Examining Resident Quality of Care Performance Variation in Primary Care through U.S. National Publicly Reported Measures

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Abstract

Clinical performance measures to assess residents' quality of care for patients is a U.S. national accreditation requirement but under-utilized.1,2 Publicly reported measures on practicing physician performance used in U.S. national reporting are key to improving care transparency and public accountability.2-3

We examined the variation of primary care residents' quality of care and to identify predictors for resident extreme high and low performance. Eight U.S. accredited residency programs training 682 family medicine and internal medicine residents during their three-year ambulatory care training were examined between July 2014-June 2019. Performance for residents, attending physicians at the same medical center, and national point estimates were analyzed using the NCQA's Healthcare Effectiveness Data and Information Set (HEDIS) publicly reported quality of care measures: prevention cancer screenings, blood pressure control, and monitoring of patients on persistent medications.

Resident performance for 17,771 patients differed across training years for Annual Monitoring for Patients on Persistent Medications, Cervical Cancer Screening, and Colorectal Cancer Screening. Resident performance was lower than attending-levels for all HEDIS measures but higher than the national average on all metrics except Annual Monitoring for Patients on Persistent Medications. Variation of performance generally narrowed as residents progressed in training years. When comparing resident-level to attending-level variation, attendings had notably narrower variation of performance. Residents caring for more patients were associated with lower odds (~6%, $p<.001$) for extreme lower performance.

Examining resident performance over their entire residency training is important in examining practice patterns, guiding training design, and improving transparency to patients of their quality of care. Using publicly reported quality measures may be a practical step to garner national insights in providing high quality of care to the public.

Further study of publicly reported quality measures may be a practical step for insights about the care residents deliver and support the public accountability of residency training.

References (maximum three)

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