AAPM Receives a $250,000 Funding Award for Project on Communicating Radiation Risk in Medicine

ALEXANDRIA, VA, March 22, 2024 — A team at the American Association of Physicists in Medicine (AAPM) has received a $250,000 Eugene Washington PCORI Engagement Award from the Patient-Centered Outcomes Research Institute (PCORI). The award will fund a project titled “Radiation risk in medicine: Identifying and enabling patient-provider shared decision-making,” a first of its kind initiative to advance the relevance of patient voice in radiation medicine.

Ehsan Samei, PhD, Chief Imaging Physicist, Duke University Health System and Chair of the AAPM Board of Directors, will lead the engagement project at AAPM. The project is informed by a seasoned group of experts and advisory board members including Suz Schrandt, JD, Danielle Dahlstrom, Donald Frush, MD, Lawrence Dauer, PhD, Heather Moore, PhD, Liz Salguero, Sue Sheridan, and Leslie Tucker. The project will address critical gaps in understanding and addressing radiation risk in medical diagnosis and therapy, and aims to improve patient-provider communication and fostering shared decision-making.

To date, very little research has explored the best methods for communicating about and supporting informed patient-provider clinical decision-making about the use and risk of medical radiation in diagnosis and therapy. There has been little if any, patient-centered outcomes research (PCOR) or comparative clinical effectiveness research (CER) on optimal audience-informed, shared-decision-enabling communication. Not considering how radiation risk is perceived fails to account for the most important variable in the care equation — the patient. Risk perception is a real and critical factor in patient understanding of radiation, and patients have a crucial role to play in shared decision-making about radiation exposure. This proposal is positioned to address this gap and to shift the narrative meaningfully and measurably on radiation risk from the perspective of both patients and clinicians, leading to improved patient care.

“It is common in medicine to think of patient as the ‘subject’ of our care. But in reality, it is the patient that grants us the opportunity to provide the care — their agency is central to the very core of medical care,” says Samei. “This award enables focused research on how we can effectively honor and incorporate patient’s primary agency and voice in radiation medicine, which is not only the proper thing to do, but further enables the certain potential of improving both the outcome and satisfaction of the medical intervention.”

The project involves connecting with a broad community of stakeholders, primarily patients, but also other care professionals. Through surveys and listening sessions, the goal is to identify key patient needs, concerns, and priorities related to radiation risk, identifying needs and wants for effective communication strategies, and explore ways by which the expertise of the professionals can most effectively empower the patients to practice their agency in shared decision-making. The findings will be widely disseminated and used to design future studies on PCOR/CER in radiation risk.

AAPM is the principal organization devoted to the practice of physics in medicine, with significant part of its focus on science, clinical practice, and education of radiation medicine. “Given the primary focus of AAPM on clinical care, we are motivated to understand and lead how radiological techniques can improve patient care,” says C. David Gammel, the Executive Director of the AAPM and the co-Project Lead of the award. “We are excited to advance patient-centered care and disseminate our findings broadly within the community of medical physicists and other healthcare professionals.”

“Radiation risk in medicine: Identifying and enabling patient-provider shared decision-making” is part of a portfolio of projects that PCORI has funded to help develop a community of patients and other stakeholders equipped to participate as partners in comparative clinical effectiveness research (CER) and disseminate PCORI-funded study results. Through the Engagement Award Program, PCORI is creating an expansive network of individuals, communities, and organizations interested in and able to participate in, share, and use patient-centered CER.
According to Greg Martin, PCORI’s Chief of Engagement, Dissemination, and Implementation, “This project was selected for Engagement Award funding because it will build a community equipped to participate as partners in CER and develop partnerships and infrastructure to disseminate PCORI-funded research results. We look forward to working with the AAPM throughout the course of their two-year project.”

The AAPM project and the other projects approved for funding by the PCORI Engagement Award Program were selected through a highly competitive review process in which applications were assessed for their ability to meet PCORI’s engagement goals and objectives, as well as program criteria. For more information about PCORI’s funding to support engagement efforts, visit [http://www.pcori.org/content/eugene-washington-pcori-engagement-awards/](http://www.pcori.org/content/eugene-washington-pcori-engagement-awards/).

PCORI is an independent, nonprofit organization authorized by Congress with a mission to fund comparative effectiveness research that provides patients, their caregivers, and clinicians with the evidence-based information they need to make better-informed health and healthcare decisions.

**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 10,000 medical physicists in over 96 countries.

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