

## Clinical Investigation

# Variations in Medicare Reimbursement in Radiation Oncology: An Analysis of the Medicare Provider Utilization and Payment Data Set



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### Summary

In April 2014, the Centers for Medicare and Medicaid Services released data for Medicare reimbursement to individual radiation oncologists. We summarized these data and identified factors correlated with higher Medicare reimbursement. There were 4135 radiation oncologists who received a total of \$1,499,625,803 (median: \$146,453) from Medicare in 2012. Male sex, rural practice location, and billing of technical services were associated with higher total reimbursements.

**Purpose:** The purposes of this study were to summarize recently published data on Medicare reimbursement to individual radiation oncologists and to identify the causes of variation in Medicare reimbursement in radiation oncology.

**Methods and Materials:** The Medicare Provider Utilization and Payment Data: Physician and Other Supplier Public Use File (POSPUF), which details nearly all services provided by radiation oncologists in 2012, was used for this study. The data were filtered and analyzed by physician and by billing code. Statistical analysis was performed to identify differences in reimbursements based on sex, rurality, billing of technical services, or location in a certificate of need (CON) state.

**Results:** There were 4135 radiation oncologists who received a total of \$1,499,625,803 in payments from Medicare in 2012. Seventy-five percent of radiation oncologists were male. The median reimbursement was \$146,453. The code with the highest total reimbursement was 77418 (radiation treatment delivery intensity modulated radiation therapy [IMRT]). The most commonly billed evaluation and management (E/M) code for new visits was 99205 (49%). The most commonly billed E/M code for established visits was 99213 (54%). Forty percent of providers billed none of their new office visits using 99205 (the highest E/M billing code), whereas 34% of providers billed all of their new office visits using 99205. For the 1510 radiation oncologists (37%) who billed technical services, median Medicare reimbursement was \$606,008, compared with \$93,921 for all other radiation oncologists ( $P < .001$ ). On multivariate analysis, technical services billing ( $P < .001$ ), male sex ( $P < .001$ ), and rural location ( $P = .007$ ) were predictive of higher Medicare reimbursement.

**Conclusions:** The billing of technical services, with their high capital and labor overhead requirements, limits any comparison in reimbursement between individual radiation oncologists or between radiation oncologists and other specialists. Male sex and rural practice location are independent predictors of higher total Medicare reimbursements. © 2016 Elsevier Inc. All rights reserved.

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