

## METHODOLOGY FOR CALCULATING UNIT COSTS

After making adjustments for staffing and transportation, ODP analyzed the resulting adjusted unit costs for each procedure code to calculate the average unit cost and the standard deviation for each procedure code. "Extreme outliers" (defined as unit costs 50 percent more or less than the nearest unit cost for the procedure code) were removed from consideration in the calculation of the average unit cost and the standard deviation for each procedure code.

The average unit cost and standard deviation were calculated for each procedure code based on standard statistical formulas, as follows:

- Average Unit Cost = (Sum of all Unit Costs)/N, where N is the number of unit costs for each procedure code included in calculating the average
- Standard Deviation = Square Root of  $[\{\text{Sum of (Unit Cost-Average Unit Cost)}^2 \text{ for each Unit Cost}\}/(N-1)]$ , where N is the number of unit costs for each procedure code included in calculating the average and N is at least 20

The average unit cost and the two deviations above and below the average unit cost for each procedure code are set forth in the attached table, Statistical Unit Cost Analysis Summary.

After calculating the average unit cost and the standard deviation for each procedure code, ODP applied the following principles:

Unit costs that were within one standard deviation of the average unit cost for the procedure code were not adjusted.

Unit cost "outliers" (defined as unit costs that deviated from the average unit cost for the procedure code by more than one standard deviation) were at the unit cost level by procedure code, as follows:

### *Non-residential Services*

- Unit costs that were more than one standard deviation from the average unit cost for the procedure code but were within 10 percent of the FY 2008-2009 authorized rate were not adjusted.
- Unit costs that were more than one standard deviation but less than two standard deviations from the average unit cost for the procedure code and not within 10 percent of the FY 2008-2009 authorized rate were adjusted to be within one standard deviation of the average unit cost for the procedure code.
- Unit costs that were more than two standard deviations from the average unit cost for the procedure code and not within 10 percent of the FY 2008-2009 authorized rate were adjusted to be within two standard deviations of the average unit cost for the procedure code.

### *Residential Services*

- Unit costs that were more than one standard deviation but less than two standard deviations from the average unit cost for the procedure code were not adjusted.
- Unit costs that were more than two standard deviations from the average unit cost for the procedure code were compared to the currently authorized Individual Service Plans (ISPs) for the service location, as entered in HCSIS. Such unit costs that were supported by the ISPs in HCSIS were not adjusted. Such unit costs that were not supported by the ISPs in HCSIS were adjusted to be within two standard deviations of the average unit cost for the procedure code.