FOR IMMEDIATE RELEASE

AAPM-Commissioned Panel Addresses Implementation of New CMS Quality Measure

CT is a lifesaving imaging technology used to diagnose disease and guide treatment. It is the first-line imaging technique in many cases, especially in emergency departments and cancer centers. Image credit: AAPM

ALEXANDRIA, VA, March 18, 2025 — An intersocietal panel of experts in computed tomography (CT) convened by the American Association of Physicists in Medicine (AAPM) — with representation from clinical practice, industry, academia, and professional societies — examined a new performance measure in the quality-based payment programs of the Centers for Medicare & Medicaid Services (CMS). The panel identified 20 important issues and ambiguities with the new measure, which became effective this year, and published their findings in the American Journal of Roentgenology.

"Transparency and stakeholder engagement are essential for effective quality initiatives in medicine," said M. Mahesh, M.S., Ph.D., president of AAPM. "We wrote this paper to call attention to issues and ambiguities with the CMS measure, and we look forward to working with CMS to address these issues and continue the culture of quality and safety that has developed in CT imaging over the past two decades."

One of the benefits to patients that will come from this publication is that the expertise of the entire imaging community — physicians, physicists, technologists, regulators, and industry — will be used to develop quality improvement initiatives that will keep radiation doses as low as possible while maintaining the quality of medically essential CT imaging.

"We're confident that we can get this right by working together," said Mahesh.

CT is a lifesaving imaging technology used to diagnose disease and guide treatment. It is the first-line imaging technique in many cases, especially in emergency departments and cancer centers. Concerns have been raised about the increased utilization of CT in medicine because CT uses ionizing radiation, which at very high doses is known to increase a person's risk for developing cancer. However, at the low doses of radiation used in medical imaging, including in CT, the risk is extremely small, perhaps negligible.

In the past two decades, the CT imaging community has worked together to reduce CT doses. New scanner technologies have played a large role in decreasing doses, including features that automatically measure the size of the patient and adjust the radiation dose to the right value. This is especially important for children, who require lower doses than adults due to their smaller size.

"Some authors multiply the very small potential risk of a CT scan by the millions of patients who receive one and predict that we will see an increase in cancer," said Cynthia McCollough, Ph.D., past president of AAPM. "This can lead to alarmist stories and patients who really need a CT refusing to get one. Further, at the low doses we are talking about, it is debated whether the risk is even real. CT has been around for over 50 years and the predicted increases in cancer just aren't being seen."

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About the American Association of Physicists in Medicine (AAPM)

AAPM is the premier organization in medical physics, a scientific and professional discipline that uses physics principles to address a wide range of biological and medical needs. The mission of AAPM is to advance medicine through excellence in the science, education, and professional practice of medical physics. Currently, AAPM represents over 9,000 medical physicists in over 96 countries.

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