Claims-based classification system could facilitate payer identification of academic radiologist sub

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A new study by the Harvey L. Neiman Health Policy Institute presents initial validation of a novel payer claims-based system using imaging examination modality and body region for classifying radiologists' subspecialty. The study is published online in the *American Journal of Roentgenology (AJR)*.

In carrying out their work, the researchers leveraged the Neiman Imaging Types of Service (NITOS) coding platform, an open source classification system recently developed by Neiman Institute researchers that allows users to readily extract utilization and cost data to examine the role and value of medical imaging. NITOS provides a comprehensive classification of all Healthcare Common Procedure Coding System (HCPCS) codes for non-invasive diagnostic imaging professional services, mapping each code to an imaging modality, body region, and, when relevant, a specialty area of focus.

"Using Medicare public use files, we identified 33,118 self-designated radiologists, and through a manual and laborious search, we further identified 1,860 of those working at the top 20 National Institutes of Health-funded academic radiology departments across the country," said Richard Duszak, MD, FACR, professor and vice chair for health policy and practice in the department of radiology and imaging sciences at Emory University and affiliate senior research fellow at the Neiman Institute. "Medicare claims for those radiologists were NITOS-mapped

by subspecialty, and that mapping was compared to their departmental website self-designated subspecialty area."

According to Duszak, this transparent and reproducible mapping algorithm correctly subspecialty classified 90 percent of academic radiologists. Of the other 10 percent, 6 percent had practice patterns sufficiently mixed that they could not be discretely classified, and 4 percent were erroneously classified.

"Emerging payment models are designed to more tightly link payment to quality metrics, thereby rewarding physicians who demonstrate the greatest value for their patients," noted lead author Andrew Rosenkrantz, MD, MPA, an associate professor of radiology at NYU Langone Medical Center and a Neiman Institute affiliate research fellow. "Metrics developed by the Centers for Medicare and Medicaid Services (CMS) have been the subject of considerable criticism, particularly as they apply to radiologists."

Under MACRA, CMS has developed specialty- and subspecialty-specific quality measures, from which physicians can report any six measures for their specialty/sub-specialty. However, CMS provider codes currently only differentiate diagnostic radiologists in a generic manner from nuclear medicine physicians and interventional radiologists. As such, metrics meaningful to different subspecialty diagnostic radiologists (e.g., breast imagers vs. neuroradiologists) may be vastly different. Given such concerns, CMS has indicated its intent to partner with specialty societies in developing expanded sets of subspecialty measures.

If validated through further work, the researchers note that such a classification system would allow radiologists to be mostly quality-scored based on metrics most relevant to their unique practices, and thus align new value-based payment models with the reality of subspecialty

radiology care.

"If this concept could be validated more broadly, it would permit the development of subspecialty-focused quality metrics, thus broadening opportunities for radiologist subspecialty work to be appropriately acknowledged in future payment models," added Duszak.

Provided by Harvey L. Neiman Health Policy Institute