | 18                                       | 142         | 154         | 314          |
|  | <b>Mean Number of Claims/Beneficiary</b> |             |             |              |
| 2015-16  | 2.8                                      | 3.5         | 3.6         | 3.4          |
| 2016-17  | 3.5                                      | 3.5         | 4.0         | 3.7          |
| 2017-18  | 3.3                                      | 3.1         | 3.4         | 3.3          |
|  | <b>Total Dollars Paid</b>                |             |             |              |
| 2015-16  | \$419,724                                | \$1,321,154 | \$1,409,679 | \$3,150,557  |
| 2016-17  | \$203,037                                | \$1,401,091 | \$1,606,513 | \$3,210,641  |
| 2017-18  | \$94,015                                 | \$1,095,534 | \$1,326,848 | \$2,516,397  |
|  | <b>Dollars Paid / Beneficiary</b>        |             |             |              |
| 2015-16  | \$5,996                                  | \$9,175     | \$8,979     | \$8,492      |
| 2016-17  | \$8,460                                  | \$9,218     | \$10,500    | \$9,759      |
| 2017-18  | \$5,223                                  | \$7,715     | \$8,616     | \$8,014      |

**NO ACTION NEEDED:** This Synagis/RSV report for the DUR Board on palivizumab (Synagis®) utilization trends in the three pharmacy programs is for information and discussion purposes only. No action is being sought at this time.