

TITLE: Validation of Respiratory Care Department Relative Value Unit Metrics for an 800 Bed Medical Center.

AUTHORS: Daniel Grady, FAARC, MEd, RRT, and Todd McCarl, MBA, RRT

INSTITUTIONS (ALL): Respiratory Care, Mission Health System, Asheville, NC, United States.

Background: The American Association for Respiratory Care has recommended that Relative Value Units (RVU's) be utilized as the metric to accurately determine staffing resources required for cost-effective and safe provision of services.¹ The purpose of this study was to validate the metrics used to determine staffing levels and productivity in an 800 bed, acute care hospital by comparing measured RVU's to the national time standards published by the AARC in the Uniform Reporting Manual (URM).

Methods: We retrospectively analyzed the top 13 procedures which constituted 95% of the work performed by the department staff in one fiscal year (fy 2011). The actual time required for completion of each procedure was recorded by staff from the time that an order was received to the time at which all documentation was completed. The mean and standard deviation for the measured hospital RVU's were calculated and compared to the mean RVU in the AARC URM. The variance between the hospital RVU and the AARC URM RVU was determined for each procedure.

Results: Comparative data are shown in the table, which follows this abstract. Of the 13 procedures analyzed, the hospital RVU's were less than the national time standards for 8/13 procedures = 61%; 2/12 = 15% procedures were within 2 minutes of the AARC values, and 3/13 = 23% had hospital RVU time standards which exceeded those in the AARC URM manual.

Conclusions: This study has demonstrated a method to determine the validity for metrics used to determine staffing levels and productivity in an 800 bed hospital. Since metrics provide data to drive crucial decisions such as staffing levels, productivity, and comparative expense reporting between hospitals; it is recommended that Relative Value Units be periodically validated to ensure cost-effective and safe staffing levels.