

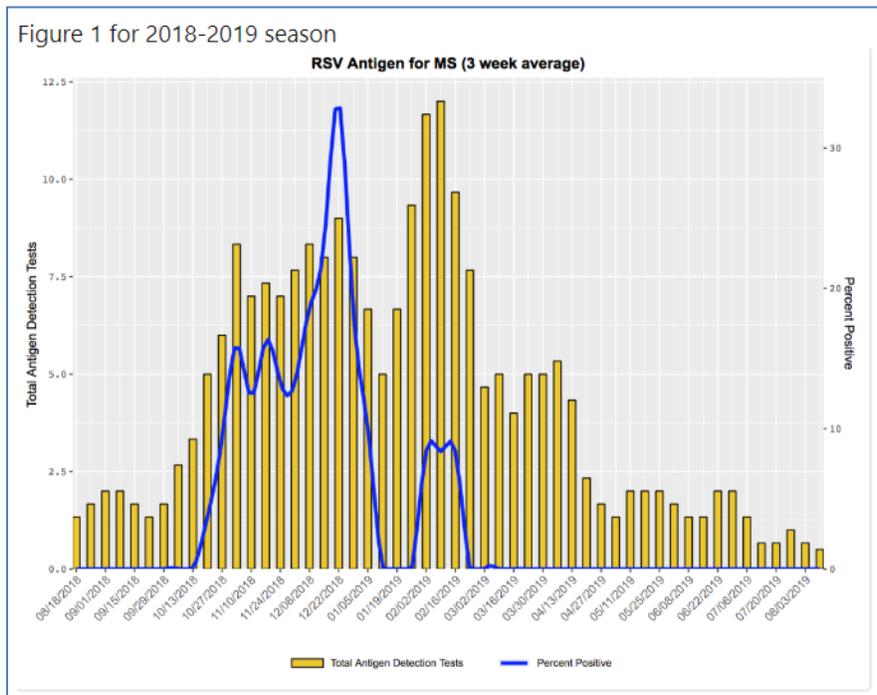
## PALIVIZUMAB UTILIZATION UPDATE: 2015-16 THROUGH 2018-2019 SEASONS

### 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. The AAP Committee on Infectious Diseases and the Subcommittee on Bronchiolitis regularly review and evaluate all data as they become available. In September 2017, all available data regarding palivizumab (Synagis®) were considered, and both groups reaffirmed the recommendations in the RSV policy statement and technical report.<sup>2</sup>

In the United States, RSV infections typically occur at the time of annual community outbreaks, during late fall, winter, and early spring. Annually RSV leads to an average of 2.1 million outpatient visits and over 57,000 hospitalizations among children under 5 years of age.<sup>3</sup>

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 are 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



<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> American Academy of Pediatrics News. October 19, 2017. <https://www.aappublications.org/news/2017/10/19/RSV101917>

<sup>3</sup> Hall CB, Weinberg GA, Iwane MK, Blumkin AK, Edwards KM, et al. The burden of respiratory syncytial virus infection in young children. *External. New Engl J Med*. 2009;360(6):588-98.

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>4</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-week moving average. 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 four seasons. The total number of beneficiaries treated rose slightly last year almost returning to the same number of beneficiaries treated in the 2015-2016 season. The average paid amount per beneficiary treated was the highest it has been at \$10,136 last season. This increase in average paid amount per beneficiary can be attributed to an increase in the mean number of claims/beneficiary to 4.4. The maximum recommended doses in a season is 5. The total dollars paid for 2018-2019 season was the highest of the past four seasons at \$3,740,227.

Table 1: Palivizumab Utilization Summary by Season and Pharmacy Program					
Season	Pharmacy Program				Total
	FFS	UHC	MAG	MOL	
<b>Number of Unique Beneficiaries</b>					
2015-16	70	148	157	0	375
2016-17	24	158	153	0	335
2017-18	18	164	165	0	347
2018-19	34	155	175	5	369
<b>Total Dollars Paid</b>					
2015-16	\$419,724	\$1,322,920	\$1,409,679	\$ -	\$3,152,323
2016-17	\$203,037	\$1,406,196	\$1,606,513	\$ -	\$3,215,746
2017-18	\$93,812	\$1,283,588	\$1,725,471	\$ -	\$3,102,871
2018-19	\$270,004	\$1,384,210	\$2,078,395	\$7,619	\$3,740,227
<b>Mean Number of Claims/Beneficiary</b>					
2015-16	2.8	3.5	3.6	0	3.4
2016-17	3.5	3.5	4.0	0	3.7
2017-18	3.3	3.6	4.2	0	3.8
2018-19	4.1	4.0	4.9	1	4.4
<b>Dollars Paid / Beneficiary</b>					
2015-16	\$5,996	\$8,939	\$8,979	\$ -	\$8,406
2016-17	\$8,460	\$8,900	\$10,500	\$ -	\$9,599
2017-18	\$5,212	\$7,827	\$10,457	\$ -	\$8,942
2018-19	\$7,941	\$8,930	\$11,877	\$1,524	\$10,136
<small>Note: Previous year numbers in this report vary slightly from the numbers reported in the May 2018 DUR Update due to lag time in the reporting of medical claims.</small>					

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

<sup>4</sup> <https://www.cdc.gov/surveillance/nrevss/rsv/index.html>. (accessed 8/19/2019).